



Plant McIntosh Ash Pond 1

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

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT




ATLANTIC COAST
CONSULTING, INC.

PROFESSIONAL CERTIFICATION

This *2023 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company – Plant McIntosh Ash Pond 1* has been prepared in compliance with the United States Environmental Protection Agency Coal Combustion Residuals Rule (40 Code of Federal Regulations [CFR] 257 Subpart D), 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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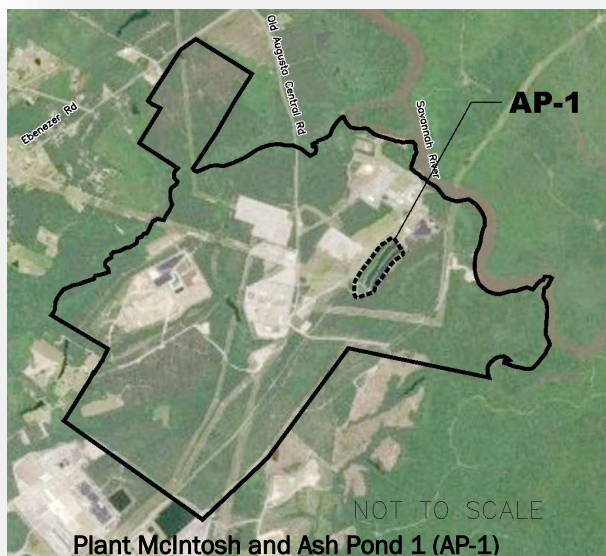
SUMMARY

This summary of the *2023 Annual Groundwater Monitoring and Corrective Action Report* provides the groundwater monitoring and corrective action program status from January through December 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 6¹ 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, in Effingham County, Georgia. AP-1 is located on the eastern portion of the Plant McIntosh property. The Site has been closed by removal of CCR material.

Groundwater at the Site is monitored using a comprehensive monitoring system of wells installed to meet federal and state monitoring requirements. Routine sampling and reporting began after background groundwater conditions were established between May 2016 and April 2017. Based on groundwater conditions at the Site, an assessment monitoring program was established on January 15, 2018. An Alternate Source Demonstration (ASD) completed in January 2019 and a November 2019 supplement presented lines of evidence demonstrating that statistically significant levels (SSL) of cobalt and lithium in groundwater were not due to a release from the unit. The ASD and supplemental information were included in the 2018 and 2019 Annual Groundwater Monitoring and Corrective Action Reports, respectively. During this January through December 2023 annual reporting period, the Site remained in assessment monitoring. The Georgia Environmental Protection Division (EPD) approved the CCR permit (051-11D(CCR)) for the Site on February 6, 2020.

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



¹ 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

Those evaluations showed statistically significant levels of Appendix III² and Appendix IV³ parameters in wells as summarized in the table below.

Appendix III Parameter	February 2023	July 2023
Boron	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
Chloride	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
Calcium		MGWC-3, MGWC-8
Fluoride	MGWC-12	MGWC-7, MGWC-12
Sulfate	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
TDS	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8	MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8
Appendix IV Parameter	February 2023	July 2023
Cobalt	MGWC-7, MGWC-8	MGWC-7, MGWC-8
Lithium	MGWC-7	MGWC-7

Based on review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program from January through December 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.

² Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)

³ 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 Annual Groundwater Monitoring and Corrective Action Report* to document groundwater monitoring activities conducted at Georgia Power Company's (Georgia Power) Plant McIntosh Ash Pond 1 (the Site or AP-1). To specify groundwater monitoring requirements, Georgia EPD Rule 391-3-4-.10(6)(a) incorporates by reference the US EPA CCR Rule 40 CFR § 257 Subpart D. For ease of reference, the US EPA CCR Rules are cited within this report.

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

This report documents activities completed for the groundwater monitoring program from January through December 2023 in accordance with 40 CFR § 257.90(e). This report includes results of the semiannual assessment monitoring events conducted in February 2023 and July 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. 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 December 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 and July 2023.

2.1 Monitoring Well Installation and Maintenance

There were no changes to the groundwater monitoring system during the annual 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 events 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 and July 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 and July 2023 as the first and second semiannual assessment monitoring events of 2023, respectively. Samples were collected from the monitoring network depicted on Figure 3. A summary of groundwater sampling events completed during the semiannual reporting period is provided in Table 2, Groundwater Sampling Event Summary. Results of sampling activities are presented in Appendix A.

2.3 Additional Sampling

Additional geochemical anion and cation data was collected during the February 2023 event 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 Figures 4A and 4B, Potentiometric Contour Map – February 2023 and July 2023, respectively. The general direction of groundwater flow across AP-1 is predominately toward the east. The groundwater flow patterns observed during the 2023 monitoring events are consistent with historical observations.

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

Specifically:

Equation

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

Groundwater flow velocities were calculated for the Site based on hydraulic gradients, average hydraulic conductivity based on previous slug test data, and an estimated effective porosity of 0.20 (based on the default value for silty sands, US EPA, 1989). Groundwater flow velocities have been calculated and are tabulated on Tables 4A and 4B, Horizontal Groundwater Flow Velocity Calculations – February 2023 and July 2023, respectively. The calculated flow velocity was 0.039 feet per day during both the February 2023 and July 2023 events.

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 as a guide the 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 (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:

- ± 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 two groundwater monitoring events in the annual monitoring period. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in Appendix A.

Analytical data collected during the monitoring period are summarized in Tables 5A and 5B, Summary of Groundwater Analytical Data – February 2023 and July 2023, respectively. Additional geochemical analytical data collected during the February 2023 monitoring event are summarized in Table 5C, 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 validated data meet project objectives and the associated data validation reports are provided in Appendix A, along with the laboratory reports.

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

4.0 STATISTICAL ANALYSIS

Groundwater monitoring data collected during the February 2023 and July 2023 semiannual assessment monitoring events were statistically analyzed by Groundwater Stats Consulting, LLC pursuant to 40 CFR § 257.95 following the Professional Engineer-certified statistical method. Appendix III detection monitoring parameters were statistically analyzed to determine if constituents have returned to background levels. Appendix IV assessment monitoring parameters were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard (GWPS). Statistical analysis methods and results are provided in Appendix B, Statistical 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 and July 2023 semiannual assessment events. To statistically compare groundwater data to GWPS, confidence intervals are constructed for each of the detected Appendix IV parameters in each downgradient well. Those confidence intervals are compared to the GWPS. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its GWPS. If there is an exceedance of the established standard, a statistically significant level (SSL) exceedance is identified.

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

- (1) The federally established maximum contaminant level (MCL) 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 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 and July 2023 events 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 – February 2023 & July 2023, 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 and July 2023 sampling events:

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

Concentrations of cobalt in all wells have been below the GWPS during this annual reporting period.

5.0 ALTERNATE SOURCE DEMONSTRATION

In accordance with 40 CFR § 257.94(e), Georgia Power implemented assessment monitoring in May 2018. SSIs of Appendix III and SSLs of Appendix IV parameters were identified at the Site during the sampling events conducted in February 2023 and July 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 December 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 Annual Groundwater Monitoring and Corrective Action Report* for Georgia Power's Plant McIntosh AP-1 was prepared to fulfill the requirements of US EPA's CCR Rule and Georgia EPD Rules for Solid Waste Management Chapter 391-3-4-.10.

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

Based on the findings presented, AP-1 will remain in assessment monitoring. The next semiannual assessment monitoring event is currently scheduled for February 2024.

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

Notes:

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

**Table 1B
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 indicates 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	Aug. 1-2, 2023
Purpose of Sampling Event		Semiannual Assessment	Semiannual Assessment
MGWC-1	Downgradient	X	X
MGWC-2	Downgradient	X	X
MGWC-3	Downgradient	X	X
MGWA-5	Upgradient	X	X
MGWA-6	Upgradient	X	X
MGWA-6A	Upgradient	X	X
MGWC-7	Downgradient	X	X
MGWC-8	Downgradient	X	X
MGWA-10	Upgradient	X	X
MGWA-11	Upgradient	X	X
MGWC-12	Downgradient	X	X

Notes:

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

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

Well ID	Top of Casing Elevation (NAVD88)	Feb. 6, 2023 Groundwater Elevation (NAVD88)	July 31, 2023 Groundwater Elevation (NAVD88)
MGWC-1	65.26	24.99	24.68
MGWC-2	48.54	26.72	25.74
MGWC-3	52.65	31.39	31.09
MGWC-4	64.33	35.41	35.24
MGWA-5	64.36	38.89	38.53
MGWA-6	61.08	36.36	36.35
MGWA-6A	59.76	36.42	36.41
MGWC-7	54.40	29.57	29.53
MGWC-8	62.61	27.71	27.49
MGWA-9	59.29	35.43	34.98
MGWA-10	65.07	46.56	44.96
MGWA-11	64.91	42.03	41.26
MGWC-12	64.10	35.54	35.38
PZ-13	40.91	23.28	22.11
PZ-14	47.11	27.97	27.42
PZ-15	42.37	23.27	22.12
PZ-16	54.71	20.84	20.56
PZ-17	57.51	24.17	23.98
PZ-18	53.48	32.39	31.09
MGWC-19	53.98	28.96	28.51
MGWC-20	51.56	26.78	26.45
MGWC-21	62.65	27.52	27.13
MGWC-22	47.53	27.50	26.95
MGWC-23	57.47	22.44	22.19
MGWA-24	60.53	37.77	37.67

Notes:

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

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

Equation

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

where: v = groundwater velocity
K = hydraulic conductivity
dh/dl = hydraulic gradient
P_e = effective porosity

Values Used in Calculation

Value			Source
K =	3.39E-04	cm/sec	See note 1.
	0.962	ft/day	
dh/dl ₁ =	23.29/2796	ft/ft	Hydraulic gradient from MGWA-10 to PZ-15
	0.0083	unitless	
dh/dl ₂ =	15.52/1898	ft/ft	MGWA-6 to PZ-16
	0.0082	unitless	
dh/dl ₃ =	11.26/1458	ft/ft	MGWA-9 to PZ-17
	0.0077	unitless	
dh/dl _{avg} =	0.0081	unitless	Average of dh/dl _{1,2,3}
P _e =	0.20	unitless	See note 2.

Calculated Flow Velocity

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

$$v = 0.039 \text{ ft/day, or } 14.2 \text{ ft/year}$$

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 4B
Horizontal Groundwater Flow Velocity Calculations
July 2023
Plant McIntosh Ash Pond 1
Effingham County, Georgia

Equation

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

Values Used in Calculation

Value	Source
K = 3.39E-04 cm/sec 0.962 ft/day	See note 1.
dh/dl ₁ = 22.84/2796 ft/ft 0.0082 unitless	Hydraulic gradient from MGWA-10 to PZ-15
dh/dl ₂ = 15.79/1898 ft/ft 0.0083 unitless	MGWA-6 to PZ-16
dh/dl ₃ = 11/1458 ft/ft 0.0075 unitless	MGWA-9 to PZ-17
dh/dl _{avg} = 0.0080 unitless	Average of dh/dl _{1,2,3}
P _e = 0.20 unitless	See note 2.

Calculated Flow Velocity

$$v = \frac{(0.962)(0.008)}{0.20}$$

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

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							
		MGWC-1	MGWC-2	MGWC-3	MGWA-5	MGWA-6	MGWA-6A	MGWC-7	MGWC-8
		2/8/2023	2/8/2023	2/7/2023	2/7/2023	2/7/2023	2/7/2023	2/8/2023	2/8/2023
APPENDIX III	Boron	1.5	1.8	0.63	0.022 J	0.028 J	0.039 J	2.1	3.9
	Calcium	110	100	110	26	110	99	65	110
	Chloride	12	11	11	4.7	3.1	3.2	11	13
	Fluoride	0.11	0.074 J	0.076 J	0.069 J	0.060 J	0.064 J	0.14	0.084 J
	pH	7.28	7.44	7.01	7.85	7.13	7.24	7.43	6.76
	Sulfate	140	150	120	2.5	2.3	1.6	220	280
	TDS	400	440	410	150	290	260	370	480
APPENDIX IV	Antimony	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	0.00051 J	<0.00034
	Arsenic	0.0016	<0.00086	0.0018	<0.00086	0.011	0.013	<0.00086	0.0010
	Barium	0.10	0.044	0.16	0.028	0.030	0.032	0.020	0.052
	Beryllium	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020 J
	Cadmium	0.00012 J	0.0021 J	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078	0.0018 J
	Chromium	0.0014 J	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	0.0013 J	0.0013 J
	Cobalt	<0.00022	0.0012 J	0.0025	<0.00022	0.00023 J	0.00069 J	0.0044	0.0019 J
	Fluoride	0.11	0.074 J	0.076 J	0.069 J	0.060 J	0.064 J	0.14	0.084 J
	Lead	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
	Lithium	0.010	0.0065	0.014	0.011	<0.0020	<0.0020	0.14	0.012
	Mercury	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	0.00026
	Molybdenum	0.0012 J	<0.00086	<0.00086	<0.00086	<0.00086	<0.00086	<0.00086	<0.00086
	Radium (226 + 228)	1.77	0.799	2.14	0.0887 U	0.487 U	0.701	1.88	1.11
	Selenium	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099
Thallium	<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		
		MGWA-10	MGWA-11	MGWC-12
		2/7/2023	2/7/2023	2/7/2023
APPENDIX III	Boron	<0.022	0.028 J	0.067 J
	Calcium	3.6	34	30
	Chloride	7.0	4.2	4.2
	Fluoride	<0.040	0.070 J	0.25
	pH	5.46	7.72	6.95
	Sulfate	<0.40	3.3	4.7
	TDS	61	190	190
APPENDIX IV	Antimony	<0.00034	<0.00034	<0.00034
	Arsenic	<0.00086	0.0025	0.00098 J
	Barium	0.021	0.10	0.060
	Beryllium	<0.00020	<0.00020	<0.00020
	Cadmium	<0.000078	<0.000078	<0.000078
	Chromium	0.0053	<0.0012	0.0012 J
	Cobalt	<0.00022	<0.00022	<0.00022
	Fluoride	<0.040	0.070 J	0.25
	Lead	<0.00021	<0.00021	<0.00021
	Lithium	0.0081	0.022	0.024
	Mercury	<0.000080	<0.000080	<0.000080
	Molybdenum	<0.00086	0.00098 J	<0.00086
	Radium (226 + 228)	0.671	0.858	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 Analytical Data
July 2023
Plant McIntosh Ash Pond 1
Effingham County, Georgia

Substance		Well ID							
		MGWC-1	MGWC-2	MGWC-3	MGWA-5	MGWA-6	MGWA-6A	MGWC-7	MGWC-8
		8/1/2023	8/2/2023	8/1/2023	8/1/2023	8/1/2023	8/1/2023	8/2/2023	8/1/2023
APPENDIX III	Boron	1.6	1.8	0.65	0.037 J	0.057 J	0.038 J	2.2	4.3
	Calcium	110	100	120	28	110	110	57	120
	Chloride	13	12	12	5.2	3.3	3.4	11	13
	Fluoride	0.15	0.087 J	0.10	0.094 J	0.084 J	0.081 J	0.20	0.11
	pH	7.30	7.31	7.09	7.52	7.14	7.20	6.90	6.77
	Sulfate	140	150	110	2.9	3.2	4.0	200	280
	TDS	450	520	420	170	330	360	410	570
APPENDIX IV	Antimony	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034
	Arsenic	0.0012	<0.00086	0.0017	<0.00086	0.010	0.0046	<0.00086	0.00098 J
	Barium	0.10	0.040	0.16	0.037	0.029	0.029	0.015	0.056
	Beryllium	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00025 J
	Cadmium	<0.000078	0.00032 J	<0.000078	<0.000078	<0.000078	<0.000078	0.00031 J	0.0020 J
	Chromium	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012
	Cobalt	<0.00022	0.0011 J	0.00054 J	<0.00022	<0.00022	0.00045 J	0.0031	0.0015 J
	Fluoride	0.15	0.087 J	0.10	0.094 J	0.084 J	0.081 J	0.20	0.11
	Lead	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
	Lithium	0.0084	0.0031 J	0.011	0.0077	<0.0020	<0.0020	0.13	0.012
	Mercury	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	<0.000080	0.00014 J
	Molybdenum	0.0012 J	<0.00086	<0.00086	<0.00086	<0.00086	0.0014 J	<0.00086	<0.00086
	Radium (226 + 228)	1.61	1.09	2.07	0.982	1.27	1.44	1.46	0.872
	Selenium	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099
Thallium	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	

Notes:

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

Table 5B
Summary of Groundwater Analytical Data
July 2023
Plant McIntosh Ash Pond 1
Effingham County, Georgia

Substance		Well ID		
		MGWA-10	MGWA-11	MGWC-12
		8/1/2023	8/1/2023	8/2/2023
APPENDIX III	Boron	0.035 J	0.045 J	0.062 J
	Calcium	3.9	39	31
	Chloride	7.4	3.3	4.5
	Fluoride	<0.040	0.094 J	0.25
	pH	5.46	7.61	7.20
	Sulfate	0.56 J	1.0	4.6
	TDS	57	300	200
APPENDIX IV	Antimony	<0.00034	<0.00034	<0.00034
	Arsenic	<0.00086	0.0025	<0.00086
	Barium	0.021	0.12	0.055
	Beryllium	<0.00020	<0.00020	<0.00020
	Cadmium	<0.000078	<0.000078	<0.000078
	Chromium	0.0044	<0.0012	<0.0012
	Cobalt	<0.00022	<0.00022	<0.00022
	Fluoride	<0.040	0.094 J	0.25
	Lead	<0.00021	<0.00021	<0.00021
	Lithium	0.0053	0.024	0.019
	Mercury	<0.000080	<0.000080	<0.000080
	Molybdenum	<0.00086	<0.00086	<0.00086
	Radium (226 + 228)	0.546 U	1.87	0.432 U
	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 5C
Summary of Groundwater Anion and Cation Data
February 2023
Plant McIntosh Ash Pond 1
Effingham County, Georgia

Substance		Well ID							
		MGWC-1	MGWC-2	MGWC-3	MGWA-5	MGWA-6	MGWA-6A	MGWC-7	MGWC-8
		2/8/2023	2/8/2023	2/7/2023	2/7/2023	2/7/2023	2/7/2023	2/8/2023	2/8/2023
Anions	Alkalinity	190	220	210	110	280	260	49	95
	Bicarbonate Alkalinity	190	220	210	110	280	260	49	95
	Carbonate Alkalinity	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Chloride	12	11	11	4.7	3.1	3.2	11	13
	Sulfate	140	150	120	2.5	2.3	1.6	220	280
Cations	Calcium	110	100	110	26	110	99	65	110
	Magnesium	5.8	17	5.5	11	2.6	2.6	6.8	19
	Potassium	2.0	2.0	1.6	1.1	0.68	0.61	3.3	2.8
	Sodium	20	31	16	6.8	4.5	4.3	43	26
Total Dissolved Solids		400	440	410	150	290	260	370	480

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

Substance		Well ID		
		MGWA-10	MGWA-11	MGWC-12
		2/7/2023	2/7/2023	2/7/2023
Anions	Alkalinity	16	140	140
	Bicarbonate Alkalinity	16	140	140
	Carbonate Alkalinity	<5.0	<5.0	<5.0
	Chloride	7.0	4.2	4.2
	Sulfate	<0.40	3.3	4.7
Cations	Calcium	3.6	34	30
	Magnesium	1.1	10	12
	Potassium	1.1	1.9	1.9
	Sodium	6.3	9.5	13
Total Dissolved Solids		61	190	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

Plant McIntosh AP-1 Statistical Method Summary		
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 –
February 2023 & July 2023
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)	1.23	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

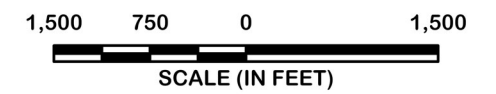
LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- - APPROXIMATE AP-1 BOUNDARY



NOTES:






1. AERIAL DATED JULY 17, 2023, PROVIDED BY SAM, LLC. ADDITIONAL PHOTOGRAPHY SOURCED FROM NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) DATED FROM 2019 THROUGH 2021.



2023 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT

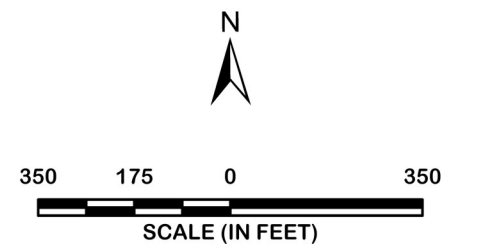


LEGEND

-  APPROXIMATE AP-1 BOUNDARY
-  AREA WHERE ASH REMOVAL WAS CERTIFIED COMPLETE BY GA EPD (OCTOBER 6, 2021)
-  DETECTION WELL
-  ASSESSMENT WELL
-  PIEZOMETER

NOTES:







1. AERIAL DATED JULY 17, 2023, PROVIDED BY SAM, LLC. ADDITIONAL PHOTOGRAPHY SOURCED FROM NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) DATED APRIL 15, 2023.
2. CELL BOUNDARY LAYERS PROVIDED BY GEI CONSULTANTS.



2023 ANNUAL GROUNDWATER MONITORING
 AND CORRECTIVE ACTION REPORT



LEGEND

-  APPROXIMATE AP-1 BOUNDARY
-  GROUNDWATER ELEVATION CONTOUR
-  GROUNDWATER FLOW DIRECTION
-  DETECTION WELL
-  ASSESSMENT WELL
-  PIEZOMETER

NOTES:

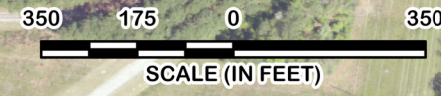
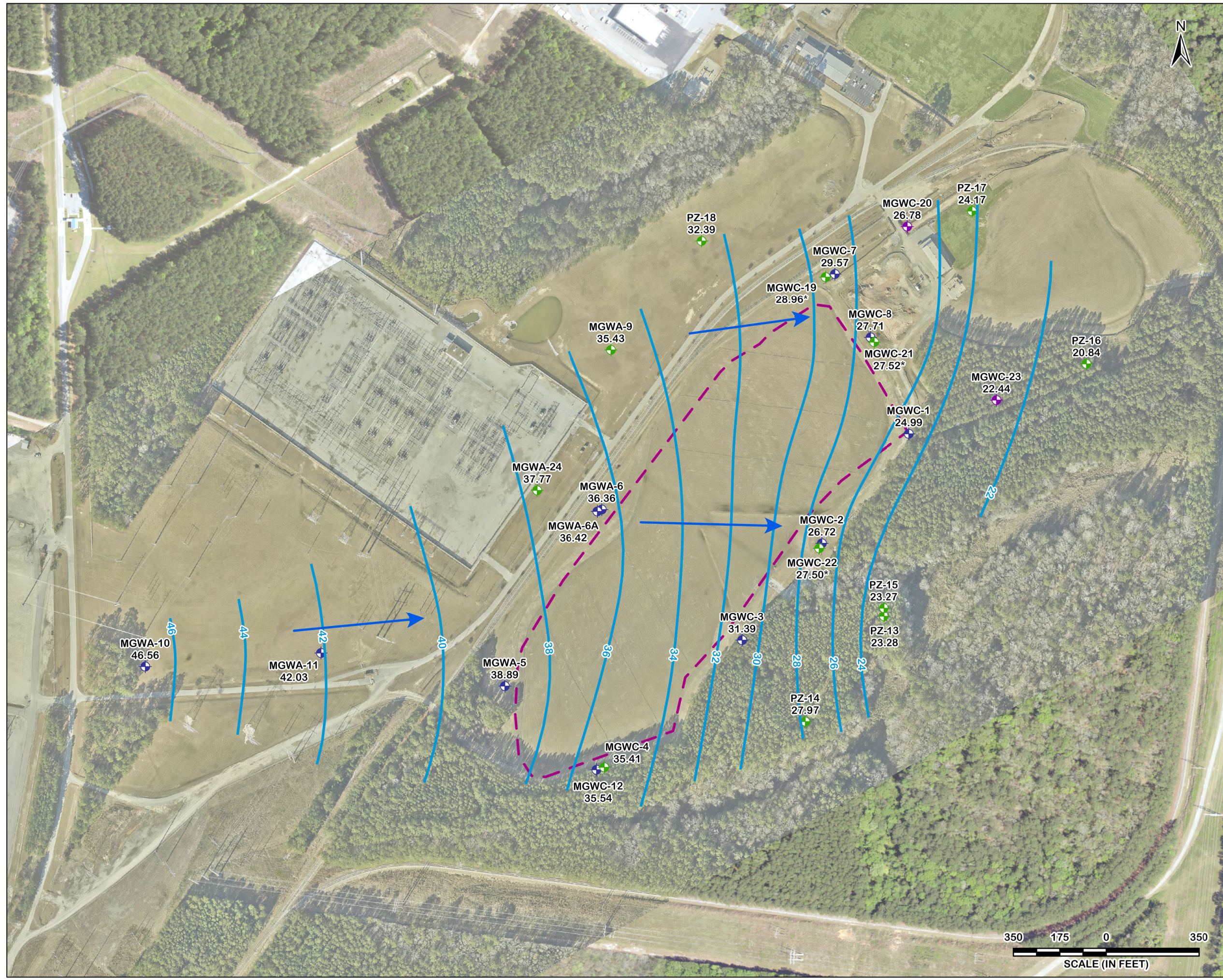
1. AERIAL DATED JANUARY 2023 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY SOURCED FROM NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) DATED APRIL 15, 2023.
2. * = ELEVATIONS FOR MGWC-19, MGWC-21, AND MGWC-22 ARE NOT USED TO CALCULATE POTENTIOMETRIC CONTOURS.









2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

POTENTIOMETRIC CONTOUR MAP
 FEBRUARY 2023

FIGURE 4A



LEGEND

-  APPROXIMATE AP-1 BOUNDARY
-  GROUNDWATER ELEVATION CONTOUR
-  GROUNDWATER FLOW DIRECTION
-  DETECTION WELL
-  ASSESSMENT WELL
-  PIEZOMETER

NOTES:

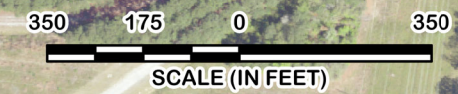
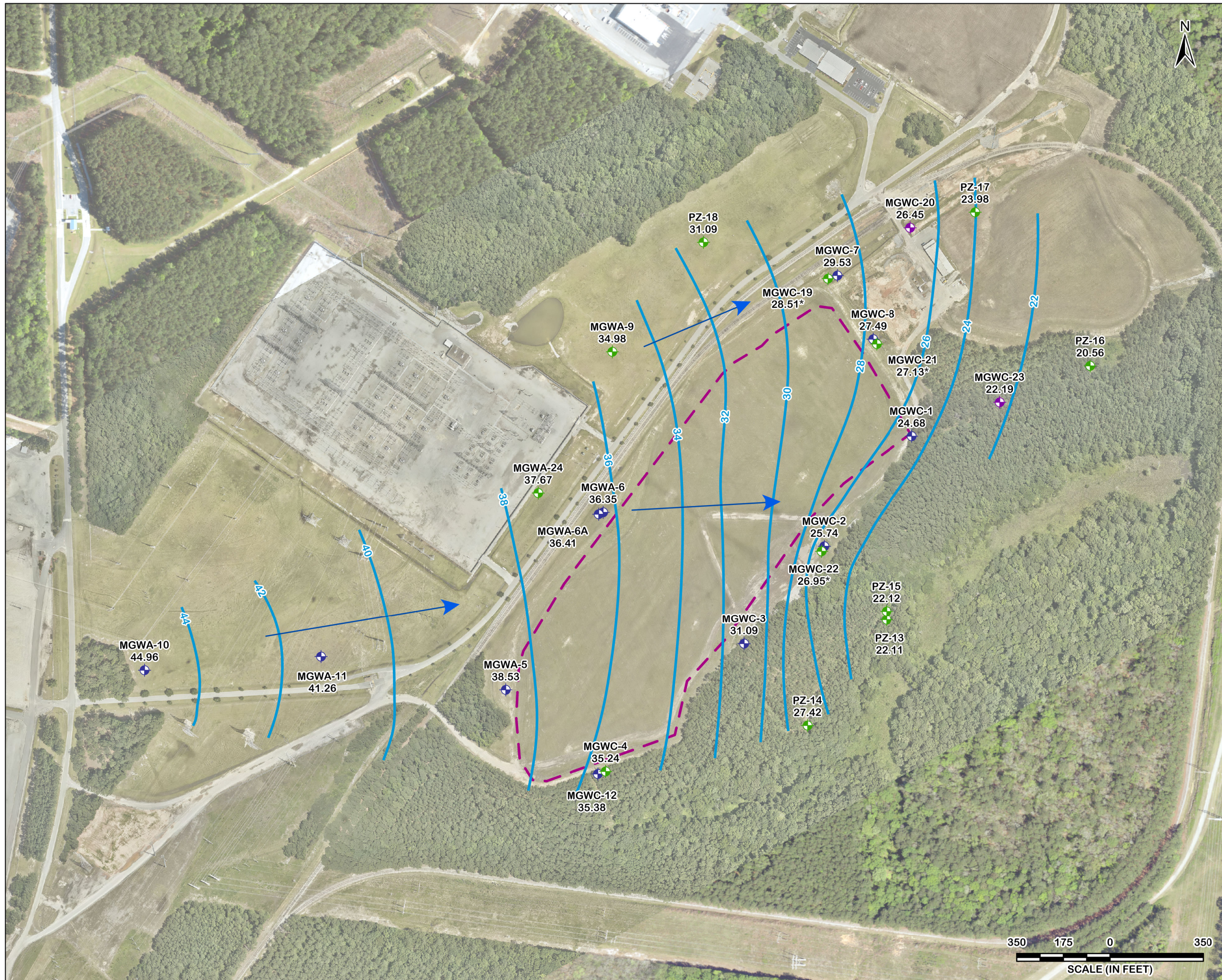
1. AERIAL DATED JULY 17, 2023, PROVIDED BY SAM, LLC. ADDITIONAL PHOTOGRAPHY SOURCED FROM NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) DATED APRIL 15, 2023.
2. * = ELEVATIONS FOR MGWC-19, MGWC-21, AND MGWC-22 ARE NOT USED TO CALCULATE POTENTIOMETRIC CONTOURS.



2023 ANNUAL GROUNDWATER MONITORING
 AND CORRECTIVE ACTION REPORT

POTENTIOMETRIC CONTOUR MAP
 JULY 2023

FIGURE
 4B



APPENDICES

APPENDIX A

Laboratory Analytical and Field Sampling Reports

APPENDIX A

*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



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2/20/2023 9:38:45 AM

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

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

Job ID: 680-230304-1

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

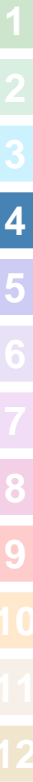
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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

Eurofins Savannah

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
Calcium	34		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
Lithium	0.022		0.0050	0.0020	mg/L		02/10/23 05:10	02/10/23 15:03	1
Molybdenum	0.00098 J		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
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	7.72				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
Chloride	4.7		1.0	0.20	mg/L			02/11/23 21:35	1
Fluoride	0.069 J		0.10	0.040	mg/L			02/11/23 21:35	1
Sulfate	2.5		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
Barium	0.028		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
Boron	0.022 J		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
Calcium	26		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
Lithium	0.011		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

Eurofins Savannah

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

Eurofins Savannah

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
Calcium	110		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
Cobalt	0.0025		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
Lithium	0.014		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
Total Dissolved Solids (SM 2540C-2011)	410		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	7.01				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
Chloride	4.2		1.0	0.20	mg/L			02/11/23 22:28	1
Fluoride	0.25		0.10	0.040	mg/L			02/11/23 22:28	1
Sulfate	4.7		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
Arsenic	0.00098	J	0.0010	0.00086	mg/L		02/10/23 05:10	02/10/23 15:31	1
Barium	0.060		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
Boron	0.067	J	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
Calcium	30		0.50	0.14	mg/L		02/10/23 05:10	02/10/23 15:31	1
Chromium	0.0012	J	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
Lithium	0.024		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 MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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
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
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
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
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 MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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

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		RPD	
							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		RPD	
									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 Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
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 Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
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 Result	LCS Qualifier	Unit	D	%Rec	%Rec 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	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	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

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: 680-230304-12 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										

Eurofins Savannah

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										

Eurofins Savannah

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



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

Client Information		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 ₄ , TDS (EPA 300 g & 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								
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)		Total Number of containers				
				Preservation Code:		D	I	D	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
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)								
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months								
Deliverable Requested I II III IV Other (specify)						Special Instructions/QC Requirements.								
Empty Kit Relinquished by:		Date:		Time		Method of Shipment:								
Relinquished by:		Date/Time: 2-9-23/0845		Company: ACC		Received by:		Date/Time: 2-9-23/0845		Company: ACC				
Relinquished by:		Date/Time: 2-9-23/1000		Company: ACC		Received by:		Date/Time: 2/9/23 1001		Company:				
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: 37/37 2.6/2.0 2.1/2.1										

Chain of Custody Record

Client Information		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				Analysis Requested				Job #:					
Address: 241 Ralph McGill Blvd SE		Due Date Requested		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)			
City: Atlanta		TAT Requested (days): <u>Standard</u>											
State Zip: GA, 30308		Lab Project #: <u>68027747</u>											
Phone: 404-506-7116(Tel)		PO #:											
Email: SCS Contacts / ACC Contacts		Project #:											
Project Name: Plant McIntosh - Ash Pond 1		SSOW#:								Task Code MCI-CCR-ASSMT-2023S1 Special Instructions/Note: Full APP III + APP IV			
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)	App. III Metals (B, Ca)	CI, F, SO ₄ , 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	Other:
				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=
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested I, II, III, IV, Other (specify)				Special Instructions/QC Requirements									
Empty Kit Relinquished by:		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: <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>									

3.7/3.7 2.6/2.6

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

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

Authorized for release by
David Fuller, Project Manager
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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
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- 7
- 8
- 9
- 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

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	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				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
LCS LCS										
Carrier	%Yield	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	Limit
DU DU										
Carrier	%Yield	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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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

Client Information		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) <input type="checkbox"/> Perform MS/MSD (Yes or No) <input type="checkbox"/> App III Metals (B, Ca) <input type="checkbox"/> Cl, F, SO ₄ , TDS (EPA 300 g & SM 2540C) <input type="checkbox"/> App. IV Metals (Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Ti) <input type="checkbox"/> Radium 226 & 228 (SW-946 9315/9320) <input type="checkbox"/>		Job #:		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)	
Address: 241 Ralph McGill Blvd SE		TAT Requested (days): Standard							
City: Atlanta		Lab Project #: 68027747							
State Zip: GA, 30308		PO #:							
Phone: 404-506-7116(Tel)		Project #:							
Email: SCS Contacts / ACC Contacts		SSOW#:							
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)	Preservation Code:		Task Code: MCI-CCR-ASSMT-2023S1	
								Special Instructions/Note: Full APP III + APP IV	
MCI- MGWA-10	02/07/23	1015	G	WG	N	N	✓	✓	5 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	✓	✓	5 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
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements.				
Empty Kit Relinquished by:		Date:		Time		Method of Shipment:			
Relinquished by:		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

Client Information		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						Analysis Requested		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: <u>MCI-CCR-ASSMT-2023S1</u>					
Email: SCS Contacts / ACC Contacts		Project #:						Special Instructions/Note: <u>Full APP III + APP IV</u>					
Project Name: Plant McIntosh - Ash Pond 1		SSOW#:											
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)	App. III Metals (B, Ca)	CI, F, SO ₄ , 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= <u>NA</u>
MCI-AP1-FD-02		02/08/23	/	G	WG	N	N	✓	✓	✓	✓	5	pH= <u>NA</u>
MCI-AP1-FB-01		02/07/23	1455	G	WQ	N	N	✓	✓	✓	✓	5	pH= <u>NA</u>
MCI-AP1-FB-02		02/08/23	1025	G	WQ	N	N	✓	✓	✓	✓	5	pH= <u>NA</u>
MCI-AP1-EB-03		02/07/23	1540	G	WQ	N	N	✓	✓	✓	✓	5	pH= <u>NA</u>
MCI-AP1-EB-04		02/08/23	1145	G	WQ	N	N	✓	✓	✓	✓	5	pH= <u>NA</u>
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=
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
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: <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: <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>							

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Lab PM Fuller, David	Carrier Tracking No(s): 680-728655.1	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		Analysis Requested		
State, Zip MO, 63045		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		
Phone 314-298-9666(Tel) 314-298-8757(Fax)		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)		
Email		Total Number of Containers		
Project Name Plant McIntosh Ash Pond 1		Field Filtered Sample (Yes or No)		
Site		Perform MS/MSD (Yes or No)		
Due Date Requested: 3/14/2023		9315 Ra226/PreSep_21 Radium-226		
TAT Requested (days):		Radium-228 Radium-228		
PO #		9320 Ra226/PreSep_0 Radium-228		
WC #		Field Filtered Sample (Yes or No)		
Project # 68027747		Preservation Code:		
SSOW#		Matrix (W=water, S=solid, O=water/soil, AT=tissue, A=air)		
Sample Date		Sample Type (C=comp, G=grab)		
Sample Time		Sample Time		
Sample ID (Lab ID)		Special Instructions/Note:		
MCI-MGWA-10 (680-230304-1)	2/7/23 10:15 Eastern	Water	X	2
MCI-MGWA-11 (680-230304-2)	2/7/23 12:10 Eastern	Water	X	2
MCI-MGWA-5 (680-230304-3)	2/7/23 13:40 Eastern	Water	X	2
MCI-MGWA-6 (680-230304-4)	2/7/23 12:05 Eastern	Water	X	2
MCI-MGWA-6A (680-230304-5)	2/7/23 10:40 Eastern	Water	X	2
MCI-MGWC-3 (680-230304-6)	2/7/23 14:20 Eastern	Water	X	2
MCI-MGWC-12 (680-230304-7)	2/7/23 15:05 Eastern	Water	X	2
MCI-MGWC-1 (680-230304-8)	2/8/23 10:00 Eastern	Water	X	2
MCI-MGWC-2 (680-230304-9)	2/8/23 09:55 Eastern	Water	X	2

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
 Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: **FedEx** Date/Time: _____ Company: _____
 Relinquished by: **Shanley - Shanley** Date/Time: **2/13/23 0812** Company: **ETASTL**
 Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No Cooler Temperature(s) °C and Other Remarks:

Special Instructions/QC Requirements:
 Return To Client Disposal By Lab Archive For _____ Months
 Method of Shipment: _____
 Received by: **FedEx** Date/Time: _____ Company: _____
 Received by: **Shanley - Shanley** Date/Time: **2/13/23 0812** Company: **ETASTL**



Chain of Custody Record

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

Client Information (Sub Contract Lab)		Lab PM Fuller, David	Carrier Tracking No(s)	COC No. 680-726855.2
Client Contact Shipping/Receiving		E-Mail David.Fuller@et.eurofins.com	State of Origin Georgia	Page Page 2 of 2
Company TestAmerica Laboratories, Inc.		Job # 680-230304-2		
Address 13715 Rider Trail North,		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		
City Earth City		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		Total Number of Containers		
Phone 314-298-8566(Tel) 314-298-8757(Fax)		Analysis Requested		
Email		515_Ra226/PreSep_21 Radium-226 Ra226Ra228_GFP/Combined Radium-226 and Radium-228		
Project # 68027747		520_Ra228/PreSep_0 Radium-228		
Site Plant McIntosh Ash Pond 1		Field Filtered Sample (Yes or No)		
SSOW#		Performance MSMSD (Yes or No)		
Due Date Requested: 3/14/2023		Matrix (W=Water, S=Solid, O=Wastewater, I=I-Tissue, A=Air)		
TAT Requested (days):		Sample Time		
PO #		Sample Type (C=Comp, G=grab)		
WO #		Preservation Code		
Sample Date		Sample Time		
Sample Identification - Client ID (Lab ID)		Sample Time		
MCI-MGWC-7 (680-230304-10)	2/8/23	11:50 Eastern	Water	X
MCI-MGWC-8 (680-230304-11)	2/8/23	13:30 Eastern	Water	X
MCI-AP1-FD-01 (680-230304-12)	2/8/23	Eastern	Water	X
MCI-AP1-FD-02 (680-230304-13)	2/8/23	Eastern	Water	X
MCI-AP1-FB-01 (680-230304-14)	2/7/23	14:55 Eastern	Water	X
MCI-AP1-FB-02 (680-230304-15)	2/8/23	10:25 Eastern	Water	X
MCI-AP1-EB-03 (680-230304-16)	2/7/23	15:40 Eastern	Water	X
MCI-AP1-EB-04 (680-230304-17)	2/8/23	11:45 Eastern	Water	X
Special Instructions/Note: <i>(37)</i>				
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/leak/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)				
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Special Instructions/QC Requirements:				
Empty Kit Relinquished by: _____ Date: _____ Method of Shipment: _____				
Relinquished by: _____ Date/Time: _____ Company: _____				
Relinquished by: FEDEX Date/Time: _____ Company: _____				
Relinquished by: <i>Diana Sharkey - Sharkey</i> Date/Time: <i>2/13/23 0812</i> Company: ETASTL				
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No				
Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____				



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
(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

Job ID: 680-230304-3

Laboratory: Eurofins Savannah

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



Client Information		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		Analysis Requested			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 #: 68027747										
Phone: 404-506-7116(Tel)		PO #:	Preservation Codes:		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)										
Email:		Project #:	Other:												
SCS Contacts / ACC Contacts		SSOW#:	Task Code: MCI-CCR-ASSMT-2023S1												
Project Name: Plant McIntosh - Ash Pond 1					Special Instructions/Note ALK + 3 Cations (Report Separately)										
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			
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)										
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months										
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements 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)¹ and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)². 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

¹US 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

²US 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)¹ and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)². 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

¹US 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

²US 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

Location Name: MGWA-5 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 53.09 ft Total Depth: 63.09 ft Initial Depth to Water: 25.54 ft	Pump Type: Peristaltic Pump Tubing Type: Poly Pump Intake From TOC: 58 ft Estimated Total Volume Pumped: 5.2 liter Flow Cell Volume: 90 ml Final Flow Rate: 175 ml/min Final Draw Down: 15 in	Instrument Used: Aqua TROLL 400 Serial Number: 843285
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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:
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Low-Flow Test Report:

Test Date / Time: 2/7/2023 11:35:04 AM

Project: Plant McIntosh AP-1

Operator Name: D. Johnson

Location Name: MGWA-6 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 32.14 ft Total Depth: 42.14 ft Initial Depth to Water: 24.91 ft	Pump Type: Peri Pump Tubing Type: Poly Pump Intake From TOC: 37 ft Estimated Total Volume Pumped: 4.5 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 2.16 in	Instrument Used: Aqua TROLL 400 Serial Number: 884186
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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

Location Name: MGWA-6A Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 32.44 ft Total Depth: 42.44 ft Initial Depth to Water: 23.34 ft	Pump Type: Peri Pump Tubing Type: Poly Pump Intake From TOC: 37 ft Estimated Total Volume Pumped: 8.25 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 12 in	Instrument Used: Aqua TROLL 400 Serial Number: 884186
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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

Location Name: MGWA-10 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 43.09 ft Total Depth: 53.09 ft Initial Depth to Water: 18.56 ft	Pump Type: Peristaltic Pump Tubing Type: Poly Pump Intake From TOC: 48 ft Estimated Total Volume Pumped: 4 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 35 in	Instrument Used: Aqua TROLL 400 Serial Number: 843285
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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

Location Name: MGWA-11 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 45.81 ft Total Depth: 55.81 ft Initial Depth to Water: 22.93 ft	Pump Type: Peristaltic Pump Tubing Type: Poly Pump Intake From TOC: 50 ft Estimated Total Volume Pumped: 6.4 liter Flow Cell Volume: 90 ml Final Flow Rate: 185 ml/min Final Draw Down: 6 in	Instrument Used: Aqua TROLL 400 Serial Number: 843285
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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

Location Name: MGWC-1 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 46.08 ft Total Depth: 56.08 ft Initial Depth to Water: 40.31 ft	Pump Type: Portable Bladder Pump Tubing Type: Poly Pump Intake From TOC: 51 ft Estimated Total Volume Pumped: 6.7 liter Flow Cell Volume: 90 ml Final Flow Rate: 225 ml/min Final Draw Down: 17 in	Instrument Used: Aqua TROLL 400 Serial Number: 843285
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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

Location Name: MGWC-2 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.9 ft Total Depth: 37.29 ft Initial Depth to Water: 21.81 ft	Pump Type: Peri Pump Tubing Type: Poly Pump Intake From TOC: 33 ft Estimated Total Volume Pumped: 6 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 14.04 in	Instrument Used: Aqua TROLL 400 Serial Number: 884186
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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

Location Name: MGWC-3 Well Diameter: 2 ft Casing Type: PVC Screen Length: 10 ft Top of Screen: 28 ft Total Depth: 38.98 ft Initial Depth to Water: 21.32 ft	Pump Type: Peri Pump Tubing Type: Poly Pump Intake From TOC: 33 ft Estimated Total Volume Pumped: 5.25 liter Flow Cell Volume: 90 ml Final Flow Rate: 175 ml/min Final Draw Down: 4.2 in	Instrument Used: Aqua TROLL 400 Serial Number: 884186
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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

Location Name: MGWC-7 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 32.3 ft Total Depth: 42.29 ft Initial Depth to Water: 24.65 ft	Pump Type: Peri Pump Tubing Type: Poly Pump Intake From TOC: 38 ft Estimated Total Volume Pumped: 3.6 liter Flow Cell Volume: 90 ml Final Flow Rate: 120 ml/min Final Draw Down: 4.56 in	Instrument Used: Aqua TROLL 400 Serial Number: 884186
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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

Location Name: MGWC-8 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 42.56 ft Total Depth: 52.56 ft Initial Depth to Water: 34.98 ft	Pump Type: Portable Bladder Pump Tubing Type: Poly Pump Intake From TOC: 47 ft Estimated Total Volume Pumped: 6.7 liter Flow Cell Volume: 90 ml Final Flow Rate: 225 ml/min Final Draw Down: 4 in	Instrument Used: Aqua TROLL 400 Serial Number: 843285
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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

Location Name: MGWC-12 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 42.9 ft Total Depth: 52.9 ft Initial Depth to Water: 28.57 ft	Pump Type: Peristaltic Pump Tubing Type: Poly Pump Intake From TOC: 47 ft Estimated Total Volume Pumped: 4.5 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 9 in	Instrument Used: Aqua TROLL 400 Serial Number: 843285
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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:
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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):

		PZ-16	PZ-17	PZ-18
a	Does the well recharge adequately when purged?	N/A	N/A	N/A
b	If dedicated sampling equipment is installed, is it in good condition?	N/A	N/A	N/A
c	Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	N/A	N/A	N/A

Note: N/A - Not Applicable

6 - Based on your professional judgment, is the well construction / location appropriate to:

	PZ-16	PZ-17	PZ-18
1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	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 A

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

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

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

Generated 8/17/2023 2:15:51 PM Revision 1

JOB DESCRIPTION

Plant McIntosh - Ash Pond 1

JOB NUMBER

680-238497-1

Eurofins Savannah

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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
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(770)344-8986

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Revision 1

Definitions/Glossary

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

Job ID: 680-238497-1

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.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control 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: 680-238497-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-238497-1	MCI-MGWA-10	Water	08/01/23 10:54	08/02/23 13:55
680-238497-2	MCI-MGWA-11	Water	08/01/23 12:20	08/02/23 13:55
680-238497-3	MCI-MGWA-5	Water	08/01/23 13:20	08/02/23 13:55
680-238497-4	MCI-MGWA-6	Water	08/01/23 11:50	08/02/23 13:55
680-238497-5	MCI-MGWA-6A	Water	08/01/23 10:40	08/02/23 13:55
680-238497-6	MCI-MGWC-1	Water	08/01/23 14:04	08/02/23 13:55
680-238497-7	MCI-MGWC-2	Water	08/02/23 10:24	08/02/23 13:55
680-238497-8	MCI-MGWC-3	Water	08/01/23 14:43	08/02/23 13:55
680-238497-9	MCI-MGWC-7	Water	08/02/23 10:21	08/02/23 13:55
680-238497-10	MCI-MGWC-8	Water	08/01/23 15:44	08/02/23 13:55
680-238497-11	MCI-MGWC-12	Water	08/02/23 11:45	08/02/23 13:55
680-238497-12	MCI-AP1-FD-01	Water	08/01/23 00:00	08/02/23 13:55
680-238497-13	MCI-AP1-FD-02	Water	08/01/23 00:00	08/02/23 13:55
680-238497-14	MCI-AP1-FB-01	Water	08/02/23 10:45	08/02/23 13:55
680-238497-15	MCI-AP1-FB-02	Water	08/02/23 11:05	08/02/23 13:55
680-238497-16	MCI-AP1-EB-03	Water	08/01/23 13:10	08/02/23 13:55
680-238497-17	MCI-AP1-EB-04	Water	08/02/23 10:35	08/02/23 13:55

Case Narrative

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

Job ID: 680-238497-1

Job ID: 680-238497-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative 680-238497-1

Revision 1

The report being provided is a revision of the original report sent on 8/9/2023. The report (revision 1) is being revised in order to report the reanalysis of three samples for metals by 6020B, MCI-AP1-FB-02 (680-238497-15), MCI-AP1-EB-03 (680-238497-16), MCI-AP1-EB-04 (680-238497-17) after a data quality review was requested. (Note: It was determined the -15 & -16 samples were cross-labeled during this review.)

Receipt

The samples were received on 8/2/2023 1:55 PM. 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 0.6°C, 0.9°C, 1.3°C and 2.1°C

HPLC/IC

Method 300_ORGFM_28D: Due to the high concentration of Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 680-791760 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 680-792069 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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-11 (680-238497-2), MCI-MGWA-6 (680-238497-4), MCI-MGWA-6A (680-238497-5), MCI-MGWC-1 (680-238497-6), MCI-MGWC-2 (680-238497-7), MCI-MGWC-3 (680-238497-8), MCI-MGWC-7 (680-238497-9), MCI-MGWC-8 (680-238497-10), MCI-AP1-FD-01 (680-238497-12) and MCI-AP1-FD-02 (680-238497-13).

Method 2540C: The sample duplicate precision for the following sample associated with analytical batch 680-791596 was outside control limits: (680-238329-H-2 DU). The associated Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD) precision met acceptance criteria.

Method 2540C: The sample duplicate precision for the following sample associated with analytical batch 680-791826 was outside control limits: (680-238497-C-5 DU). The associated Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD) precision met acceptance criteria.

Method 2540C: The sample duplicate precision for the following sample associated with analytical batch 680-792118 was outside control limits: (680-238497-C-7 DU). The associated Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD) precision met acceptance criteria.

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: 680-238497-1

Client Sample ID: MCI-MGWA-10

Lab Sample ID: 680-238497-1

Date Collected: 08/01/23 10:54

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.4		1.0	0.20	mg/L			08/04/23 10:58	1
Fluoride	<0.040		0.10	0.040	mg/L			08/04/23 10:58	1
Sulfate	0.56	J	1.0	0.40	mg/L			08/04/23 10:58	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		08/03/23 05:51	08/03/23 20:54	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/03/23 05:51	08/03/23 20:54	1
Barium	0.021		0.010	0.00089	mg/L		08/03/23 05:51	08/03/23 20:54	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:51	08/03/23 20:54	1
Boron	0.035	J B	0.080	0.022	mg/L		08/03/23 05:51	08/03/23 20:54	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:51	08/03/23 20:54	1
Calcium	3.9		0.50	0.14	mg/L		08/03/23 05:51	08/03/23 20:54	1
Chromium	0.0044		0.0020	0.0012	mg/L		08/03/23 05:51	08/03/23 20:54	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/03/23 05:51	08/03/23 20:54	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:51	08/03/23 20:54	1
Lithium	0.0053		0.0050	0.0020	mg/L		08/03/23 05:51	08/03/23 20:54	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:51	08/03/23 20:54	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:51	08/03/23 20:54	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:51	08/03/23 20:54	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	57		10	10	mg/L			08/03/23 10:39	1

Client Sample ID: MCI-MGWA-11

Lab Sample ID: 680-238497-2

Date Collected: 08/01/23 12:20

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.3		1.0	0.20	mg/L			08/04/23 11:10	1
Fluoride	0.094	J	0.10	0.040	mg/L			08/04/23 11:10	1
Sulfate	1.0		1.0	0.40	mg/L			08/04/23 11:10	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		08/03/23 05:51	08/03/23 20:58	1
Arsenic	0.0025		0.0010	0.00086	mg/L		08/03/23 05:51	08/03/23 20:58	1
Barium	0.12		0.010	0.00089	mg/L		08/03/23 05:51	08/03/23 20:58	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:51	08/03/23 20:58	1
Boron	0.045	J B	0.080	0.022	mg/L		08/03/23 05:51	08/03/23 20:58	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:51	08/03/23 20:58	1
Calcium	39		0.50	0.14	mg/L		08/03/23 05:51	08/03/23 20:58	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:51	08/03/23 20:58	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/03/23 05:51	08/03/23 20:58	1

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Client Sample Results

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWA-11

Lab Sample ID: 680-238497-2

Date Collected: 08/01/23 12:20

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:51	08/03/23 20:58	1
Lithium	0.024		0.0050	0.0020	mg/L		08/03/23 05:51	08/03/23 20:58	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:51	08/03/23 20:58	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:51	08/03/23 20:58	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:51	08/03/23 20:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	300		40	40	mg/L			08/03/23 10:39	1

Client Sample ID: MCI-MGWA-5

Lab Sample ID: 680-238497-3

Date Collected: 08/01/23 13:20

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.2		1.0	0.20	mg/L			08/04/23 11:23	1
Fluoride	0.094	J	0.10	0.040	mg/L			08/04/23 11:23	1
Sulfate	2.9		1.0	0.40	mg/L			08/04/23 11:23	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		08/03/23 05:46	08/03/23 17:27	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/03/23 05:46	08/03/23 17:27	1
Barium	0.037		0.010	0.00089	mg/L		08/03/23 05:46	08/03/23 17:27	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:46	08/03/23 17:27	1
Boron	0.037	J	0.080	0.022	mg/L		08/03/23 05:46	08/04/23 15:39	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:46	08/03/23 17:27	1
Calcium	28		0.50	0.14	mg/L		08/03/23 05:46	08/03/23 17:27	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:46	08/03/23 17:27	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/03/23 05:46	08/03/23 17:27	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:46	08/03/23 17:27	1
Lithium	0.0077		0.0050	0.0020	mg/L		08/03/23 05:46	08/03/23 17:27	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:46	08/03/23 17:27	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:46	08/03/23 17:27	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:46	08/03/23 17:27	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		08/08/23 12:00	08/09/23 10:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	170		10	10	mg/L			08/03/23 10:39	1

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Client Sample Results

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWA-6

Lab Sample ID: 680-238497-4

Date Collected: 08/01/23 11:50

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.3		1.0	0.20	mg/L			08/04/23 11:36	1
Fluoride	0.084	J	0.10	0.040	mg/L			08/04/23 11:36	1
Sulfate	3.2		1.0	0.40	mg/L			08/04/23 11:36	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		08/03/23 05:46	08/03/23 17:55	1
Arsenic	0.010		0.0010	0.00086	mg/L		08/03/23 05:46	08/03/23 17:55	1
Barium	0.029		0.010	0.00089	mg/L		08/03/23 05:46	08/03/23 17:55	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:46	08/03/23 17:55	1
Boron	0.057	J	0.080	0.022	mg/L		08/03/23 05:46	08/04/23 15:55	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:46	08/03/23 17:55	1
Calcium	110		0.50	0.14	mg/L		08/03/23 05:46	08/03/23 17:55	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:46	08/03/23 17:55	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/03/23 05:46	08/03/23 17:55	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:46	08/03/23 17:55	1
Lithium	<0.0020		0.0050	0.0020	mg/L		08/03/23 05:46	08/03/23 17:55	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:46	08/03/23 17:55	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:46	08/03/23 17:55	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:46	08/03/23 17:55	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	330		40	40	mg/L			08/03/23 10:39	1

Client Sample ID: MCI-MGWA-6A

Lab Sample ID: 680-238497-5

Date Collected: 08/01/23 10:40

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.4		1.0	0.20	mg/L			08/04/23 11:48	1
Fluoride	0.081	J	0.10	0.040	mg/L			08/04/23 11:48	1
Sulfate	4.0		1.0	0.40	mg/L			08/04/23 11:48	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		08/03/23 05:46	08/03/23 17:18	1
Arsenic	0.0046		0.0010	0.00086	mg/L		08/03/23 05:46	08/03/23 17:18	1
Barium	0.029		0.010	0.00089	mg/L		08/03/23 05:46	08/03/23 17:18	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:46	08/03/23 17:18	1
Boron	0.038	J	0.080	0.022	mg/L		08/03/23 05:46	08/04/23 15:22	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:46	08/03/23 17:18	1
Calcium	110		0.50	0.14	mg/L		08/03/23 05:46	08/03/23 17:18	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:46	08/03/23 17:18	1
Cobalt	0.00045	J	0.0025	0.00022	mg/L		08/03/23 05:46	08/03/23 17:18	1

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Client Sample Results

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWA-6A

Lab Sample ID: 680-238497-5

Date Collected: 08/01/23 10:40

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:46	08/03/23 17:18	1
Lithium	<0.0020		0.0050	0.0020	mg/L		08/03/23 05:46	08/03/23 17:18	1
Molybdenum	0.0014	J	0.015	0.00086	mg/L		08/03/23 05:46	08/03/23 17:18	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:46	08/03/23 17:18	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:46	08/03/23 17:18	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	360		40	40	mg/L			08/04/23 11:57	1

Client Sample ID: MCI-MGWC-1

Lab Sample ID: 680-238497-6

Date Collected: 08/01/23 14:04

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		1.0	0.20	mg/L			08/04/23 12:01	1
Fluoride	0.15		0.10	0.040	mg/L			08/04/23 12:01	1
Sulfate	140		1.0	0.40	mg/L			08/04/23 12:01	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		08/03/23 05:46	08/03/23 17:10	1
Arsenic	0.0012		0.0010	0.00086	mg/L		08/03/23 05:46	08/03/23 17:10	1
Barium	0.10		0.010	0.00089	mg/L		08/03/23 05:46	08/03/23 17:10	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:46	08/03/23 17:10	1
Boron	1.6		0.080	0.022	mg/L		08/03/23 05:46	08/04/23 15:14	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:46	08/03/23 17:10	1
Calcium	110		0.50	0.14	mg/L		08/03/23 05:46	08/03/23 17:10	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:46	08/03/23 17:10	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/03/23 05:46	08/03/23 17:10	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:46	08/03/23 17:10	1
Lithium	0.0084		0.0050	0.0020	mg/L		08/03/23 05:46	08/03/23 17:10	1
Molybdenum	0.0012	J	0.015	0.00086	mg/L		08/03/23 05:46	08/03/23 17:10	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:46	08/03/23 17:10	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:46	08/03/23 17:10	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	450		40	40	mg/L			08/04/23 11:57	1

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Client Sample Results

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWC-2

Lab Sample ID: 680-238497-7

Date Collected: 08/02/23 10:24

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		1.0	0.20	mg/L			08/04/23 12:14	1
Fluoride	0.087	J	0.10	0.040	mg/L			08/04/23 12:14	1
Sulfate	150		1.0	0.40	mg/L			08/04/23 12:14	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		08/03/23 05:46	08/03/23 17:31	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/03/23 05:46	08/03/23 17:31	1
Barium	0.040		0.010	0.00089	mg/L		08/03/23 05:46	08/03/23 17:31	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:46	08/03/23 17:31	1
Boron	1.8		0.32	0.088	mg/L		08/03/23 05:46	08/04/23 15:43	4
Cadmium	0.00032	J	0.0025	0.000078	mg/L		08/03/23 05:46	08/03/23 17:31	1
Calcium	100		0.50	0.14	mg/L		08/03/23 05:46	08/03/23 17:31	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:46	08/03/23 17:31	1
Cobalt	0.0011	J	0.0025	0.00022	mg/L		08/03/23 05:46	08/03/23 17:31	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:46	08/03/23 17:31	1
Lithium	0.0031	J	0.0050	0.0020	mg/L		08/03/23 05:46	08/03/23 17:31	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:46	08/03/23 17:31	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:46	08/03/23 17:31	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:46	08/03/23 17:31	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	520		40	40	mg/L			08/07/23 12:07	1

Client Sample ID: MCI-MGWC-3

Lab Sample ID: 680-238497-8

Date Collected: 08/01/23 14:43

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		1.0	0.20	mg/L			08/04/23 12:26	1
Fluoride	0.10		0.10	0.040	mg/L			08/04/23 12:26	1
Sulfate	110		1.0	0.40	mg/L			08/04/23 12:26	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		08/03/23 05:51	08/03/23 21:19	1
Arsenic	0.0017		0.0010	0.00086	mg/L		08/03/23 05:51	08/03/23 21:19	1
Barium	0.16		0.010	0.00089	mg/L		08/03/23 05:51	08/03/23 21:19	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:51	08/03/23 21:19	1
Boron	0.65	B	0.080	0.022	mg/L		08/03/23 05:51	08/03/23 21:19	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:51	08/03/23 21:19	1
Calcium	120		0.50	0.14	mg/L		08/03/23 05:51	08/03/23 21:19	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:51	08/03/23 21:19	1
Cobalt	0.00054	J	0.0025	0.00022	mg/L		08/03/23 05:51	08/03/23 21:19	1

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Client Sample Results

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWC-3

Lab Sample ID: 680-238497-8

Date Collected: 08/01/23 14:43

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:51	08/03/23 21:19	1
Lithium	0.011		0.0050	0.0020	mg/L		08/03/23 05:51	08/03/23 21:19	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:51	08/03/23 21:19	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:51	08/03/23 21:19	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:51	08/03/23 21:19	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	420		40	40	mg/L			08/04/23 11:57	1

Client Sample ID: MCI-MGWC-7

Lab Sample ID: 680-238497-9

Date Collected: 08/02/23 10:21

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		1.0	0.20	mg/L			08/04/23 13:04	1
Fluoride	0.20		0.10	0.040	mg/L			08/04/23 13:04	1
Sulfate	200		1.0	0.40	mg/L			08/04/23 13:04	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		08/03/23 05:46	08/03/23 17:22	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/03/23 05:46	08/03/23 17:22	1
Barium	0.015		0.010	0.00089	mg/L		08/03/23 05:46	08/03/23 17:22	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:46	08/03/23 17:22	1
Boron	2.2		0.32	0.088	mg/L		08/03/23 05:46	08/04/23 15:34	4
Cadmium	0.00031	J	0.0025	0.000078	mg/L		08/03/23 05:46	08/03/23 17:22	1
Calcium	57		0.50	0.14	mg/L		08/03/23 05:46	08/03/23 17:22	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:46	08/03/23 17:22	1
Cobalt	0.0031		0.0025	0.00022	mg/L		08/03/23 05:46	08/03/23 17:22	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:46	08/03/23 17:22	1
Lithium	0.13		0.0050	0.0020	mg/L		08/03/23 05:46	08/03/23 17:22	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:46	08/03/23 17:22	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:46	08/03/23 17:22	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:46	08/03/23 17:22	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	410		40	40	mg/L			08/07/23 12:07	1

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Client Sample Results

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWC-8

Lab Sample ID: 680-238497-10

Date Collected: 08/01/23 15:44

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		1.0	0.20	mg/L			08/04/23 13:42	1
Fluoride	0.11		0.10	0.040	mg/L			08/04/23 13:42	1
Sulfate	280		5.0	2.0	mg/L			08/07/23 12:51	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		08/03/23 05:51	08/03/23 21:10	1
Arsenic	0.00098	J	0.0010	0.00086	mg/L		08/03/23 05:51	08/03/23 21:10	1
Barium	0.056		0.010	0.00089	mg/L		08/03/23 05:51	08/03/23 21:10	1
Beryllium	0.00025	J	0.0025	0.00020	mg/L		08/03/23 05:51	08/03/23 21:10	1
Boron	4.3	B	0.080	0.022	mg/L		08/03/23 05:51	08/03/23 21:10	1
Cadmium	0.0020	J	0.0025	0.000078	mg/L		08/03/23 05:51	08/03/23 21:10	1
Calcium	120		0.50	0.14	mg/L		08/03/23 05:51	08/03/23 21:10	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:51	08/03/23 21:10	1
Cobalt	0.0015	J	0.0025	0.00022	mg/L		08/03/23 05:51	08/03/23 21:10	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:51	08/03/23 21:10	1
Lithium	0.012		0.0050	0.0020	mg/L		08/03/23 05:51	08/03/23 21:10	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:51	08/03/23 21:10	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:51	08/03/23 21:10	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:51	08/03/23 21:10	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00014	J	0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	570		40	40	mg/L			08/04/23 11:57	1

Client Sample ID: MCI-MGWC-12

Lab Sample ID: 680-238497-11

Date Collected: 08/02/23 11:45

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.5		1.0	0.20	mg/L			08/04/23 13:55	1
Fluoride	0.25		0.10	0.040	mg/L			08/04/23 13:55	1
Sulfate	4.6		1.0	0.40	mg/L			08/04/23 13:55	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		08/03/23 05:51	08/03/23 21:23	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/03/23 05:51	08/03/23 21:23	1
Barium	0.055		0.010	0.00089	mg/L		08/03/23 05:51	08/03/23 21:23	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:51	08/03/23 21:23	1
Boron	0.062	J B	0.080	0.022	mg/L		08/03/23 05:51	08/03/23 21:23	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:51	08/03/23 21:23	1
Calcium	31		0.50	0.14	mg/L		08/03/23 05:51	08/03/23 21:23	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:51	08/03/23 21:23	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/03/23 05:51	08/03/23 21:23	1

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Client Sample Results

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWC-12

Lab Sample ID: 680-238497-11

Date Collected: 08/02/23 11:45

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:51	08/03/23 21:23	1
Lithium	0.019		0.0050	0.0020	mg/L		08/03/23 05:51	08/03/23 21:23	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:51	08/03/23 21:23	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:51	08/03/23 21:23	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:51	08/03/23 21:23	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		08/08/23 12:00	08/09/23 10:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	200		10	10	mg/L			08/07/23 12:07	1

Client Sample ID: MCI-AP1-FD-01

Lab Sample ID: 680-238497-12

Date Collected: 08/01/23 00:00

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		1.0	0.20	mg/L			08/04/23 14:08	1
Fluoride	0.11		0.10	0.040	mg/L			08/04/23 14:08	1
Sulfate	280		5.0	2.0	mg/L			08/07/23 13:03	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		08/03/23 05:46	08/03/23 17:35	1
Arsenic	0.00095	J	0.0010	0.00086	mg/L		08/03/23 05:46	08/03/23 17:35	1
Barium	0.051		0.010	0.00089	mg/L		08/03/23 05:46	08/03/23 17:35	1
Beryllium	0.00023	J	0.0025	0.00020	mg/L		08/03/23 05:46	08/03/23 17:35	1
Boron	3.8		0.080	0.022	mg/L		08/03/23 05:46	08/04/23 15:47	1
Cadmium	0.0014	J	0.0025	0.000078	mg/L		08/03/23 05:46	08/03/23 17:35	1
Calcium	110		0.50	0.14	mg/L		08/03/23 05:46	08/03/23 17:35	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:46	08/03/23 17:35	1
Cobalt	0.0014	J	0.0025	0.00022	mg/L		08/03/23 05:46	08/03/23 17:35	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:46	08/03/23 17:35	1
Lithium	0.0095		0.0050	0.0020	mg/L		08/03/23 05:46	08/03/23 17:35	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:46	08/03/23 17:35	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:46	08/03/23 17:35	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:46	08/03/23 17:35	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00012	J	0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	570		40	40	mg/L			08/04/23 11:57	1

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Client Sample Results

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

Job ID: 680-238497-1

Client Sample ID: MCI-AP1-FD-02

Lab Sample ID: 680-238497-13

Date Collected: 08/01/23 00:00

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		1.0	0.20	mg/L			08/04/23 14:20	1
Fluoride	0.10		0.10	0.040	mg/L			08/04/23 14:20	1
Sulfate	110		1.0	0.40	mg/L			08/04/23 14:20	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		08/03/23 05:46	08/03/23 18:03	1
Arsenic	0.0017		0.0010	0.00086	mg/L		08/03/23 05:46	08/03/23 18:03	1
Barium	0.16		0.010	0.00089	mg/L		08/03/23 05:46	08/03/23 18:03	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:46	08/03/23 18:03	1
Boron	0.59		0.080	0.022	mg/L		08/03/23 05:46	08/04/23 16:03	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:46	08/03/23 18:03	1
Calcium	120		0.50	0.14	mg/L		08/03/23 05:46	08/03/23 18:03	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:46	08/03/23 18:03	1
Cobalt	0.00049	J	0.0025	0.00022	mg/L		08/03/23 05:46	08/03/23 18:03	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:46	08/03/23 18:03	1
Lithium	0.011		0.0050	0.0020	mg/L		08/03/23 05:46	08/03/23 18:03	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:46	08/03/23 18:03	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:46	08/03/23 18:03	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:46	08/03/23 18:03	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		08/08/23 12:00	08/09/23 10:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	410		40	40	mg/L			08/04/23 11:57	1

Client Sample ID: MCI-AP1-FB-01

Lab Sample ID: 680-238497-14

Date Collected: 08/02/23 10:45

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/04/23 14:33	1
Fluoride	0.59		0.10	0.040	mg/L			08/04/23 14:33	1
Sulfate	<0.40		1.0	0.40	mg/L			08/04/23 14:33	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		08/03/23 05:46	08/03/23 17:14	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/03/23 05:46	08/03/23 17:14	1
Barium	0.00092	J	0.010	0.00089	mg/L		08/03/23 05:46	08/03/23 17:14	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:46	08/03/23 17:14	1
Boron	0.033	J	0.080	0.022	mg/L		08/03/23 05:46	08/04/23 15:18	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:46	08/03/23 17:14	1
Calcium	<0.14		0.50	0.14	mg/L		08/03/23 05:46	08/03/23 17:14	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:46	08/03/23 17:14	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/03/23 05:46	08/03/23 17:14	1

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Client Sample Results

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

Job ID: 680-238497-1

Client Sample ID: MCI-AP1-FB-01

Lab Sample ID: 680-238497-14

Date Collected: 08/02/23 10:45

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:46	08/03/23 17:14	1
Lithium	<0.0020		0.0050	0.0020	mg/L		08/03/23 05:46	08/03/23 17:14	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:46	08/03/23 17:14	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:46	08/03/23 17:14	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:46	08/03/23 17:14	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	<10		10	10	mg/L			08/07/23 12:07	1

Client Sample ID: MCI-AP1-FB-02

Lab Sample ID: 680-238497-15

Date Collected: 08/02/23 11:05

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/04/23 14:46	1
Fluoride	0.61		0.10	0.040	mg/L			08/04/23 14:46	1
Sulfate	<0.40		1.0	0.40	mg/L			08/04/23 14:46	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		08/16/23 05:44	08/16/23 16:41	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/16/23 05:44	08/16/23 16:41	1
Barium	<0.00089		0.010	0.00089	mg/L		08/16/23 05:44	08/16/23 16:41	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/16/23 05:44	08/16/23 16:41	1
Boron	<0.022		0.080	0.022	mg/L		08/16/23 05:44	08/16/23 16:41	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/16/23 05:44	08/16/23 16:41	1
Calcium	<0.14		0.50	0.14	mg/L		08/16/23 05:44	08/16/23 16:41	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/16/23 05:44	08/16/23 16:41	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/16/23 05:44	08/16/23 16:41	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/16/23 05:44	08/16/23 16:41	1
Lithium	<0.0020		0.0050	0.0020	mg/L		08/16/23 05:44	08/16/23 16:41	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/16/23 05:44	08/16/23 16:41	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/16/23 05:44	08/16/23 16:41	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/16/23 05:44	08/16/23 16:41	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 11:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	<10		10	10	mg/L			08/07/23 12:07	1

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Client Sample Results

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

Job ID: 680-238497-1

Client Sample ID: MCI-AP1-EB-03

Lab Sample ID: 680-238497-16

Date Collected: 08/01/23 13:10

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/04/23 14:58	1
Fluoride	0.67		0.10	0.040	mg/L			08/04/23 14:58	1
Sulfate	<0.40		1.0	0.40	mg/L			08/04/23 14:58	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		08/16/23 05:44	08/16/23 16:53	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/16/23 05:44	08/16/23 16:53	1
Barium	<0.00089		0.010	0.00089	mg/L		08/16/23 05:44	08/16/23 16:53	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/16/23 05:44	08/16/23 16:53	1
Boron	<0.022		0.080	0.022	mg/L		08/16/23 05:44	08/16/23 16:53	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/16/23 05:44	08/16/23 16:53	1
Calcium	<0.14		0.50	0.14	mg/L		08/16/23 05:44	08/16/23 16:53	1
Chromium	0.0012	J	0.0020	0.0012	mg/L		08/16/23 05:44	08/16/23 16:53	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/16/23 05:44	08/16/23 16:53	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/16/23 05:44	08/16/23 16:53	1
Lithium	<0.0020		0.0050	0.0020	mg/L		08/16/23 05:44	08/16/23 16:53	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/16/23 05:44	08/16/23 16:53	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/16/23 05:44	08/16/23 16:53	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/16/23 05:44	08/16/23 16:53	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 11:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	<10		10	10	mg/L			08/04/23 11:57	1

Client Sample ID: MCI-AP1-EB-04

Lab Sample ID: 680-238497-17

Date Collected: 08/02/23 10:35

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/04/23 15:11	1
Fluoride	0.057	J	0.10	0.040	mg/L			08/04/23 15:11	1
Sulfate	<0.40		1.0	0.40	mg/L			08/04/23 15:11	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		08/16/23 05:44	08/16/23 16:57	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/16/23 05:44	08/16/23 16:57	1
Barium	<0.00089		0.010	0.00089	mg/L		08/16/23 05:44	08/16/23 16:57	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/16/23 05:44	08/16/23 16:57	1
Boron	<0.022		0.080	0.022	mg/L		08/16/23 05:44	08/16/23 16:57	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/16/23 05:44	08/16/23 16:57	1
Calcium	<0.14		0.50	0.14	mg/L		08/16/23 05:44	08/16/23 16:57	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/16/23 05:44	08/16/23 16:57	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/16/23 05:44	08/16/23 16:57	1

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Client Sample Results

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

Job ID: 680-238497-1

Client Sample ID: MCI-AP1-EB-04

Lab Sample ID: 680-238497-17

Date Collected: 08/02/23 10:35

Matrix: Water

Date Received: 08/02/23 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00021		0.0010	0.00021	mg/L		08/16/23 05:44	08/16/23 16:57	1
Lithium	<0.0020		0.0050	0.0020	mg/L		08/16/23 05:44	08/16/23 16:57	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/16/23 05:44	08/16/23 16:57	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/16/23 05:44	08/16/23 16:57	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/16/23 05:44	08/16/23 16:57	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 11:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	<10		10	10	mg/L			08/07/23 12:07	1

QC Sample Results

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

Job ID: 680-238497-1

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

Lab Sample ID: MB 680-791760/2
Matrix: Water
Analysis Batch: 791760

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/04/23 09:09	1
Fluoride	<0.040		0.10	0.040	mg/L			08/04/23 09:09	1
Sulfate	<0.40		1.0	0.40	mg/L			08/04/23 09:09	1

Lab Sample ID: LCS 680-791760/4
Matrix: Water
Analysis Batch: 791760

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.97		mg/L		100	90 - 110
Fluoride	2.00	2.15		mg/L		108	90 - 110
Sulfate	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 680-791760/5
Matrix: Water
Analysis Batch: 791760

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.97		mg/L		100	90 - 110	0	15
Fluoride	2.00	2.15		mg/L		107	90 - 110	0	15
Sulfate	10.0	10.2		mg/L		102	90 - 110	0	15

Lab Sample ID: 680-238494-E-6 MS
Matrix: Water
Analysis Batch: 791760

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	3.2		10.0	13.0		mg/L		98	80 - 120
Fluoride	0.063	J	2.00	2.07		mg/L		101	80 - 120
Sulfate	13		10.0	22.8		mg/L		97	80 - 120

Lab Sample ID: 680-238494-E-6 MSD
Matrix: Water
Analysis Batch: 791760

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	3.2		10.0	13.2		mg/L		100	80 - 120	2	15
Fluoride	0.063	J	2.00	2.12		mg/L		103	80 - 120	2	15
Sulfate	13		10.0	23.0		mg/L		99	80 - 120	1	15

Lab Sample ID: 680-238497-9 MS
Matrix: Water
Analysis Batch: 791760

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	11		10.0	20.6		mg/L		100	80 - 120
Fluoride	0.20		2.00	2.27		mg/L		103	80 - 120
Sulfate	200		10.0	210	4	mg/L		76	80 - 120

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QC Sample Results

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

Job ID: 680-238497-1

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

Lab Sample ID: 680-238497-9 MSD
Matrix: Water
Analysis Batch: 791760

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	11		10.0	20.9		mg/L		102	80 - 120	1	15
Fluoride	0.20		2.00	2.32		mg/L		106	80 - 120	2	15
Sulfate	200		10.0	210	4	mg/L		81	80 - 120	0	15

Lab Sample ID: MB 680-792069/2
Matrix: Water
Analysis Batch: 792069

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			08/07/23 10:00	1
Fluoride	<0.040		0.10	0.040	mg/L			08/07/23 10:00	1
Sulfate	<0.40		1.0	0.40	mg/L			08/07/23 10:00	1

Lab Sample ID: LCS 680-792069/4
Matrix: Water
Analysis Batch: 792069

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.96		mg/L		100	90 - 110
Fluoride	2.00	2.12		mg/L		106	90 - 110
Sulfate	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 680-792069/5
Matrix: Water
Analysis Batch: 792069

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.96		mg/L		100	90 - 110	0	15
Fluoride	2.00	2.13		mg/L		106	90 - 110	0	15
Sulfate	10.0	10.2		mg/L		102	90 - 110	0	15

Lab Sample ID: 680-238271-F-2 MS
Matrix: Water
Analysis Batch: 792069

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
Fluoride	0.044	J F2	2.00	1.75		mg/L		85	80 - 120
Sulfate	48		10.0	56.2	4	mg/L		81	80 - 120

Lab Sample ID: 680-238271-F-2 MSD
Matrix: Water
Analysis Batch: 792069

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
Fluoride	0.044	J F2	2.00	2.07	F2	mg/L		101	80 - 120	17	15
Sulfate	48		10.0	57.6	4	mg/L		96	80 - 120	3	15

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QC Sample Results

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

Job ID: 680-238497-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 680-791512/1-A
Matrix: Water
Analysis Batch: 791787

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 791512

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.00034		0.0020	0.00034	mg/L		08/03/23 05:46	08/03/23 16:09	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/03/23 05:46	08/03/23 16:09	1
Barium	<0.00089		0.010	0.00089	mg/L		08/03/23 05:46	08/03/23 16:09	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:46	08/03/23 16:09	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:46	08/03/23 16:09	1
Calcium	<0.14		0.50	0.14	mg/L		08/03/23 05:46	08/03/23 16:09	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:46	08/03/23 16:09	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/03/23 05:46	08/03/23 16:09	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:46	08/03/23 16:09	1
Lithium	<0.0020		0.0050	0.0020	mg/L		08/03/23 05:46	08/03/23 16:09	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:46	08/03/23 16:09	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:46	08/03/23 16:09	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:46	08/03/23 16:09	1

Lab Sample ID: MB 680-791512/1-A
Matrix: Water
Analysis Batch: 791932

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 791512

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.00034		0.0020	0.00034	mg/L		08/03/23 05:46	08/04/23 14:45	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/03/23 05:46	08/04/23 14:45	1
Barium	0.00102	J	0.010	0.00089	mg/L		08/03/23 05:46	08/04/23 14:45	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:46	08/04/23 14:45	1
Boron	<0.022		0.080	0.022	mg/L		08/03/23 05:46	08/04/23 14:45	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:46	08/04/23 14:45	1
Calcium	<0.14		0.50	0.14	mg/L		08/03/23 05:46	08/04/23 14:45	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:46	08/04/23 14:45	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/03/23 05:46	08/04/23 14:45	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:46	08/04/23 14:45	1
Lithium	<0.0020		0.0050	0.0020	mg/L		08/03/23 05:46	08/04/23 14:45	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:46	08/04/23 14:45	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:46	08/04/23 14:45	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:46	08/04/23 14:45	1

Lab Sample ID: LCS 680-791512/2-A
Matrix: Water
Analysis Batch: 791787

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 791512

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Antimony	0.0500	0.0504		mg/L		101	80 - 120
Arsenic	0.100	0.105		mg/L		105	80 - 120
Barium	0.100	0.0970		mg/L		97	80 - 120
Beryllium	0.0500	0.0534		mg/L		107	80 - 120
Cadmium	0.0500	0.0488		mg/L		98	80 - 120
Calcium	5.00	5.36		mg/L		107	80 - 120
Chromium	0.100	0.0964		mg/L		96	80 - 120
Cobalt	0.0500	0.0537		mg/L		107	80 - 120
Lead	0.500	0.517		mg/L		103	80 - 120
Lithium	0.500	0.518		mg/L		104	80 - 120

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QC Sample Results

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

Job ID: 680-238497-1

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

Lab Sample ID: LCS 680-791512/2-A
Matrix: Water
Analysis Batch: 791787

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 791512

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	0.100	0.106		mg/L		106	80 - 120
Selenium	0.100	0.108		mg/L		108	80 - 120
Thallium	0.0500	0.0488		mg/L		98	80 - 120

Lab Sample ID: LCS 680-791512/2-A
Matrix: Water
Analysis Batch: 791932

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 791512

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.0500	0.0485		mg/L		97	80 - 120
Arsenic	0.100	0.100		mg/L		100	80 - 120
Barium	0.100	0.0987		mg/L		99	80 - 120
Beryllium	0.0500	0.0491		mg/L		98	80 - 120
Boron	0.200	0.198		mg/L		99	80 - 120
Cadmium	0.0500	0.0481		mg/L		96	80 - 120
Calcium	5.00	5.21		mg/L		104	80 - 120
Chromium	0.100	0.102		mg/L		102	80 - 120
Cobalt	0.0500	0.0517		mg/L		103	80 - 120
Lead	0.500	0.516		mg/L		103	80 - 120
Lithium	0.500	0.488		mg/L		98	80 - 120
Molybdenum	0.100	0.102		mg/L		102	80 - 120
Selenium	0.100	0.102		mg/L		102	80 - 120
Thallium	0.0500	0.0472		mg/L		94	80 - 120

Lab Sample ID: 680-238484-A-1-B MS
Matrix: Water
Analysis Batch: 791787

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 791512

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00034		0.0500	0.0507		mg/L		101	75 - 125
Arsenic	0.0022		0.100	0.107		mg/L		105	75 - 125
Barium	0.013		0.100	0.110		mg/L		98	75 - 125
Beryllium	<0.00020		0.0500	0.0538		mg/L		108	75 - 125
Cadmium	<0.000078		0.0500	0.0497		mg/L		99	75 - 125
Calcium	14		5.00	18.3		mg/L		84	75 - 125
Chromium	0.0015	J	0.100	0.0974		mg/L		96	75 - 125
Cobalt	0.00069	J	0.0500	0.0556		mg/L		110	75 - 125
Lead	0.00029	J	0.500	0.516		mg/L		103	75 - 125
Lithium	<0.0020		0.500	0.524		mg/L		105	75 - 125
Molybdenum	0.0031	J	0.100	0.110		mg/L		107	75 - 125
Selenium	0.0011	J	0.100	0.109		mg/L		108	75 - 125
Thallium	<0.00026		0.0500	0.0496		mg/L		99	75 - 125

Lab Sample ID: 680-238484-A-1-B MS
Matrix: Water
Analysis Batch: 791932

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 791512

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.047	J	0.200	0.233		mg/L		93	75 - 125

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QC Sample Results

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

Job ID: 680-238497-1

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

Lab Sample ID: 680-238484-A-1-C MSD
Matrix: Water
Analysis Batch: 791787

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 791512

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Antimony	<0.00034		0.0500	0.0504		mg/L		101	75 - 125	1	20
Arsenic	0.0022		0.100	0.107		mg/L		105	75 - 125	0	20
Barium	0.013		0.100	0.112		mg/L		100	75 - 125	2	20
Beryllium	<0.00020		0.0500	0.0536		mg/L		107	75 - 125	0	20
Cadmium	<0.000078		0.0500	0.0508		mg/L		102	75 - 125	2	20
Calcium	14		5.00	18.0		mg/L		78	75 - 125	2	20
Chromium	0.0015	J	0.100	0.100		mg/L		99	75 - 125	3	20
Cobalt	0.00069	J	0.0500	0.0552		mg/L		109	75 - 125	1	20
Lead	0.00029	J	0.500	0.529		mg/L		106	75 - 125	2	20
Lithium	<0.0020		0.500	0.526		mg/L		105	75 - 125	0	20
Molybdenum	0.0031	J	0.100	0.110		mg/L		107	75 - 125	0	20
Selenium	0.0011	J	0.100	0.108		mg/L		107	75 - 125	1	20
Thallium	<0.00026		0.0500	0.0507		mg/L		101	75 - 125	2	20

Lab Sample ID: 680-238484-A-1-C MSD
Matrix: Water
Analysis Batch: 791932

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 791512

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Boron	0.047	J	0.200	0.240		mg/L		97	75 - 125	3	20

Lab Sample ID: MB 680-791513/1-A
Matrix: Water
Analysis Batch: 791787

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 791513

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.00034		0.0020	0.00034	mg/L		08/03/23 05:51	08/03/23 20:22	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/03/23 05:51	08/03/23 20:22	1
Barium	<0.00089		0.010	0.00089	mg/L		08/03/23 05:51	08/03/23 20:22	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/03/23 05:51	08/03/23 20:22	1
Boron	0.0391	J	0.080	0.022	mg/L		08/03/23 05:51	08/03/23 20:22	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/03/23 05:51	08/03/23 20:22	1
Calcium	<0.14		0.50	0.14	mg/L		08/03/23 05:51	08/03/23 20:22	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/03/23 05:51	08/03/23 20:22	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/03/23 05:51	08/03/23 20:22	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/03/23 05:51	08/03/23 20:22	1
Lithium	<0.0020		0.0050	0.0020	mg/L		08/03/23 05:51	08/03/23 20:22	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/03/23 05:51	08/03/23 20:22	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/03/23 05:51	08/03/23 20:22	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/03/23 05:51	08/03/23 20:22	1

Lab Sample ID: LCS 680-791513/2-A
Matrix: Water
Analysis Batch: 791787

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 791513

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec
							Limits
Antimony	0.0500	0.0531		mg/L		106	80 - 120
Arsenic	0.100	0.110		mg/L		110	80 - 120
Barium	0.100	0.103		mg/L		103	80 - 120

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QC Sample Results

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

Job ID: 680-238497-1

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

Lab Sample ID: LCS 680-791513/2-A
Matrix: Water
Analysis Batch: 791787

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 791513

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	0.0500	0.0523		mg/L		105	80 - 120
Boron	0.200	0.235		mg/L		118	80 - 120
Cadmium	0.0500	0.0517		mg/L		103	80 - 120
Calcium	5.00	5.30		mg/L		106	80 - 120
Chromium	0.100	0.105		mg/L		105	80 - 120
Cobalt	0.0500	0.0560		mg/L		112	80 - 120
Lead	0.500	0.542		mg/L		108	80 - 120
Lithium	0.500	0.515		mg/L		103	80 - 120
Molybdenum	0.100	0.111		mg/L		111	80 - 120
Selenium	0.100	0.110		mg/L		110	80 - 120
Thallium	0.0500	0.0508		mg/L		102	80 - 120

Lab Sample ID: MB 680-793587/1-A
Matrix: Water
Analysis Batch: 793796

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 793587

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00034		0.0020	0.00034	mg/L		08/16/23 05:44	08/16/23 16:08	1
Arsenic	<0.00086		0.0010	0.00086	mg/L		08/16/23 05:44	08/16/23 16:08	1
Barium	<0.00089		0.010	0.00089	mg/L		08/16/23 05:44	08/16/23 16:08	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		08/16/23 05:44	08/16/23 16:08	1
Boron	<0.022		0.080	0.022	mg/L		08/16/23 05:44	08/16/23 16:08	1
Cadmium	<0.000078		0.0025	0.000078	mg/L		08/16/23 05:44	08/16/23 16:08	1
Calcium	<0.14		0.50	0.14	mg/L		08/16/23 05:44	08/16/23 16:08	1
Chromium	<0.0012		0.0020	0.0012	mg/L		08/16/23 05:44	08/16/23 16:08	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		08/16/23 05:44	08/16/23 16:08	1
Lead	<0.00021		0.0010	0.00021	mg/L		08/16/23 05:44	08/16/23 16:08	1
Lithium	<0.0020		0.0050	0.0020	mg/L		08/16/23 05:44	08/16/23 16:08	1
Molybdenum	<0.00086		0.015	0.00086	mg/L		08/16/23 05:44	08/16/23 16:08	1
Selenium	<0.00099		0.0050	0.00099	mg/L		08/16/23 05:44	08/16/23 16:08	1
Thallium	<0.00026		0.0010	0.00026	mg/L		08/16/23 05:44	08/16/23 16:08	1

Lab Sample ID: LCS 680-793587/2-A
Matrix: Water
Analysis Batch: 793796

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 793587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.0500	0.0519		mg/L		104	80 - 120
Arsenic	0.100	0.104		mg/L		104	80 - 120
Barium	0.100	0.102		mg/L		102	80 - 120
Beryllium	0.0500	0.0515		mg/L		103	80 - 120
Boron	0.200	0.211		mg/L		105	80 - 120
Cadmium	0.0500	0.0521		mg/L		104	80 - 120
Calcium	5.00	5.17		mg/L		103	80 - 120
Chromium	0.100	0.109		mg/L		109	80 - 120
Cobalt	0.0500	0.0547		mg/L		109	80 - 120
Lead	0.500	0.504		mg/L		101	80 - 120
Lithium	0.500	0.494		mg/L		99	80 - 120
Molybdenum	0.100	0.105		mg/L		105	80 - 120

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QC Sample Results

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

Job ID: 680-238497-1

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

Lab Sample ID: LCS 680-793587/2-A
Matrix: Water
Analysis Batch: 793796

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 793587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	0.100	0.102		mg/L		102	80 - 120
Thallium	0.0500	0.0491		mg/L		98	80 - 120

Lab Sample ID: 752-10488-A-4-E MS
Matrix: Water
Analysis Batch: 793796

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 793587

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00034		0.0500	0.0528		mg/L		106	75 - 125
Arsenic	<0.00086		0.100	0.102		mg/L		102	75 - 125
Barium	0.75	F2	0.100	0.802	4	mg/L		53	75 - 125
Beryllium	<0.00020		0.0500	0.0519		mg/L		104	75 - 125
Boron	<0.022		0.200	0.224		mg/L		112	75 - 125
Cadmium	<0.000078		0.0500	0.0518		mg/L		104	75 - 125
Calcium	130	F2	5.00	129	4	mg/L		-74	75 - 125
Chromium	<0.0012		0.100	0.107		mg/L		107	75 - 125
Cobalt	0.019		0.0500	0.0704		mg/L		103	75 - 125
Lead	<0.00021		0.500	0.509		mg/L		102	75 - 125
Lithium	0.0028	J	0.500	0.477		mg/L		95	75 - 125
Molybdenum	<0.00086		0.100	0.105		mg/L		105	75 - 125
Selenium	<0.00099		0.100	0.105		mg/L		105	75 - 125
Thallium	<0.00026		0.0500	0.0504		mg/L		101	75 - 125

Lab Sample ID: 752-10488-A-4-F MSD
Matrix: Water
Analysis Batch: 793796

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 793587

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00034		0.0500	0.0502		mg/L		100	75 - 125	5	20
Arsenic	<0.00086		0.100	0.0989		mg/L		99	75 - 125	3	20
Barium	0.75	F2	0.100	0.424	4 F2	mg/L		-325	75 - 125	62	20
Beryllium	<0.00020		0.0500	0.0507		mg/L		101	75 - 125	2	20
Boron	<0.022		0.200	0.219		mg/L		109	75 - 125	2	20
Cadmium	<0.000078		0.0500	0.0500		mg/L		100	75 - 125	4	20
Calcium	130	F2	5.00	66.0	4 F2	mg/L		-1338	75 - 125	65	20
Chromium	<0.0012		0.100	0.102		mg/L		102	75 - 125	4	20
Cobalt	0.019		0.0500	0.0604		mg/L		83	75 - 125	15	20
Lead	<0.00021		0.500	0.487		mg/L		97	75 - 125	4	20
Lithium	0.0028	J	0.500	0.484		mg/L		96	75 - 125	1	20
Molybdenum	<0.00086		0.100	0.101		mg/L		101	75 - 125	5	20
Selenium	<0.00099		0.100	0.101		mg/L		101	75 - 125	4	20
Thallium	<0.00026		0.0500	0.0489		mg/L		98	75 - 125	3	20

QC Sample Results

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

Job ID: 680-238497-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-792327/1-A
Matrix: Water
Analysis Batch: 792548

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 792327

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000080		0.00020	0.000080	mg/L		08/08/23 12:00	08/09/23 10:29	1

Lab Sample ID: LCS 680-792327/2-A
Matrix: Water
Analysis Batch: 792548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 792327

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00250	0.00245		mg/L		98	80 - 120

Lab Sample ID: 680-238643-E-3-D MS
Matrix: Water
Analysis Batch: 792548

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 792327

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.000080		0.00100	0.000931		mg/L		93	80 - 120

Lab Sample ID: 680-238643-E-3-E MSD
Matrix: Water
Analysis Batch: 792548

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 792327

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	<0.000080		0.00100	0.000831		mg/L		83	80 - 120	11	20

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

Lab Sample ID: MB 680-791596/1
Matrix: Water
Analysis Batch: 791596

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/03/23 10:39	1

Lab Sample ID: LCS 680-791596/2
Matrix: Water
Analysis Batch: 791596

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	2380	2400		mg/L		101	80 - 120

Lab Sample ID: LCSD 680-791596/3
Matrix: Water
Analysis Batch: 791596

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
Total Dissolved Solids	2380	2500		mg/L		105	80 - 120	4	25

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QC Sample Results

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

Job ID: 680-238497-1

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

Lab Sample ID: 680-238329-H-2 DU
Matrix: Water
Analysis Batch: 791596

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	380		344	F3	mg/L		9	5

Lab Sample ID: 680-238493-C-3 DU
Matrix: Water
Analysis Batch: 791596

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	1200		1100		mg/L		4	5

Lab Sample ID: MB 680-791826/1
Matrix: Water
Analysis Batch: 791826

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/04/23 11:57	1

Lab Sample ID: LCS 680-791826/2
Matrix: Water
Analysis Batch: 791826

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	2380	2380		mg/L		100	80 - 120

Lab Sample ID: LCSD 680-791826/3
Matrix: Water
Analysis Batch: 791826

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	2380	2420		mg/L		102	80 - 120	1	25

Lab Sample ID: 680-238497-5 DU
Matrix: Water
Analysis Batch: 791826

Client Sample ID: MCI-MGWA-6A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	360		290	F3	mg/L		21	5

Lab Sample ID: MB 680-792118/1
Matrix: Water
Analysis Batch: 792118

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/07/23 12:07	1

Lab Sample ID: LCS 680-792118/2
Matrix: Water
Analysis Batch: 792118

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	2380	2440		mg/L		103	80 - 120

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QC Sample Results

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

Job ID: 680-238497-1

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

Lab Sample ID: LCSD 680-792118/3
Matrix: Water
Analysis Batch: 792118

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	2380	2380		mg/L	-	100	80 - 120	2	25

Lab Sample ID: 680-238497-7 DU
Matrix: Water
Analysis Batch: 792118

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	520		488	F3	mg/L	-	7	5



QC Association Summary

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

Job ID: 680-238497-1

HPLC/IC

Analysis Batch: 791760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-1	MCI-MGWA-10	Total/NA	Water	300.0-1993 R2.1	
680-238497-2	MCI-MGWA-11	Total/NA	Water	300.0-1993 R2.1	
680-238497-3	MCI-MGWA-5	Total/NA	Water	300.0-1993 R2.1	
680-238497-4	MCI-MGWA-6	Total/NA	Water	300.0-1993 R2.1	
680-238497-5	MCI-MGWA-6A	Total/NA	Water	300.0-1993 R2.1	
680-238497-6	MCI-MGWC-1	Total/NA	Water	300.0-1993 R2.1	
680-238497-7	MCI-MGWC-2	Total/NA	Water	300.0-1993 R2.1	
680-238497-8	MCI-MGWC-3	Total/NA	Water	300.0-1993 R2.1	
680-238497-9	MCI-MGWC-7	Total/NA	Water	300.0-1993 R2.1	
680-238497-10	MCI-MGWC-8	Total/NA	Water	300.0-1993 R2.1	
680-238497-11	MCI-MGWC-12	Total/NA	Water	300.0-1993 R2.1	
680-238497-12	MCI-AP1-FD-01	Total/NA	Water	300.0-1993 R2.1	
680-238497-13	MCI-AP1-FD-02	Total/NA	Water	300.0-1993 R2.1	
680-238497-14	MCI-AP1-FB-01	Total/NA	Water	300.0-1993 R2.1	
680-238497-15	MCI-AP1-FB-02	Total/NA	Water	300.0-1993 R2.1	
680-238497-16	MCI-AP1-EB-03	Total/NA	Water	300.0-1993 R2.1	
680-238497-17	MCI-AP1-EB-04	Total/NA	Water	300.0-1993 R2.1	
MB 680-791760/2	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-791760/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-791760/5	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
680-238494-E-6 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
680-238494-E-6 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	
680-238497-9 MS	MCI-MGWC-7	Total/NA	Water	300.0-1993 R2.1	
680-238497-9 MSD	MCI-MGWC-7	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 792069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-10	MCI-MGWC-8	Total/NA	Water	300.0-1993 R2.1	
680-238497-12	MCI-AP1-FD-01	Total/NA	Water	300.0-1993 R2.1	
MB 680-792069/2	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-792069/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-792069/5	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
680-238271-F-2 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
680-238271-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	

Metals

Prep Batch: 791512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-3	MCI-MGWA-5	Total Recoverable	Water	3005A	
680-238497-4	MCI-MGWA-6	Total Recoverable	Water	3005A	
680-238497-5	MCI-MGWA-6A	Total Recoverable	Water	3005A	
680-238497-6	MCI-MGWC-1	Total Recoverable	Water	3005A	
680-238497-7	MCI-MGWC-2	Total Recoverable	Water	3005A	
680-238497-9	MCI-MGWC-7	Total Recoverable	Water	3005A	
680-238497-12	MCI-AP1-FD-01	Total Recoverable	Water	3005A	
680-238497-13	MCI-AP1-FD-02	Total Recoverable	Water	3005A	
680-238497-14	MCI-AP1-FB-01	Total Recoverable	Water	3005A	
MB 680-791512/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-791512/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-238484-A-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	

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QC Association Summary

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

Job ID: 680-238497-1

Metals (Continued)

Prep Batch: 791512 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238484-A-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 791513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-1	MCI-MGWA-10	Total Recoverable	Water	3005A	
680-238497-2	MCI-MGWA-11	Total Recoverable	Water	3005A	
680-238497-8	MCI-MGWC-3	Total Recoverable	Water	3005A	
680-238497-10	MCI-MGWC-8	Total Recoverable	Water	3005A	
680-238497-11	MCI-MGWC-12	Total Recoverable	Water	3005A	
MB 680-791513/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-791513/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 791787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-1	MCI-MGWA-10	Total Recoverable	Water	6020B	791513
680-238497-2	MCI-MGWA-11	Total Recoverable	Water	6020B	791513
680-238497-3	MCI-MGWA-5	Total Recoverable	Water	6020B	791512
680-238497-4	MCI-MGWA-6	Total Recoverable	Water	6020B	791512
680-238497-5	MCI-MGWA-6A	Total Recoverable	Water	6020B	791512
680-238497-6	MCI-MGWC-1	Total Recoverable	Water	6020B	791512
680-238497-7	MCI-MGWC-2	Total Recoverable	Water	6020B	791512
680-238497-8	MCI-MGWC-3	Total Recoverable	Water	6020B	791513
680-238497-9	MCI-MGWC-7	Total Recoverable	Water	6020B	791512
680-238497-10	MCI-MGWC-8	Total Recoverable	Water	6020B	791513
680-238497-11	MCI-MGWC-12	Total Recoverable	Water	6020B	791513
680-238497-12	MCI-AP1-FD-01	Total Recoverable	Water	6020B	791512
680-238497-13	MCI-AP1-FD-02	Total Recoverable	Water	6020B	791512
680-238497-14	MCI-AP1-FB-01	Total Recoverable	Water	6020B	791512
MB 680-791512/1-A	Method Blank	Total Recoverable	Water	6020B	791512
MB 680-791513/1-A	Method Blank	Total Recoverable	Water	6020B	791513
LCS 680-791512/2-A	Lab Control Sample	Total Recoverable	Water	6020B	791512
LCS 680-791513/2-A	Lab Control Sample	Total Recoverable	Water	6020B	791513
680-238484-A-1-B MS	Matrix Spike	Total Recoverable	Water	6020B	791512
680-238484-A-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	791512

Analysis Batch: 791932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-3	MCI-MGWA-5	Total Recoverable	Water	6020B	791512
680-238497-4	MCI-MGWA-6	Total Recoverable	Water	6020B	791512
680-238497-5	MCI-MGWA-6A	Total Recoverable	Water	6020B	791512
680-238497-6	MCI-MGWC-1	Total Recoverable	Water	6020B	791512
680-238497-7	MCI-MGWC-2	Total Recoverable	Water	6020B	791512
680-238497-9	MCI-MGWC-7	Total Recoverable	Water	6020B	791512
680-238497-12	MCI-AP1-FD-01	Total Recoverable	Water	6020B	791512
680-238497-13	MCI-AP1-FD-02	Total Recoverable	Water	6020B	791512
680-238497-14	MCI-AP1-FB-01	Total Recoverable	Water	6020B	791512
MB 680-791512/1-A	Method Blank	Total Recoverable	Water	6020B	791512
LCS 680-791512/2-A	Lab Control Sample	Total Recoverable	Water	6020B	791512
680-238484-A-1-B MS	Matrix Spike	Total Recoverable	Water	6020B	791512
680-238484-A-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	791512

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QC Association Summary

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

Job ID: 680-238497-1

Metals

Prep Batch: 792327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-1	MCI-MGWA-10	Total/NA	Water	7470A	
680-238497-2	MCI-MGWA-11	Total/NA	Water	7470A	
680-238497-3	MCI-MGWA-5	Total/NA	Water	7470A	
680-238497-4	MCI-MGWA-6	Total/NA	Water	7470A	
680-238497-5	MCI-MGWA-6A	Total/NA	Water	7470A	
680-238497-6	MCI-MGWC-1	Total/NA	Water	7470A	
680-238497-7	MCI-MGWC-2	Total/NA	Water	7470A	
680-238497-8	MCI-MGWC-3	Total/NA	Water	7470A	
680-238497-9	MCI-MGWC-7	Total/NA	Water	7470A	
680-238497-10	MCI-MGWC-8	Total/NA	Water	7470A	
680-238497-11	MCI-MGWC-12	Total/NA	Water	7470A	
680-238497-12	MCI-AP1-FD-01	Total/NA	Water	7470A	
680-238497-13	MCI-AP1-FD-02	Total/NA	Water	7470A	
680-238497-14	MCI-AP1-FB-01	Total/NA	Water	7470A	
680-238497-15	MCI-AP1-FB-02	Total/NA	Water	7470A	
680-238497-16	MCI-AP1-EB-03	Total/NA	Water	7470A	
680-238497-17	MCI-AP1-EB-04	Total/NA	Water	7470A	
MB 680-792327/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-792327/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-238643-E-3-D MS	Matrix Spike	Total/NA	Water	7470A	
680-238643-E-3-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 792548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-1	MCI-MGWA-10	Total/NA	Water	7470A	792327
680-238497-2	MCI-MGWA-11	Total/NA	Water	7470A	792327
680-238497-3	MCI-MGWA-5	Total/NA	Water	7470A	792327
680-238497-4	MCI-MGWA-6	Total/NA	Water	7470A	792327
680-238497-5	MCI-MGWA-6A	Total/NA	Water	7470A	792327
680-238497-6	MCI-MGWC-1	Total/NA	Water	7470A	792327
680-238497-7	MCI-MGWC-2	Total/NA	Water	7470A	792327
680-238497-8	MCI-MGWC-3	Total/NA	Water	7470A	792327
680-238497-9	MCI-MGWC-7	Total/NA	Water	7470A	792327
680-238497-10	MCI-MGWC-8	Total/NA	Water	7470A	792327
680-238497-11	MCI-MGWC-12	Total/NA	Water	7470A	792327
680-238497-12	MCI-AP1-FD-01	Total/NA	Water	7470A	792327
680-238497-13	MCI-AP1-FD-02	Total/NA	Water	7470A	792327
680-238497-14	MCI-AP1-FB-01	Total/NA	Water	7470A	792327
680-238497-15	MCI-AP1-FB-02	Total/NA	Water	7470A	792327
680-238497-16	MCI-AP1-EB-03	Total/NA	Water	7470A	792327
680-238497-17	MCI-AP1-EB-04	Total/NA	Water	7470A	792327
MB 680-792327/1-A	Method Blank	Total/NA	Water	7470A	792327
LCS 680-792327/2-A	Lab Control Sample	Total/NA	Water	7470A	792327
680-238643-E-3-D MS	Matrix Spike	Total/NA	Water	7470A	792327
680-238643-E-3-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	792327

Prep Batch: 793587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-15	MCI-AP1-FB-02	Total Recoverable	Water	3005A	
680-238497-16	MCI-AP1-EB-03	Total Recoverable	Water	3005A	
680-238497-17	MCI-AP1-EB-04	Total Recoverable	Water	3005A	

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QC Association Summary

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

Job ID: 680-238497-1

Metals (Continued)

Prep Batch: 793587 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 680-793587/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-793587/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
752-10488-A-4-E MS	Matrix Spike	Total Recoverable	Water	3005A	
752-10488-A-4-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 793796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-15	MCI-AP1-FB-02	Total Recoverable	Water	6020B	793587
680-238497-16	MCI-AP1-EB-03	Total Recoverable	Water	6020B	793587
680-238497-17	MCI-AP1-EB-04	Total Recoverable	Water	6020B	793587
MB 680-793587/1-A	Method Blank	Total Recoverable	Water	6020B	793587
LCS 680-793587/2-A	Lab Control Sample	Total Recoverable	Water	6020B	793587
752-10488-A-4-E MS	Matrix Spike	Total Recoverable	Water	6020B	793587
752-10488-A-4-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	793587

General Chemistry

Analysis Batch: 791596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-1	MCI-MGWA-10	Total/NA	Water	2540C-2011	
680-238497-2	MCI-MGWA-11	Total/NA	Water	2540C-2011	
680-238497-3	MCI-MGWA-5	Total/NA	Water	2540C-2011	
680-238497-4	MCI-MGWA-6	Total/NA	Water	2540C-2011	
MB 680-791596/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-791596/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-791596/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-238329-H-2 DU	Duplicate	Total/NA	Water	2540C-2011	
680-238493-C-3 DU	Duplicate	Total/NA	Water	2540C-2011	

Analysis Batch: 791826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-5	MCI-MGWA-6A	Total/NA	Water	2540C-2011	
680-238497-6	MCI-MGWC-1	Total/NA	Water	2540C-2011	
680-238497-8	MCI-MGWC-3	Total/NA	Water	2540C-2011	
680-238497-10	MCI-MGWC-8	Total/NA	Water	2540C-2011	
680-238497-12	MCI-AP1-FD-01	Total/NA	Water	2540C-2011	
680-238497-13	MCI-AP1-FD-02	Total/NA	Water	2540C-2011	
680-238497-16	MCI-AP1-EB-03	Total/NA	Water	2540C-2011	
MB 680-791826/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-791826/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-791826/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-238497-5 DU	MCI-MGWA-6A	Total/NA	Water	2540C-2011	

Analysis Batch: 792118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-7	MCI-MGWC-2	Total/NA	Water	2540C-2011	
680-238497-9	MCI-MGWC-7	Total/NA	Water	2540C-2011	
680-238497-11	MCI-MGWC-12	Total/NA	Water	2540C-2011	
680-238497-14	MCI-AP1-FB-01	Total/NA	Water	2540C-2011	
680-238497-15	MCI-AP1-FB-02	Total/NA	Water	2540C-2011	
680-238497-17	MCI-AP1-EB-04	Total/NA	Water	2540C-2011	

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QC Association Summary

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

Job ID: 680-238497-1

General Chemistry (Continued)

Analysis Batch: 792118 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 680-792118/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-792118/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-792118/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-238497-7 DU	MCI-MGWC-2	Total/NA	Water	2540C-2011	

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Lab Chronicle

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWA-10

Lab Sample ID: 680-238497-1

Date Collected: 08/01/23 10:54

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 10:58	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	791513	08/03/23 05:51	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791787	08/03/23 20:54	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 10:32	BJB	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	791596	08/03/23 10:39	PG	EET SAV
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWA-11

Lab Sample ID: 680-238497-2

Date Collected: 08/01/23 12:20

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 11:10	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	791513	08/03/23 05:51	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791787	08/03/23 20:58	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 10:34	BJB	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	791596	08/03/23 10:39	PG	EET SAV
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWA-5

Lab Sample ID: 680-238497-3

Date Collected: 08/01/23 13:20

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 11:23	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791787	08/03/23 17:27	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791932	08/04/23 15:39	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 10:35	BJB	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	791596	08/03/23 10:39	PG	EET SAV
Instrument ID: NOEQUIP										

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Lab Chronicle

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWA-6

Lab Sample ID: 680-238497-4

Date Collected: 08/01/23 11:50

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 11:36	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791787	08/03/23 17:55	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791932	08/04/23 15:55	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 10:37	BJB	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	791596	08/03/23 10:39	PG	EET SAV
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWA-6A

Lab Sample ID: 680-238497-5

Date Collected: 08/01/23 10:40

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 11:48	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791787	08/03/23 17:18	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791932	08/04/23 15:22	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 10:41	BJB	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	791826	08/04/23 11:57	PG	EET SAV
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWC-1

Lab Sample ID: 680-238497-6

Date Collected: 08/01/23 14:04

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 12:01	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791787	08/03/23 17:10	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791932	08/04/23 15:14	BWR	EET SAV
Instrument ID: ICPMSC										

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Lab Chronicle

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWC-1

Lab Sample ID: 680-238497-6

Date Collected: 08/01/23 14:04

Matrix: Water

Date Received: 08/02/23 13:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 10:43	BJB	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	791826	08/04/23 11:57	PG	EET SAV
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWC-2

Lab Sample ID: 680-238497-7

Date Collected: 08/02/23 10:24

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 12:14	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791787	08/03/23 17:31	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		4			791932	08/04/23 15:43	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 10:45	BJB	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	792118	08/07/23 12:07	PG	EET SAV
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWC-3

Lab Sample ID: 680-238497-8

Date Collected: 08/01/23 14:43

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 12:26	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	791513	08/03/23 05:51	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791787	08/03/23 21:19	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 10:46	BJB	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	791826	08/04/23 11:57	PG	EET SAV
Instrument ID: NOEQUIP										

Lab Chronicle

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWC-7

Lab Sample ID: 680-238497-9

Date Collected: 08/02/23 10:21

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 13:04	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791787	08/03/23 17:22	BWR	EET SAV
Instrument ID: ICPMSC										
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B		4			791932	08/04/23 15:34	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 10:48	BJB	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	792118	08/07/23 12:07	PG	EET SAV
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWC-8

Lab Sample ID: 680-238497-10

Date Collected: 08/01/23 15:44

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 13:42	T1C	EET SAV
Instrument ID: CICK										
Total/NA	Analysis	300.0-1993 R2.1		5	5 mL	5 mL	792069	08/07/23 12:51	GE	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	791513	08/03/23 05:51	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791787	08/03/23 21:10	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 10:49	BJB	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	50 mL	200 mL	791826	08/04/23 11:57	PG	EET SAV
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWC-12

Lab Sample ID: 680-238497-11

Date Collected: 08/02/23 11:45

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 13:55	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	791513	08/03/23 05:51	RR	EET SAV
Total Recoverable	Analysis	6020B		1			791787	08/03/23 21:23	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 10:51	BJB	EET SAV
Instrument ID: QuickTrace2										

Eurofins Savannah

Lab Chronicle

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

Job ID: 680-238497-1

Client Sample ID: MCI-MGWC-12

Lab Sample ID: 680-238497-11

Date Collected: 08/02/23 11:45

Matrix: Water

Date Received: 08/02/23 13:55

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	792118	08/07/23 12:07	PG	EET SAV

Client Sample ID: MCI-AP1-FD-01

Lab Sample ID: 680-238497-12

Date Collected: 08/01/23 00:00

Matrix: Water

Date Received: 08/02/23 13:55

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 Instrument ID: CICK		1	5 mL	5 mL	791760	08/04/23 14:08	T1C	EET SAV
Total/NA	Analysis	300.0-1993 R2.1 Instrument ID: CICK		5	5 mL	5 mL	792069	08/07/23 13:03	GE	EET SAV
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			791787	08/03/23 17:35	BWR	EET SAV
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			791932	08/04/23 15:47	BWR	EET SAV
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A Instrument ID: QuickTrace2		1			792548	08/09/23 10:52	BJB	EET SAV
Total/NA	Analysis	2540C-2011 Instrument ID: NOEQUIP		1	50 mL	200 mL	791826	08/04/23 11:57	PG	EET SAV

Client Sample ID: MCI-AP1-FD-02

Lab Sample ID: 680-238497-13

Date Collected: 08/01/23 00:00

Matrix: Water

Date Received: 08/02/23 13:55

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 Instrument ID: CICK		1	5 mL	5 mL	791760	08/04/23 14:20	T1C	EET SAV
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			791787	08/03/23 18:03	BWR	EET SAV
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			791932	08/04/23 16:03	BWR	EET SAV
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A Instrument ID: QuickTrace2		1			792548	08/09/23 10:54	BJB	EET SAV
Total/NA	Analysis	2540C-2011 Instrument ID: NOEQUIP		1	50 mL	200 mL	791826	08/04/23 11:57	PG	EET SAV

Lab Chronicle

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

Job ID: 680-238497-1

Client Sample ID: MCI-AP1-FB-01
Date Collected: 08/02/23 10:45
Date Received: 08/02/23 13:55

Lab Sample ID: 680-238497-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1 Instrument ID: CICK		1	5 mL	5 mL	791760	08/04/23 14:33	T1C	EET SAV
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			791787	08/03/23 17:14	BWR	EET SAV
Total Recoverable	Prep	3005A			25 mL	125 mL	791512	08/03/23 05:46	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			791932	08/04/23 15:18	BWR	EET SAV
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A Instrument ID: QuickTrace2		1			792548	08/09/23 10:55	BJB	EET SAV
Total/NA	Analysis	2540C-2011 Instrument ID: NOEQUIP		1	200 mL	200 mL	792118	08/07/23 12:07	PG	EET SAV

Client Sample ID: MCI-AP1-FB-02
Date Collected: 08/02/23 11:05
Date Received: 08/02/23 13:55

Lab Sample ID: 680-238497-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1 Instrument ID: CICK		1	5 mL	5 mL	791760	08/04/23 14:46	T1C	EET SAV
Total Recoverable	Prep	3005A			25 mL	125 mL	793587	08/16/23 05:44	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			793796	08/16/23 16:41	BWR	EET SAV
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A Instrument ID: QuickTrace2		1			792548	08/09/23 11:00	BJB	EET SAV
Total/NA	Analysis	2540C-2011 Instrument ID: NOEQUIP		1	200 mL	200 mL	792118	08/07/23 12:07	PG	EET SAV

Client Sample ID: MCI-AP1-EB-03
Date Collected: 08/01/23 13:10
Date Received: 08/02/23 13:55

Lab Sample ID: 680-238497-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1 Instrument ID: CICK		1	5 mL	5 mL	791760	08/04/23 14:58	T1C	EET SAV
Total Recoverable	Prep	3005A			25 mL	125 mL	793587	08/16/23 05:44	RR	EET SAV
Total Recoverable	Analysis	6020B Instrument ID: ICPMSC		1			793796	08/16/23 16:53	BWR	EET SAV
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A Instrument ID: QuickTrace2		1			792548	08/09/23 11:02	BJB	EET SAV
Total/NA	Analysis	2540C-2011 Instrument ID: NOEQUIP		1	200 mL	200 mL	791826	08/04/23 11:57	PG	EET SAV

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Lab Chronicle

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

Job ID: 680-238497-1

Client Sample ID: MCI-AP1-EB-04

Lab Sample ID: 680-238497-17

Date Collected: 08/02/23 10:35

Matrix: Water

Date Received: 08/02/23 13:55

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	791760	08/04/23 15:11	T1C	EET SAV
Instrument ID: CICK										
Total Recoverable	Prep	3005A			25 mL	125 mL	793587	08/16/23 05:44	RR	EET SAV
Total Recoverable	Analysis	6020B		1			793796	08/16/23 16:57	BWR	EET SAV
Instrument ID: ICPMSC										
Total/NA	Prep	7470A			50 mL	50 mL	792327	08/08/23 12:00	DW	EET SAV
Total/NA	Analysis	7470A		1			792548	08/09/23 11:03	BJB	EET SAV
Instrument ID: QuickTrace2										
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	792118	08/07/23 12:07	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: 680-238497-1

Laboratory: Eurofins Savannah

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

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24

- 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: 680-238497-1

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
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

Protocol References:

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

Client Information					Sampler: <u>T. Goble/H. Avid</u> ACC		Lab PM Fuller, David			Carrier Tracking No(s)			COC No						
Client Contact					Phone: <u>770-594-5998</u>		E-Mail <u>david.fuller@et.eurofinsus.com</u>			Page: <u>1 of 2</u>									
SCS Contacts					Job #:														
Company: GA Power					Analysis Requested														
Address 241 Ralph McGill Blvd SE					Due Date Requested		Field Filtered Sample (Yes or No) Perform IMS/MSD (Yes or No) App. III Metals (B, Ca) Cl, F, SO ₄ , TDS (EPA 300.0 & SM 2540C) App. IV Metals (Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Ti) (EPA 60207/470) Radium 226 & 228 (SM-946 9315/9320)			Total Number of containers			Preservation Codes						
City: Atlanta					TAT Requested (days)								A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z other (specify)						
State Zip: GA, 30308					Lab Project #: 68027747								Other Task_Code MCI-CCR-ASSMT-2023S2 Special Instructions/Note Full APP III + APP IV						
Phone 404-506-7116(Tel)					PO #:														
Email SCS Contacts / ACC Contacts					Project #:														
Project Name Plant McIntosh - Ash Pond 1					SSOW#:		680-238497 Chain of Custody												
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)		Preservation Code:	
MCI-1MGWA-10					08/01/23							1054		G		WG		N N ✓ ✓ ✓ ✓	
MCI-1MGWA-11					08/01/23							1220		G		WG		N N ✓ ✓ ✓ ✓	
MCI-1MGWA-5					08/01/23							1320		G		WG		N N ✓ ✓ ✓ ✓	
MCI-1MGWA-6					08/01/23							1150		G		WG		N N ✓ ✓ ✓ ✓	
MCI-1MGWA-6A					08/01/23							1040		G		WG		N N ✓ ✓ ✓ ✓	
MCI-1MGWC-1					08/01/23							1404		G		WG		N N ✓ ✓ ✓ ✓	
MCI-1MGWC-2					08/02/23							1024		G		WG		N N ✓ ✓ ✓ ✓	
MCI-1MGWC-3					08/01/23							1443		G		WG		N N ✓ ✓ ✓ ✓	
MCI-1MGWC-7					08/02/23		1021		G		WG		N N ✓ ✓ ✓ ✓						
MCI-1MGWC-8					08/01/23		1544		G		WG		N N ✓ ✓ ✓ ✓						
MCI-1MGWC-12					08/02/23		1145		G		WG		N N ✓ ✓ ✓ ✓						
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than)														
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For														
Deliverable Requested I, II, III, IV, Other (specify)					Special Instructions/QC Requirements														
Empty Kit Relinquished by					Date		Time			Method of Shipment:									
Relinquished by: <u>[Signature]</u>					Date/Time: <u>8-2-23/1355</u>		Company: <u>ACC</u>			Received by:		Date/Time:		Company:					
Relinquished by:					Date/Time:		Company:			Received by:		Date/Time:		Company:					
Relinquished by:					Date/Time:		Company:			Received by: <u>C.M...</u>		Date/Time: <u>8/2/23 1355</u>		Company: <u>[Signature]</u>					
Custody Seals Intact. Δ Yes Δ No		Custody Seal No			Cooler Temperature(s) °C and Other Remarks <u>0.5/0.6 0.8/0.9</u> <u>1.2/1.3 2.0/2.1</u>														

Chain of Custody Record

Client Information		Sampler: <u>T. Gable/H. Auld</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				Analysis Requested				Job #:	
Address: 241 Ralph McGill Blvd SE		Due Date Requested							
City: Atlanta		TAT Requested (days)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers	
State Zip: GA, 30308		Lab Project #: <u>68027747</u>							
Phone: 404-506-7116(Tel)		PO #:							
Email: SCS Contacts / ACC Contacts		Project #:							
Project Name: Plant McIntosh - Ash Pond 1		SSOW#:		App. III Metals (B, Ca)		Cl, F, SO ₄ , TDS (EPA 300.0 & SM 2540C)		App. IV Metals (Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Ti) (EPA 6020/7470)	
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)	Preservation Code		Task Code	Special Instructions/Note
								MCI-CCR-ASSMT-2023S2	Full APP III + APP IV
MCI-	<u>API-FD-01</u>	<u>08/01/23</u>	<u>---</u>	<u>G</u>	<u>WG</u>	<u>N</u>	<u>N</u>	<u>/</u>	<u>/</u>
MCI-	<u>API-FD-02</u>	<u>08/01/23</u>	<u>---</u>	<u>G</u>	<u>WG</u>	<u>N</u>	<u>N</u>	<u>/</u>	<u>/</u>
MCI-	<u>API-FB-01</u>	<u>08/02/23</u>	<u>1045</u>	<u>G</u>	<u>WQ</u>	<u>N</u>	<u>N</u>	<u>/</u>	<u>/</u>
MCI-	<u>API-FB-02</u>	<u>08/02/23</u>	<u>1105</u>	<u>G</u>	<u>WQ</u>	<u>N</u>	<u>N</u>	<u>/</u>	<u>/</u>
MCI-	<u>API-EB-03</u>	<u>08/01/23</u>	<u>1310</u>	<u>G</u>	<u>WQ</u>	<u>N</u>	<u>N</u>	<u>/</u>	<u>/</u>
MCI-	<u>API-EB-04</u>	<u>08/02/23</u>	<u>1035</u>	<u>G</u>	<u>WQ</u>	<u>N</u>	<u>N</u>	<u>/</u>	<u>/</u>
MCI-				<u>G</u>		<u>N</u>	<u>N</u>		
MCI-				<u>G</u>		<u>N</u>	<u>N</u>		
MCI-				<u>G</u>		<u>N</u>	<u>N</u>		
MCI-				<u>G</u>		<u>N</u>	<u>N</u>		
MCI-				<u>G</u>		<u>N</u>	<u>N</u>		
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested I, II, III, IV, Other (specify)						Special Instructions/QC Requirements			
Empty Kit Relinquished by			Date	Time		Method of Shipment:			
Relinquished by: <u>H. Auld</u>			Date/Time: <u>8-2-23/1355</u>	Company: <u>ACC</u>		Received by:		Date/Time:	Company:
Relinquished by:			Date/Time:	Company:		Received by:		Date/Time:	Company:
Relinquished by:			Date/Time:	Company:		Received by: <u>C. M...</u>		Date/Time: <u>8/2/23 1355</u>	Company: <u>eurofins</u>
Custody Seals Intact Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks					



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-238497-1

Login Number: 238497

List Source: Eurofins Savannah

List Number: 1

Creator: Padayao, Abigail

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

ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/8/2023 10:36:37 AM

JOB DESCRIPTION

Plant McIntosh - Ash Pond 1

JOB NUMBER

680-238497-2

Eurofins Savannah

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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9/8/2023 10:36:37 AM

Authorized for release by
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Definitions/Glossary

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

Job ID: 680-238497-2

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: 680-238497-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-238497-1	MCI-MGWA-10	Water	08/01/23 10:54	08/02/23 13:55
680-238497-2	MCI-MGWA-11	Water	08/01/23 12:20	08/02/23 13:55
680-238497-3	MCI-MGWA-5	Water	08/01/23 13:20	08/02/23 13:55
680-238497-4	MCI-MGWA-6	Water	08/01/23 11:50	08/02/23 13:55
680-238497-5	MCI-MGWA-6A	Water	08/01/23 10:40	08/02/23 13:55
680-238497-6	MCI-MGWC-1	Water	08/01/23 14:04	08/02/23 13:55
680-238497-7	MCI-MGWC-2	Water	08/02/23 10:24	08/02/23 13:55
680-238497-8	MCI-MGWC-3	Water	08/01/23 14:43	08/02/23 13:55
680-238497-9	MCI-MGWC-7	Water	08/02/23 10:21	08/02/23 13:55
680-238497-10	MCI-MGWC-8	Water	08/01/23 15:44	08/02/23 13:55
680-238497-11	MCI-MGWC-12	Water	08/02/23 11:45	08/02/23 13:55
680-238497-12	MCI-AP1-FD-01	Water	08/01/23 00:00	08/02/23 13:55
680-238497-13	MCI-AP1-FD-02	Water	08/01/23 00:00	08/02/23 13:55
680-238497-14	MCI-AP1-FB-01	Water	08/02/23 10:45	08/02/23 13:55
680-238497-15	MCI-AP1-FB-02	Water	08/02/23 11:05	08/02/23 13:55
680-238497-16	MCI-AP1-EB-03	Water	08/01/23 13:10	08/02/23 13:55
680-238497-17	MCI-AP1-EB-04	Water	08/02/23 10:35	08/02/23 13:55

Case Narrative

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

Job ID: 680-238497-2

Job ID: 680-238497-2

Laboratory: Eurofins Savannah

Narrative

Job Narrative 680-238497-2

Receipt

The samples were received on 8/2/2023 1:55 PM. 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 0.6°C, 0.9°C, 1.3°C and 2.1°C

Gas Flow Proportional Counter

Method 9315_Ra226: Radium-226 Prep Batch 160-623459 Insufficient sample volume was available to perform a sample duplicate for the following samples: MCI-MGWA-10 (680-238497-1), MCI-MGWA-11 (680-238497-2), MCI-MGWA-5 (680-238497-3), MCI-MGWA-6 (680-238497-4), MCI-MGWA-6A (680-238497-5), MCI-MGWC-1 (680-238497-6), MCI-MGWC-2 (680-238497-7), MCI-MGWC-3 (680-238497-8), MCI-MGWC-7 (680-238497-9), MCI-MGWC-8 (680-238497-10), MCI-MGWC-12 (680-238497-11), MCI-AP1-FD-01 (680-238497-12), MCI-AP1-FD-02 (680-238497-13), MCI-AP1-FB-01 (680-238497-14), MCI-AP1-FB-02 (680-238497-15), MCI-AP1-EB-03 (680-238497-16) and MCI-AP1-EB-04 (680-238497-17). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9315_Ra226: Radium-226 batch 623459 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 (680-238497-1), MCI-MGWA-11 (680-238497-2), MCI-MGWA-5 (680-238497-3), MCI-MGWA-6 (680-238497-4), MCI-MGWA-6A (680-238497-5), MCI-MGWC-1 (680-238497-6), MCI-MGWC-2 (680-238497-7), MCI-MGWC-3 (680-238497-8), MCI-MGWC-7 (680-238497-9), MCI-MGWC-8 (680-238497-10), MCI-MGWC-12 (680-238497-11), MCI-AP1-FD-01 (680-238497-12), MCI-AP1-FD-02 (680-238497-13), MCI-AP1-FB-01 (680-238497-14), MCI-AP1-FB-02 (680-238497-15), MCI-AP1-EB-03 (680-238497-16), MCI-AP1-EB-04 (680-238497-17), (LCS 160-623459/2-A), (LCSD 160-623459/3-A) and (MB 160-623459/1-A)

Method 9320_Ra228: Radium-228 Prep Batch 160-623460 Insufficient sample volume was available to perform a sample duplicate for the following samples: MCI-MGWA-10 (680-238497-1), MCI-MGWA-11 (680-238497-2), MCI-MGWA-5 (680-238497-3), MCI-MGWA-6 (680-238497-4), MCI-MGWA-6A (680-238497-5), MCI-MGWC-1 (680-238497-6), MCI-MGWC-2 (680-238497-7), MCI-MGWC-3 (680-238497-8), MCI-MGWC-7 (680-238497-9), MCI-MGWC-8 (680-238497-10), MCI-MGWC-12 (680-238497-11), MCI-AP1-FD-01 (680-238497-12), MCI-AP1-FD-02 (680-238497-13), MCI-AP1-FB-01 (680-238497-14), MCI-AP1-FB-02 (680-238497-15), MCI-AP1-EB-03 (680-238497-16) and MCI-AP1-EB-04 (680-238497-17). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9320_Ra228: Radium-228 batch 623460 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 (680-238497-1), MCI-MGWA-11 (680-238497-2), MCI-MGWA-5 (680-238497-3), MCI-MGWA-6 (680-238497-4), MCI-MGWA-6A (680-238497-5), MCI-MGWC-1 (680-238497-6), MCI-MGWC-2 (680-238497-7), MCI-MGWC-3 (680-238497-8), MCI-MGWC-7 (680-238497-9), MCI-MGWC-8 (680-238497-10), MCI-MGWC-12 (680-238497-11), MCI-AP1-FD-01 (680-238497-12), MCI-AP1-FD-02 (680-238497-13), MCI-AP1-FB-01 (680-238497-14), MCI-AP1-FB-02 (680-238497-15), MCI-AP1-EB-03 (680-238497-16), MCI-AP1-EB-04 (680-238497-17), (LCS 160-623460/2-A), (LCSD 160-623460/3-A) and (MB 160-623460/1-A)

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

Rad

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

Client Sample Results

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

Job ID: 680-238497-2

Client Sample ID: MCI-MGWA-10

Lab Sample ID: 680-238497-1

Date Collected: 08/01/23 10:54

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.351		0.229	0.231	1.00	0.298	pCi/L	08/09/23 10:16	09/01/23 16:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		30 - 110					08/09/23 10:16	09/01/23 16:09	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	0.195	U	0.325	0.325	1.00	0.557	pCi/L	08/09/23 10:19	09/01/23 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		30 - 110					08/09/23 10:19	09/01/23 11:36	1
Y Carrier	85.6		30 - 110					08/09/23 10:19	09/01/23 11:36	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	0.546	U	0.398	0.399	5.00	0.557	pCi/L		09/07/23 14:06	1

Client Sample ID: MCI-MGWA-11

Lab Sample ID: 680-238497-2

Date Collected: 08/01/23 12:20

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.294	U	0.229	0.231	1.00	0.320	pCi/L	08/09/23 10:16	09/01/23 16:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.9		30 - 110					08/09/23 10:16	09/01/23 16:09	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	1.58		0.520	0.540	1.00	0.622	pCi/L	08/09/23 10:19	09/01/23 11:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.9		30 - 110					08/09/23 10:19	09/01/23 11:39	1
Y Carrier	89.0		30 - 110					08/09/23 10:19	09/01/23 11:39	1

Client Sample Results

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

Job ID: 680-238497-2

Client Sample ID: MCI-MGWA-11

Lab Sample ID: 680-238497-2

Date Collected: 08/01/23 12:20

Matrix: Water

Date Received: 08/02/23 13:55

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	1.87		0.568	0.587	5.00	0.622	pCi/L		09/07/23 14:06	1

Client Sample ID: MCI-MGWA-5

Lab Sample ID: 680-238497-3

Date Collected: 08/01/23 13:20

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0551	U	0.173	0.173	1.00	0.332	pCi/L	08/09/23 10:16	09/01/23 16:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					08/09/23 10:16	09/01/23 16:09	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	0.927		0.442	0.450	1.00	0.606	pCi/L	08/09/23 10:19	09/01/23 11:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					08/09/23 10:19	09/01/23 11:39	1
Y Carrier	86.7		30 - 110					08/09/23 10:19	09/01/23 11:39	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	0.982		0.475	0.482	5.00	0.606	pCi/L		09/07/23 14:06	1

Client Sample ID: MCI-MGWA-6

Lab Sample ID: 680-238497-4

Date Collected: 08/01/23 11:50

Matrix: Water

Date Received: 08/02/23 13:55

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	U	0.226	0.228	1.00	0.330	pCi/L	08/09/23 10:16	09/01/23 16:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.1		30 - 110					08/09/23 10:16	09/01/23 16:11	1

Client Sample Results

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

Job ID: 680-238497-2

Client Sample ID: MCI-MGWA-6

Lab Sample ID: 680-238497-4

Date Collected: 08/01/23 11:50

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.01		0.482	0.491	1.00	0.646	pCi/L	08/09/23 10:19	09/01/23 11:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.1		30 - 110					08/09/23 10:19	09/01/23 11:39	1
Y Carrier	80.7		30 - 110					08/09/23 10:19	09/01/23 11:39	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	1.27		0.532	0.541	5.00	0.646	pCi/L		09/07/23 14:06	1

Client Sample ID: MCI-MGWA-6A

Lab Sample ID: 680-238497-5

Date Collected: 08/01/23 10:40

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.512		0.279	0.283	1.00	0.323	pCi/L	08/09/23 10:16	09/01/23 16:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		30 - 110					08/09/23 10:16	09/01/23 16:11	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	0.929		0.469	0.477	1.00	0.652	pCi/L	08/09/23 10:19	09/01/23 11:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		30 - 110					08/09/23 10:19	09/01/23 11:39	1
Y Carrier	84.5		30 - 110					08/09/23 10:19	09/01/23 11:39	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	1.44		0.546	0.555	5.00	0.652	pCi/L		09/07/23 14:06	1

Client Sample Results

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

Job ID: 680-238497-2

Client Sample ID: MCI-MGWC-1

Lab Sample ID: 680-238497-6

Date Collected: 08/01/23 14:04

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.01		0.335	0.347	1.00	0.274	pCi/L	08/09/23 10:16	09/01/23 16:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		30 - 110					08/09/23 10:16	09/01/23 16:11	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	0.601		0.363	0.367	1.00	0.521	pCi/L	08/09/23 10:19	09/01/23 11:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		30 - 110					08/09/23 10:19	09/01/23 11:39	1
Y Carrier	87.9		30 - 110					08/09/23 10:19	09/01/23 11:39	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	1.61		0.494	0.505	5.00	0.521	pCi/L		09/07/23 14:06	1

Client Sample ID: MCI-MGWC-2

Lab Sample ID: 680-238497-7

Date Collected: 08/02/23 10:24

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0963	U	0.193	0.193	1.00	0.348	pCi/L	08/09/23 10:16	09/01/23 16:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		30 - 110					08/09/23 10:16	09/01/23 16:11	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	0.997		0.406	0.416	1.00	0.508	pCi/L	08/09/23 10:19	09/01/23 11:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		30 - 110					08/09/23 10:19	09/01/23 11:39	1
Y Carrier	85.2		30 - 110					08/09/23 10:19	09/01/23 11:39	1

Client Sample Results

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

Job ID: 680-238497-2

Client Sample ID: MCI-MGWC-2

Lab Sample ID: 680-238497-7

Date Collected: 08/02/23 10:24

Matrix: Water

Date Received: 08/02/23 13:55

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	1.09		0.450	0.459	5.00	0.508	pCi/L		09/07/23 14:06	1

Client Sample ID: MCI-MGWC-3

Lab Sample ID: 680-238497-8

Date Collected: 08/01/23 14:43

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.05		0.350	0.363	1.00	0.309	pCi/L	08/09/23 10:16	09/01/23 16:11	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	90.4		30 - 110					08/09/23 10:16	09/01/23 16:11	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	1.02		0.404	0.415	1.00	0.502	pCi/L	08/09/23 10:19	09/01/23 11:39	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	90.4		30 - 110					08/09/23 10:19	09/01/23 11:39	1
Y Carrier	87.5		30 - 110					08/09/23 10:19	09/01/23 11:39	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	2.07		0.535	0.551	5.00	0.502	pCi/L		09/07/23 14:06	1

Client Sample ID: MCI-MGWC-7

Lab Sample ID: 680-238497-9

Date Collected: 08/02/23 10:21

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.14		0.370	0.384	1.00	0.333	pCi/L	08/09/23 10:16	09/01/23 16:16	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	87.5		30 - 110					08/09/23 10:16	09/01/23 16:16	1

Client Sample Results

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

Job ID: 680-238497-2

Client Sample ID: MCI-MGWC-7

Lab Sample ID: 680-238497-9

Date Collected: 08/02/23 10:21

Matrix: Water

Date Received: 08/02/23 13:55

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	0.358	0.359	1.00	0.587	pCi/L	08/09/23 10:19	09/01/23 11:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		30 - 110					08/09/23 10:19	09/01/23 11:39	1
Y Carrier	81.9		30 - 110					08/09/23 10:19	09/01/23 11:39	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	1.46		0.515	0.526	5.00	0.587	pCi/L		09/07/23 14:06	1

Client Sample ID: MCI-MGWC-8

Lab Sample ID: 680-238497-10

Date Collected: 08/01/23 15:44

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.498		0.331	0.334	1.00	0.469	pCi/L	08/09/23 10:16	09/01/23 16:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.6		30 - 110					08/09/23 10:16	09/01/23 16:16	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	0.374	U	0.410	0.411	1.00	0.669	pCi/L	08/09/23 10:19	09/01/23 11:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.6		30 - 110					08/09/23 10:19	09/01/23 11:45	1
Y Carrier	83.0		30 - 110					08/09/23 10:19	09/01/23 11:45	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	0.872		0.527	0.530	5.00	0.669	pCi/L		09/07/23 14:06	1

Client Sample Results

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

Job ID: 680-238497-2

Client Sample ID: MCI-MGWC-12

Lab Sample ID: 680-238497-11

Date Collected: 08/02/23 11:45

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0563	U	0.210	0.210	1.00	0.397	pCi/L	08/09/23 10:16	09/01/23 16:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					08/09/23 10:16	09/01/23 16:16	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	0.376	U	0.397	0.398	1.00	0.645	pCi/L	08/09/23 10:19	09/01/23 11:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					08/09/23 10:19	09/01/23 11:45	1
Y Carrier	83.4		30 - 110					08/09/23 10:19	09/01/23 11:45	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	0.432	U	0.449	0.450	5.00	0.645	pCi/L		09/07/23 14:06	1

Client Sample ID: MCI-AP1-FD-01

Lab Sample ID: 680-238497-12

Date Collected: 08/01/23 00:00

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.670		0.316	0.321	1.00	0.379	pCi/L	08/09/23 10:16	09/01/23 16:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		30 - 110					08/09/23 10:16	09/01/23 16:16	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.09		0.497	0.507	1.00	0.684	pCi/L	08/09/23 10:19	09/01/23 11:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		30 - 110					08/09/23 10:19	09/01/23 11:45	1
Y Carrier	81.1		30 - 110					08/09/23 10:19	09/01/23 11:45	1

Client Sample Results

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

Job ID: 680-238497-2

Client Sample ID: MCI-AP1-FD-01

Lab Sample ID: 680-238497-12

Date Collected: 08/01/23 00:00

Matrix: Water

Date Received: 08/02/23 13:55

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	1.76		0.589	0.600	5.00	0.684	pCi/L		09/07/23 15:41	1

Client Sample ID: MCI-AP1-FD-02

Lab Sample ID: 680-238497-13

Date Collected: 08/01/23 00:00

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.16		0.372	0.386	1.00	0.311	pCi/L	08/09/23 10:16	09/01/23 16:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		30 - 110					08/09/23 10:16	09/01/23 16:16	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	0.860		0.448	0.455	1.00	0.633	pCi/L	08/09/23 10:19	09/01/23 11:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		30 - 110					08/09/23 10:19	09/01/23 11:44	1
Y Carrier	83.7		30 - 110					08/09/23 10:19	09/01/23 11:44	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	2.02		0.582	0.597	5.00	0.633	pCi/L		09/07/23 15:41	1

Client Sample ID: MCI-AP1-FB-01

Lab Sample ID: 680-238497-14

Date Collected: 08/02/23 10:45

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0463	U	0.168	0.168	1.00	0.327	pCi/L	08/09/23 10:16	09/01/23 16:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		30 - 110					08/09/23 10:16	09/01/23 16:16	1

Client Sample Results

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

Job ID: 680-238497-2

Client Sample ID: MCI-AP1-FB-01

Lab Sample ID: 680-238497-14

Date Collected: 08/02/23 10:45

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.413	U	0.341	0.343	1.00	0.530	pCi/L	08/09/23 10:19	09/01/23 11:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		30 - 110					08/09/23 10:19	09/01/23 11:44	1
Y Carrier	86.7		30 - 110					08/09/23 10:19	09/01/23 11:44	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	0.459	U	0.380	0.382	5.00	0.530	pCi/L		09/07/23 15:41	1

Client Sample ID: MCI-AP1-FB-02

Lab Sample ID: 680-238497-15

Date Collected: 08/02/23 11:05

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0836	U	0.122	0.123	1.00	0.328	pCi/L	08/09/23 10:16	09/01/23 16:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					08/09/23 10:16	09/01/23 16:16	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	-0.0120	U	0.412	0.412	1.00	0.751	pCi/L	08/09/23 10:19	09/01/23 11:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					08/09/23 10:19	09/01/23 11:44	1
Y Carrier	89.0		30 - 110					08/09/23 10:19	09/01/23 11:44	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	-0.0956	U	0.430	0.430	5.00	0.751	pCi/L		09/07/23 15:41	1

Client Sample Results

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

Job ID: 680-238497-2

Client Sample ID: MCI-AP1-EB-03

Lab Sample ID: 680-238497-16

Date Collected: 08/01/23 13:10

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0755	U	0.234	0.234	1.00	0.433	pCi/L	08/09/23 10:16	09/01/23 16:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		30 - 110					08/09/23 10:16	09/01/23 16:16	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	0.348	0.350	1.00	0.531	pCi/L	08/09/23 10:19	09/01/23 11:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		30 - 110					08/09/23 10:19	09/01/23 11:42	1
Y Carrier	84.1		30 - 110					08/09/23 10:19	09/01/23 11:42	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	0.535		0.419	0.421	5.00	0.531	pCi/L		09/07/23 15:41	1

Client Sample ID: MCI-AP1-EB-04

Lab Sample ID: 680-238497-17

Date Collected: 08/02/23 10:35

Matrix: Water

Date Received: 08/02/23 13:55

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0451	U	0.195	0.195	1.00	0.369	pCi/L	08/09/23 10:16	09/01/23 16:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					08/09/23 10:16	09/01/23 16:23	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	-0.0438	U	0.276	0.276	1.00	0.532	pCi/L	08/09/23 10:19	09/01/23 11:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					08/09/23 10:19	09/01/23 11:41	1
Y Carrier	85.2		30 - 110					08/09/23 10:19	09/01/23 11:41	1

Client Sample Results

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

Job ID: 680-238497-2

Client Sample ID: MCI-AP1-EB-04

Lab Sample ID: 680-238497-17

Date Collected: 08/02/23 10:35

Matrix: Water

Date Received: 08/02/23 13:55

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	0.00125	U	0.338	0.338	5.00	0.532	pCi/L		09/07/23 15:41	1

- 1
- 2
- 3
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- 8
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- 10
- 11
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- 13

Tracer/Carrier Summary

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

Job ID: 680-238497-2

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	
680-238497-1	MCI-MGWA-10	89.2	
680-238497-2	MCI-MGWA-11	81.9	
680-238497-3	MCI-MGWA-5	87.3	
680-238497-4	MCI-MGWA-6	80.1	
680-238497-5	MCI-MGWA-6A	78.9	
680-238497-6	MCI-MGWC-1	89.5	
680-238497-7	MCI-MGWC-2	85.5	
680-238497-8	MCI-MGWC-3	90.4	
680-238497-9	MCI-MGWC-7	87.5	
680-238497-10	MCI-MGWC-8	81.6	
680-238497-11	MCI-MGWC-12	87.3	
680-238497-12	MCI-AP1-FD-01	85.5	
680-238497-13	MCI-AP1-FD-02	87.5	
680-238497-14	MCI-AP1-FB-01	91.4	
680-238497-15	MCI-AP1-FB-02	87.3	
680-238497-16	MCI-AP1-EB-03	89.5	
680-238497-17	MCI-AP1-EB-04	91.9	
LCS 160-623459/2-A	Lab Control Sample	87.5	
LCSD 160-623459/3-A	Lab Control Sample Dup	90.2	
MB 160-623459/1-A	Method Blank	90.2	

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)
680-238497-1	MCI-MGWA-10	89.2	85.6
680-238497-2	MCI-MGWA-11	81.9	89.0
680-238497-3	MCI-MGWA-5	87.3	86.7
680-238497-4	MCI-MGWA-6	80.1	80.7
680-238497-5	MCI-MGWA-6A	78.9	84.5
680-238497-6	MCI-MGWC-1	89.5	87.9
680-238497-7	MCI-MGWC-2	85.5	85.2
680-238497-8	MCI-MGWC-3	90.4	87.5
680-238497-9	MCI-MGWC-7	87.5	81.9
680-238497-10	MCI-MGWC-8	81.6	83.0
680-238497-11	MCI-MGWC-12	87.3	83.4
680-238497-12	MCI-AP1-FD-01	85.5	81.1
680-238497-13	MCI-AP1-FD-02	87.5	83.7
680-238497-14	MCI-AP1-FB-01	91.4	86.7
680-238497-15	MCI-AP1-FB-02	87.3	89.0
680-238497-16	MCI-AP1-EB-03	89.5	84.1
680-238497-17	MCI-AP1-EB-04	91.9	85.2
LCS 160-623460/2-A	Lab Control Sample	87.5	85.2
LCSD 160-623460/3-A	Lab Control Sample Dup	90.2	86.4
MB 160-623460/1-A	Method Blank	90.2	85.2

Tracer/Carrier Summary

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

Job ID: 680-238497-2

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: 680-238497-2

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-623459/1-A
Matrix: Water
Analysis Batch: 626379

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 623459

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.1426	U	0.0897	0.0906	1.00	0.306	pCi/L	08/09/23 10:16	09/01/23 16:08	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	90.2		30 - 110		08/09/23 10:16	09/01/23 16:08	1			

Lab Sample ID: LCS 160-623459/2-A
Matrix: Water
Analysis Batch: 626379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 623459

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	11.17		1.44	1.00	0.314	pCi/L	99	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	87.5		30 - 110						

Lab Sample ID: LCSD 160-623459/3-A
Matrix: Water
Analysis Batch: 626379

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 623459

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits	RER	Limit
				Uncert. (2σ+/-)							
Radium-226	11.3	11.10		1.43	1.00	0.423	pCi/L	98	75 - 125	0.02	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	90.2		30 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-623460/1-A
Matrix: Water
Analysis Batch: 626379

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 623460

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.8774		0.449	0.456	1.00	0.645	pCi/L	08/09/23 10:19	09/01/23 11:36	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	90.2		30 - 110		08/09/23 10:19	09/01/23 11:36	1			
Y Carrier	85.2		30 - 110		08/09/23 10:19	09/01/23 11:36	1			

QC Sample Results

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

Job ID: 680-238497-2

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

Lab Sample ID: LCS 160-623460/2-A
Matrix: Water
Analysis Batch: 626379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 623460

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.91	9.158		1.28	1.00	0.524	pCi/L	116	75 - 125
LCS LCS									
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	87.5		30 - 110						
Y Carrier	85.2		30 - 110						

Lab Sample ID: LCSD 160-623460/3-A
Matrix: Water
Analysis Batch: 626379

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 623460

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-228	7.91	9.109		1.26	1.00	0.561	pCi/L	115	75 - 125	0.02	1
LCSD LCSD											
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	90.2		30 - 110								
Y Carrier	86.4		30 - 110								

QC Association Summary

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

Job ID: 680-238497-2

Rad

Prep Batch: 623459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-1	MCI-MGWA-10	Total/NA	Water	PrecSep-21	
680-238497-2	MCI-MGWA-11	Total/NA	Water	PrecSep-21	
680-238497-3	MCI-MGWA-5	Total/NA	Water	PrecSep-21	
680-238497-4	MCI-MGWA-6	Total/NA	Water	PrecSep-21	
680-238497-5	MCI-MGWA-6A	Total/NA	Water	PrecSep-21	
680-238497-6	MCI-MGWC-1	Total/NA	Water	PrecSep-21	
680-238497-7	MCI-MGWC-2	Total/NA	Water	PrecSep-21	
680-238497-8	MCI-MGWC-3	Total/NA	Water	PrecSep-21	
680-238497-9	MCI-MGWC-7	Total/NA	Water	PrecSep-21	
680-238497-10	MCI-MGWC-8	Total/NA	Water	PrecSep-21	
680-238497-11	MCI-MGWC-12	Total/NA	Water	PrecSep-21	
680-238497-12	MCI-AP1-FD-01	Total/NA	Water	PrecSep-21	
680-238497-13	MCI-AP1-FD-02	Total/NA	Water	PrecSep-21	
680-238497-14	MCI-AP1-FB-01	Total/NA	Water	PrecSep-21	
680-238497-15	MCI-AP1-FB-02	Total/NA	Water	PrecSep-21	
680-238497-16	MCI-AP1-EB-03	Total/NA	Water	PrecSep-21	
680-238497-17	MCI-AP1-EB-04	Total/NA	Water	PrecSep-21	
MB 160-623459/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-623459/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-623459/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 623460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238497-1	MCI-MGWA-10	Total/NA	Water	PrecSep_0	
680-238497-2	MCI-MGWA-11	Total/NA	Water	PrecSep_0	
680-238497-3	MCI-MGWA-5	Total/NA	Water	PrecSep_0	
680-238497-4	MCI-MGWA-6	Total/NA	Water	PrecSep_0	
680-238497-5	MCI-MGWA-6A	Total/NA	Water	PrecSep_0	
680-238497-6	MCI-MGWC-1	Total/NA	Water	PrecSep_0	
680-238497-7	MCI-MGWC-2	Total/NA	Water	PrecSep_0	
680-238497-8	MCI-MGWC-3	Total/NA	Water	PrecSep_0	
680-238497-9	MCI-MGWC-7	Total/NA	Water	PrecSep_0	
680-238497-10	MCI-MGWC-8	Total/NA	Water	PrecSep_0	
680-238497-11	MCI-MGWC-12	Total/NA	Water	PrecSep_0	
680-238497-12	MCI-AP1-FD-01	Total/NA	Water	PrecSep_0	
680-238497-13	MCI-AP1-FD-02	Total/NA	Water	PrecSep_0	
680-238497-14	MCI-AP1-FB-01	Total/NA	Water	PrecSep_0	
680-238497-15	MCI-AP1-FB-02	Total/NA	Water	PrecSep_0	
680-238497-16	MCI-AP1-EB-03	Total/NA	Water	PrecSep_0	
680-238497-17	MCI-AP1-EB-04	Total/NA	Water	PrecSep_0	
MB 160-623460/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-623460/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-623460/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

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

Job ID: 680-238497-2

Client Sample ID: MCI-MGWA-10

Lab Sample ID: 680-238497-1

Date Collected: 08/01/23 10:54

Matrix: Water

Date Received: 08/02/23 13:55

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			930.90 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626379	09/01/23 16:09	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			930.90 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626379	09/01/23 11:36	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 14:06	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWA-11

Lab Sample ID: 680-238497-2

Date Collected: 08/01/23 12:20

Matrix: Water

Date Received: 08/02/23 13:55

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			930.08 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626379	09/01/23 16:09	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			930.08 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626379	09/01/23 11:39	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 14:06	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWA-5

Lab Sample ID: 680-238497-3

Date Collected: 08/01/23 13:20

Matrix: Water

Date Received: 08/02/23 13:55

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			925.63 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626379	09/01/23 16:09	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			925.63 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626379	09/01/23 11:39	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 14:06	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWA-6

Lab Sample ID: 680-238497-4

Date Collected: 08/01/23 11:50

Matrix: Water

Date Received: 08/02/23 13:55

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			920.14 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626379	09/01/23 16:11	FLC	EET SL
Instrument ID: GFPCRED										

Lab Chronicle

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

Job ID: 680-238497-2

Client Sample ID: MCI-MGWA-6

Lab Sample ID: 680-238497-4

Date Collected: 08/01/23 11:50

Matrix: Water

Date Received: 08/02/23 13:55

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			920.14 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626379	09/01/23 11:39	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 14:06	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWA-6A

Lab Sample ID: 680-238497-5

Date Collected: 08/01/23 10:40

Matrix: Water

Date Received: 08/02/23 13:55

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			940.80 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626379	09/01/23 16:11	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			940.80 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626379	09/01/23 11:39	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 14:06	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWC-1

Lab Sample ID: 680-238497-6

Date Collected: 08/01/23 14:04

Matrix: Water

Date Received: 08/02/23 13:55

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			945.00 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626379	09/01/23 16:11	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			945.00 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626379	09/01/23 11:39	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 14:06	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWC-2

Lab Sample ID: 680-238497-7

Date Collected: 08/02/23 10:24

Matrix: Water

Date Received: 08/02/23 13:55

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			998.77 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626379	09/01/23 16:11	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			998.77 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626379	09/01/23 11:39	FLC	EET SL
Instrument ID: GFPCRED										

Lab Chronicle

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

Job ID: 680-238497-2

Client Sample ID: MCI-MGWC-2

Lab Sample ID: 680-238497-7

Date Collected: 08/02/23 10:24

Matrix: Water

Date Received: 08/02/23 13:55

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			626553	09/07/23 14:06	EMH	EET SL

Client Sample ID: MCI-MGWC-3

Lab Sample ID: 680-238497-8

Date Collected: 08/01/23 14:43

Matrix: Water

Date Received: 08/02/23 13:55

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			938.90 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626379	09/01/23 16:11	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Prep	PrecSep_0			938.90 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626379	09/01/23 11:39	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 14:06	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWC-7

Lab Sample ID: 680-238497-9

Date Collected: 08/02/23 10:21

Matrix: Water

Date Received: 08/02/23 13:55

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			962.03 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626386	09/01/23 16:16	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			962.03 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626379	09/01/23 11:39	FLC	EET SL
Instrument ID: GFPCRED										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 14:06	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-MGWC-8

Lab Sample ID: 680-238497-10

Date Collected: 08/01/23 15:44

Matrix: Water

Date Received: 08/02/23 13:55

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			936.01 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626386	09/01/23 16:16	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			936.01 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626386	09/01/23 11:45	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 14:06	EMH	EET SL
Instrument ID: NOEQUIP										

Lab Chronicle

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

Job ID: 680-238497-2

Client Sample ID: MCI-MGWC-12

Lab Sample ID: 680-238497-11

Date Collected: 08/02/23 11:45

Matrix: Water

Date Received: 08/02/23 13:55

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			980.74 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626386	09/01/23 16:16	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			980.74 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626386	09/01/23 11:45	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 14:06	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-AP1-FD-01

Lab Sample ID: 680-238497-12

Date Collected: 08/01/23 00:00

Matrix: Water

Date Received: 08/02/23 13:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			991.98 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626386	09/01/23 16:16	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			991.98 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626386	09/01/23 11:45	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 15:41	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-AP1-FD-02

Lab Sample ID: 680-238497-13

Date Collected: 08/01/23 00:00

Matrix: Water

Date Received: 08/02/23 13:55

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			929.93 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626386	09/01/23 16:16	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			929.93 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626386	09/01/23 11:44	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 15:41	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-AP1-FB-01

Lab Sample ID: 680-238497-14

Date Collected: 08/02/23 10:45

Matrix: Water

Date Received: 08/02/23 13:55

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			944.43 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626386	09/01/23 16:16	FLC	EET SL
Instrument ID: GFPCBLUE										

Lab Chronicle

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

Job ID: 680-238497-2

Client Sample ID: MCI-AP1-FB-01

Lab Sample ID: 680-238497-14

Date Collected: 08/02/23 10:45

Matrix: Water

Date Received: 08/02/23 13:55

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			944.43 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626386	09/01/23 11:44	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 15:41	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-AP1-FB-02

Lab Sample ID: 680-238497-15

Date Collected: 08/02/23 11:05

Matrix: Water

Date Received: 08/02/23 13:55

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			923.82 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626386	09/01/23 16:16	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			923.82 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626386	09/01/23 11:44	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 15:41	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-AP1-EB-03

Lab Sample ID: 680-238497-16

Date Collected: 08/01/23 13:10

Matrix: Water

Date Received: 08/02/23 13:55

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	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626386	09/01/23 16:16	FLC	EET SL
Instrument ID: GFPCBLUE										
Total/NA	Prep	PrecSep_0			993.91 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626387	09/01/23 11:42	FLC	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Analysis	Ra226_Ra228		1			626553	09/07/23 15:41	EMH	EET SL
Instrument ID: NOEQUIP										

Client Sample ID: MCI-AP1-EB-04

Lab Sample ID: 680-238497-17

Date Collected: 08/02/23 10:35

Matrix: Water

Date Received: 08/02/23 13:55

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			998.80 mL	1.0 g	623459	08/09/23 10:16	KAC	EET SL
Total/NA	Analysis	9315		1			626387	09/01/23 16:23	FLC	EET SL
Instrument ID: GFPCPURPLE										
Total/NA	Prep	PrecSep_0			998.80 mL	1.0 g	623460	08/09/23 10:19	KAC	EET SL
Total/NA	Analysis	9320		1			626387	09/01/23 11:41	FLC	EET SL
Instrument ID: GFPCPURPLE										

Lab Chronicle

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

Job ID: 680-238497-2

Client Sample ID: MCI-AP1-EB-04

Lab Sample ID: 680-238497-17

Date Collected: 08/02/23 10:35

Matrix: Water

Date Received: 08/02/23 13:55

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			626553	09/07/23 15:41	EMH	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: 680-238497-2

Laboratory: Eurofins St. Louis

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

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87689	06-30-24

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Method Summary

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

Job ID: 680-238497-2

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.

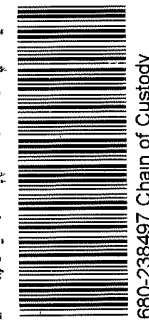
Laboratory References:

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



Chain of Custody Record

Client Information					Sampler: <u>T. Goble/H. Avid</u> ACC		Lab PM Fuller, David			Carrier Tracking No(s)			COC No																	
Client Contact SCS Contacts					Phone: <u>770-594-5998</u>		E-Mail david.fuller@et.eurofinsus.com						Page: <u>1 of 2</u>																	
Company: GA Power					Analysis Requested										Job #:															
Address 241 Ralph McGill Blvd SE															Due Date Requested		Preservation Codes													
City: Atlanta					TAT Requested (days)		Field Filtered Sample (Yes or No) Perform IMS/MSD (Yes or No) App. III Metals (B, Ca) Cl, F, SO ₄ , TDS (EPA 300.0 & SM 2540C) App. IV Metals (Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Ti) (EPA 60207/470) Radium 226 & 228 (SM-846 9315/9320)		Total Number of containers Task_Code MCI-CCR-ASSMT-2023S2 Special Instructions/Note Full APP III + APP IV																					
State Zip: GA, 30308					Lab Project #: 68027747						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	
Phone 404-506-7116(Tel)					PO #:		Other																							
Email SCS Contacts / ACC Contacts					Project #:																									
Project Name Plant McIntosh - Ash Pond 1					SSOW#:																									
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 IMS/MSD (Yes or No)		App. III Metals (B, Ca)		App. IV Metals (Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Ti)		Radium 226 & 228 (SM-846 9315/9320)		Total Number of containers		Task_Code		Special Instructions/Note			
MCI-1MGWA-10					08/01/23		1054		G WG		WG		N N		D I		D		D		D		5							
MCI-1MGWA-11					08/01/23		1220		G WG		WG		N N		D I		D		D		D		5							
MCI-1MGWA-5					08/01/23		1320		G WG		WG		N N		D I		D		D		D		5							
MCI-1MGWA-6					08/01/23		1150		G WG		WG		N N		D I		D		D		D		5							
MCI-1MGWA-6A					08/01/23		1040		G WG		WG		N N		D I		D		D		D		5							
MCI-1MGWC-1					08/01/23		1404		G WG		WG		N N		D I		D		D		D		5							
MCI-1MGWC-2					08/02/23		1024		G WG		WG		N N		D I		D		D		D		5							
MCI-1MGWC-3					08/01/23		1443		G WG		WG		N N		D I		D		D		D		5							
MCI-1MGWC-7					08/02/23		1021		G WG		WG		N N		D I		D		D		D		5							
MCI-1MGWC-8					08/01/23		1544		G WG		WG		N N		D I		D		D		D		5							
MCI-1MGWC-12					08/02/23		1145		G WG		WG		N N		D I		D		D		D		5							



Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than)									
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For									
Deliverable Requested I, II, III, IV, Other (specify)					Special Instructions/QC Requirements									

Empty Kit Relinquished by			Date			Time			Method of Shipment:								
Relinquished by: <u>[Signature]</u>			Date/Time: <u>8-2-23/1355</u>			Company: <u>ACC</u>			Received by:			Date/Time:			Company:		
Relinquished by:			Date/Time:			Company:			Received by:			Date/Time:			Company:		
Relinquished by:			Date/Time:			Company:			Received by: <u>C.M...</u>			Date/Time: <u>8/2/23 1355</u>			Company: <u>[Signature]</u>		
Custody Seals Intact. Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks <u>0.5/0.6 0.8/0.9</u> <u>1.2/1.3 2.0/2.1</u>													

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Lab PM Fuller, David	Carrier Tracking No(s) 680-746474.1																																																																						
Shipping/Receiving		E-Mail David.Fuller@et.eurofins.com	Page Page 1 of 2																																																																						
Company TestAmerica Laboratories, Inc.		State of Origin Georgia																																																																							
Address 13715 Rider Trail North,		Accreditations Required (See note) NELAP - Florida; State - Georgia																																																																							
City Earth City	Due Date Requested: 8/14/2023	Analysis Requested																																																																							
State, Zip MO, 63045	TAT Requested (days):																																																																								
Phone 314-298-8566(Tel) 314-298-8757(Fax)	PO #	<table border="1"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>9320, Ra226/PreSep, 0 Radium-228</th> <th>9315, Ra226/PreSep, 21 Radium-226 and Radium-228</th> <th>Ra226Ra228 GFC/ Combined Radium-226 and Radium-228</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> </table>		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320, Ra226/PreSep, 0 Radium-228	9315, Ra226/PreSep, 21 Radium-226 and Radium-228	Ra226Ra228 GFC/ Combined Radium-226 and Radium-228	Total Number of Containers	Special Instructions/Note:	X	X	X	X	X	2		X	X	X	X	X	2		X	X	X	X	X	2		X	X	X	X	X	2		X	X	X	X	X	2		X	X	X	X	X	2		X	X	X	X	X	2		X	X	X	X	X	2		X	X	X	X	X	2	
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)			9320, Ra226/PreSep, 0 Radium-228	9315, Ra226/PreSep, 21 Radium-226 and Radium-228	Ra226Ra228 GFC/ Combined Radium-226 and Radium-228	Total Number of Containers	Special Instructions/Note:																																																																	
X	X	X	X	X	2																																																																				
X	X	X	X	X	2																																																																				
X	X	X	X	X	2																																																																				
X	X	X	X	X	2																																																																				
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X	X	X	X	X	2																																																																				
X	X	X	X	X	2																																																																				
X	X	X	X	X	2																																																																				
X	X	X	X	X	2																																																																				
Matrix (W=Water, S=Soil, O=Water/Oil, AT=Tissue, A=AM)	Sample Type (C=Comp, G=grab)	Sample Time	Sample Date	Preservation Code:																																																																					
Water	Water	10:54 Eastern	8/1/23	Water																																																																					
Water	Water	12:20 Eastern	8/1/23	Water																																																																					
Water	Water	13:20 Eastern	8/1/23	Water																																																																					
Water	Water	11:50 Eastern	8/1/23	Water																																																																					
Water	Water	10:40 Eastern	8/1/23	Water																																																																					
Water	Water	14:04 Eastern	8/1/23	Water																																																																					
Water	Water	10:24 Eastern	8/2/23	Water																																																																					
Water	Water	14:43 Eastern	8/1/23	Water																																																																					
Water	Water	10:21 Eastern	8/2/23	Water																																																																					

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Paul Keefe* Date: 8/7/23
 Relinquished by: *FEDEX* Date: 1:30
 Relinquished by: _____ Date: _____
 Relinquished by: _____ Date: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements: _____

Received by: *FEDEX* Date/Time: _____ Company: _____
 Received by: *Shanban - Shanban* Date/Time: 8/18/23 08:45 Company: *EAFTL*
 Received by: _____ Date/Time: _____ Company: _____
 Cooler Temperature(s) °C and Other Remarks: _____

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-238497-2

Login Number: 238497

List Number: 1

Creator: Padayao, Abigail

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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-238497-2

Login Number: 238497

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 08/08/23 01:26 PM

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



LEVEL 2A LABORATORY DATA VALIDATIONS

McIntosh Ash Pond 1

Annual Event

July 2023

Georgia Power Company – McIntosh Ash Pond 1

Quality Control Review of Analytical Data – July 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 August 1, 2023 and August 2, 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. SDG 680-238497-1 was revised to correct errant blank results found during data quality review and reanalysis.

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)¹ and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)². 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, except for total dissolved solids (TDS) from MCI-MGWA-6A (680-238497-5) and MCI-MGWC-2 (680-238497-7) as described in the qualifications section below.
- Field Precision:** Field goals for precision were met, except for lithium and combined radium 226+228 from MCI-MGWC-8 (680-238497-10) as described in the qualifications section below.
- Accuracy:** Laboratory goals for accuracy were met, except for sulfate from MCI-MGWC-7 (680-238497-9) as described in the qualifications section below.
- 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:

- B:** The analyte was positively identified above the method detection limit; however, the analyte was also detected in a method blank, field blank, and/or equipment blank.
- 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-MGWA-6A (680-238497-5) and MCI-MGWC-2 (680-238497-7) were qualified as estimated (J) for TDS as the laboratory relative percent differences (RPDs) exceeded QC criteria (21% and 7%, respectively, above the limit of 5).
- Samples MCI-MGWC-8 (680-238497-10) and MCI-AP1-FD-01 (680-238497-12) were qualified as estimated (J) for lithium as the field RPD exceeded QC criteria (23.3% above the limit of 20).
- Samples MCI-MGWC-8 (680-238497-10) and MCI-AP1-FD-01 (680-238497-12) were qualified as estimated (J) for combined radium 226+228 as the field RPD exceeded QC criteria (67.5% above the limit of 20).
- Sample MCI-MGWC-7 (680-238497-9) was qualified as estimated (J) for sulfate as the associated matrix spike (MS) recovery was outside QC criteria (76%, below the range of 80-120).
- Certain boron results on work order 680-238497-1 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 method detection limit (MDL), the new MDL 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.
- Certain fluoride results on work order 680-238497-1 were qualified as blank detections (B) due to the analytes being detected in field and/or equipment blank samples, as shown in Table 2.
- Certain combined radium 226+228 results on work order 680-238497-2 were qualified as non-detect (ND) due to the analytes being detected at similar concentrations in an associated blank sample. As shown in Table 2, when the original sample result was below the RL, the new minimum detectable concentration (MDC) was raised to the sample result as part of the qualification process; when the original sample result was

slightly above the RL, the new RL was raised to the sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from McIntosh AP1 sampled between August 1, 2023 and August 2, 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

¹US 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

²US 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 Annual Groundwater Monitoring and Corrective Action Report

TABLE 1
Georgia Power Company – McIntosh AP1
Sample Summary Table – July 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)
238497-1	MCI-MGWA-10	08/01/23	680-238497-1	WG		X	X	X	
238497-2	MCI-MGWA-10	08/01/23	680-238497-1	WG					X
238497-1	MCI-MGWA-11	08/01/23	680-238497-2	WG		X	X	X	
238497-2	MCI-MGWA-11	08/01/23	680-238497-2	WG					X
238497-1	MCI-MGWA-5	08/01/23	680-238497-3	WG		X	X	X	
238497-2	MCI-MGWA-5	08/01/23	680-238497-3	WG					X
238497-1	MCI-MGWA-6	08/01/23	680-238497-4	WG		X	X	X	
238497-2	MCI-MGWA-6	08/01/23	680-238497-4	WG					X
238497-1	MCI-MGWA-6A	08/01/23	680-238497-5	WG		X	X	X	
238497-2	MCI-MGWA-6A	08/01/23	680-238497-5	WG					X
238497-1	MCI-MGWC-1	08/01/23	680-238497-6	WG		X	X	X	
238497-2	MCI-MGWC-1	08/01/23	680-238497-6	WG					X
238497-1	MCI-MGWC-2	08/02/23	680-238497-7	WG		X	X	X	
238497-2	MCI-MGWC-2	08/02/23	680-238497-7	WG					X
238497-1	MCI-MGWC-3	08/01/23	680-238497-8	WG		X	X	X	
238497-2	MCI-MGWC-3	08/01/23	680-238497-8	WG					X
238497-1	MCI-MGWC-7	08/02/23	680-238497-9	WG		X	X	X	
238497-2	MCI-MGWC-7	08/02/23	680-238497-9	WG					X
238497-1	MCI-MGWC-8	08/01/23	680-238497-10	WG		X	X	X	
238497-2	MCI-MGWC-8	08/01/23	680-238497-10	WG					X
238497-1	MCI-MGWC-12	08/02/23	680-238497-11	WG		X	X	X	
238497-2	MCI-MGWC-12	08/02/23	680-238497-11	WG					X
238497-1	MCI-AP1-FD-01	08/01/23	680-238497-12	WG	FD (MCI-MGWC-8)	X	X	X	
238497-2	MCI-AP1-FD-01	08/01/23	680-238497-12	WG	FD (MCI-MGWC-8)				X
238497-1	MCI-AP1-FD-02	08/01/23	680-238497-13	WG	FD (MCI-MGWC-3)	X	X	X	
238497-2	MCI-AP1-FD-02	08/01/23	680-238497-13	WG	FD (MCI-MGWC-3)				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 Annual Groundwater Monitoring and Corrective Action Report

TABLE 1 (continued)

Georgia Power Company – McIntosh AP1

Sample Summary Table – July 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)
238497-1	MCI-AP1-FB-01	08/02/23	680-238497-14	WQ	FB	X	X	X	
238497-2	MCI-AP1-FB-01	08/02/23	680-238497-14	WQ	FB				X
238497-1	MCI-AP1-FB-02	08/02/23	680-238497-15	WQ	FB	X	X	X	
238497-2	MCI-AP1-FB-02	08/02/23	680-238497-15	WQ	FB				X
238497-1	MCI-AP1-EB-03	08/01/23	680-238497-16	WQ	EB	X	X	X	
238497-2	MCI-AP1-EB-03	08/01/23	680-238497-16	WQ	EB				X
238497-1	MCI-AP1-EB-04	08/02/23	680-238497-17	WQ	EB	X	X	X	
238497-2	MCI-AP1-EB-04	08/02/23	680-238497-17	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 Annual Groundwater Monitoring and Corrective Action Report

TABLE 2
Georgia Power Company – McIntosh AP1
Qualifier Summary Table – July 2023

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
238497-1	MCI-MGWA-10	Boron		0.035	ND	Blank detection
238497-1	MCI-MGWA-11	Boron		0.045	ND	Blank detection
238497-1	MCI-MGWC-3	Boron			J	Blank detection
238497-1	MCI-MGWC-8	Boron			J	Blank detection
238497-1	MCI-MGWC-12	Boron		0.062	ND	Blank detection
238497-1	MCI-AP1-FB-01	Fluoride			B	Blank detection
238497-1	MCI-AP1-FB-02	Fluoride			B	Blank detection
238497-1	MCI-AP1-EB-03	Fluoride			B	Blank detection
238497-1	MCI-MGWC-8	Lithium			J	RPD exceeds field goal
238497-1	MCI-AP1-FD-01	Lithium			J	RPD exceeds field goal
238497-2	MCI-MGWC-8	Radium, combined			J	RPD exceeds field goal
238497-2	MCI-AP1-FD-01	Radium, combined			J	RPD exceeds field goal
238497-1	MCI-MGWA-6A	TDS			J	RPD exceeds lab goal
238497-1	MCI-MGWC-2	TDS			J	RPD exceeds lab goal
238497-1	MCI-MGWC-7	Sulfate			J	MS outside QC criterion
238497-2	MCI-MGWA-5	Radium-228		0.927	ND	Blank detection
238497-2	MCI-MGWA-6	Radium-228	1.01		ND	Blank detection
238497-2	MCI-MGWA-6A	Radium-228		0.929	ND	Blank detection
238497-2	MCI-MGWC-1	Radium-228		0.601	ND	Blank detection
238497-2	MCI-MGWC-2	Radium-228		0.997	ND	Blank detection
238497-2	MCI-MGWC-3	Radium-228	1.02		ND	Blank detection

Abbreviations:

MDC – Minimum Detectable Concentration
MS/MSD – Matrix Spike / Matrix Spike Duplicate
MDL – Method Detection Limit
RL – Reporting Limit
RPD – Relative Percent Difference
SDG – Sample Delivery Group
TDS – Total Dissolved Solids

Qualifiers:

B – Field or Equipment Blank Detection
J – Estimated Result
ND – Non-Detect Result

Low-Flow Test Report:

Test Date / Time: 8/1/2023 1:34:08 PM

Project: Plant McIntosh AP-1

Operator Name: Taylor Goble

Location Name: MGWC-1 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 46.08 ft Total Depth: 56.08 ft Initial Depth to Water: 40.6 ft	Pump Type: Portable Bladder Pump Tubing Type: Poly Pump Intake From TOC: 51 ft Estimated Total Volume Pumped: 6750 ml Flow Cell Volume: 90 ml Final Flow Rate: 225 ml/min Final Draw Down: 1.5 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989619
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Test Notes:

Sampled at 1404. Partly cloudy 89 degrees

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	+/- 25	+/- 0.3	
8/1/2023 1:34 PM	00:00	7.37 pH	34.29 °C	442.37 µS/cm	3.45 mg/L	17.90 NTU	62.0 mV	41.15 ft	225.00 ml/min
8/1/2023 1:39 PM	05:00	7.31 pH	25.34 °C	500.07 µS/cm	2.54 mg/L	15.70 NTU	44.8 mV	41.75 ft	225.00 ml/min
8/1/2023 1:44 PM	10:00	7.29 pH	24.69 °C	551.68 µS/cm	1.60 mg/L	10.70 NTU	43.2 mV	41.93 ft	225.00 ml/min
8/1/2023 1:49 PM	15:00	7.29 pH	24.35 °C	576.51 µS/cm	0.89 mg/L	8.05 NTU	40.9 mV	42.05 ft	225.00 ml/min
8/1/2023 1:54 PM	20:00	7.29 pH	24.41 °C	589.77 µS/cm	0.59 mg/L	3.38 NTU	39.2 mV	42.10 ft	225.00 ml/min
8/1/2023 1:59 PM	25:00	7.30 pH	24.35 °C	594.26 µS/cm	0.41 mg/L	1.49 NTU	38.1 mV	42.10 ft	225.00 ml/min
8/1/2023 2:04 PM	30:00	7.30 pH	23.92 °C	597.33 µS/cm	0.32 mg/L	1.33 NTU	37.1 mV	42.10 ft	225.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/2/2023 9:54:39 AM

Project: Plant McIntosh AP-1

Operator Name: H. Auld

Location Name: MGWC-2 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.36 ft Total Depth: 37.36 ft Initial Depth to Water: 22.87 ft	Pump Type: Peri Pump Tubing Type: Poly Pump Intake From TOC: 32.3 ft Estimated Total Volume Pumped: 6 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 17.16 in	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

Sample time 1024. Partly cloudy 80s. MCI-AP1-EB-04 here at 1035.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/2/2023 9:54 AM	00:00	5.01 pH	30.43 °C	11.64 µS/cm	7.55 mg/L	5.00 NTU	245.7 mV	22.87 ft	200.00 ml/min
8/2/2023 9:59 AM	05:00	6.64 pH	24.53 °C	696.66 µS/cm	0.73 mg/L	2.10 NTU	103.0 mV	23.80 ft	220.00 ml/min
8/2/2023 10:04 AM	10:00	7.05 pH	22.58 °C	701.22 µS/cm	0.49 mg/L	2.40 NTU	67.3 mV	24.20 ft	220.00 ml/min
8/2/2023 10:09 AM	15:00	7.18 pH	22.74 °C	709.08 µS/cm	0.38 mg/L	1.02 NTU	51.7 mV	24.30 ft	200.00 ml/min
8/2/2023 10:14 AM	20:00	7.25 pH	22.96 °C	702.91 µS/cm	0.37 mg/L	0.93 NTU	38.8 mV	24.30 ft	200.00 ml/min
8/2/2023 10:19 AM	25:00	7.29 pH	22.98 °C	703.84 µS/cm	0.30 mg/L	0.54 NTU	25.2 mV	24.30 ft	200.00 ml/min
8/2/2023 10:24 AM	30:00	7.31 pH	23.24 °C	704.52 µS/cm	0.30 mg/L	0.70 NTU	12.3 mV	24.30 ft	200.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/1/2023 2:14:52 PM

Project: Plant McIntosh AP-1

Operator Name: H. Auld

Location Name: MGWC-3 Well Diameter: 2 ft Casing Type: PVC Screen Length: 10 ft Top of Screen: 28.7 ft Total Depth: 38.74 ft Initial Depth to Water: 21.62 ft	Pump Type: Peri Pump Tubing Type: Poly Pump Intake From TOC: 33.7 ft Estimated Total Volume Pumped: 5.8 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 5.8 in	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

Sampled at 1443 on 8-1-23. Sunny, 80s. FD-02 taken here.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/1/2023 2:14 PM	00:00	7.33 pH	47.50 °C	0.10 µS/cm	5.50 mg/L	5.00 NTU	85.3 mV	21.62 ft	175.00 ml/min
8/1/2023 2:19 PM	05:00	7.24 pH	24.67 °C	577.08 µS/cm	0.44 mg/L	1.70 NTU	70.8 mV	22.00 ft	200.00 ml/min
8/1/2023 2:24 PM	10:00	7.16 pH	22.83 °C	598.66 µS/cm	0.35 mg/L	1.50 NTU	70.2 mV	22.10 ft	200.00 ml/min
8/1/2023 2:29 PM	15:00	7.13 pH	22.58 °C	600.27 µS/cm	0.29 mg/L	0.80 NTU	70.1 mV	22.10 ft	200.00 ml/min
8/1/2023 2:34 PM	20:00	7.11 pH	22.50 °C	606.36 µS/cm	0.26 mg/L	0.60 NTU	69.0 mV	22.10 ft	200.00 ml/min
8/1/2023 2:39 PM	25:00	7.09 pH	22.55 °C	608.64 µS/cm	0.22 mg/L	0.90 NTU	68.2 mV	22.10 ft	200.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/1/2023 12:47:25 PM

Project: Plant McIntosh AP-1

Operator Name: H. Auld

Location Name: MGWA-5 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 53.1 ft Total Depth: 63.09 ft Initial Depth to Water: 25.85 ft	Pump Type: Peri Pump Tubing Type: Poly Pump Intake From TOC: 58.1 ft Estimated Total Volume Pumped: 4.4 liter Flow Cell Volume: 90 ml Final Flow Rate: 130 ml/min Final Draw Down: 4.4 in	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

Sampled at 1320 on 8-1-23. Sunny, 80s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/1/2023 12:47 PM	00:00	7.88 pH	44.68 °C	0.25 µS/cm	5.70 mg/L	5.00 NTU	101.6 mV	25.85 ft	175.00 ml/min
8/1/2023 12:52 PM	05:00	7.72 pH	28.55 °C	239.40 µS/cm	1.14 mg/L	11.00 NTU	-85.7 mV	26.40 ft	175.00 ml/min
8/1/2023 12:57 PM	10:00	7.60 pH	26.21 °C	244.32 µS/cm	0.46 mg/L	7.30 NTU	-111.8 mV	26.70 ft	130.00 ml/min
8/1/2023 1:02 PM	15:00	7.55 pH	26.24 °C	246.71 µS/cm	0.37 mg/L	7.80 NTU	-99.6 mV	26.70 ft	130.00 ml/min
8/1/2023 1:07 PM	20:00	7.53 pH	26.30 °C	246.81 µS/cm	0.28 mg/L	6.10 NTU	-101.3 mV	26.70 ft	130.00 ml/min
8/1/2023 1:12 PM	25:00	7.52 pH	26.57 °C	245.39 µS/cm	0.28 mg/L	4.70 NTU	-102.2 mV	26.70 ft	130.00 ml/min
8/1/2023 1:17 PM	30:00	7.52 pH	26.70 °C	244.49 µS/cm	0.30 mg/L	4.10 NTU	-118.7 mV	26.70 ft	130.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/1/2023 11:10:32 AM

Project: Plant McIntosh AP-1

Operator Name: H. Auld

Location Name: MGWA-6 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 31.93 ft Total Depth: 41.93 ft Initial Depth to Water: 24.82 ft	Pump Type: Peri Pump Tubing Type: Poly Pump Intake From TOC: 36.9 ft Estimated Total Volume Pumped: 6 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 2.16 in	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

Sampled at 1150 on 8-1-23. Sunny, 80s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/1/2023 11:10 AM	00:00	7.67 pH	41.24 °C	0.19 µS/cm	6.10 mg/L	5.00 NTU	73.4 mV	24.82 ft	150.00 ml/min
8/1/2023 11:15 AM	05:00	7.24 pH	27.10 °C	492.52 µS/cm	1.61 mg/L	18.30 NTU	31.7 mV	25.00 ft	150.00 ml/min
8/1/2023 11:20 AM	10:00	7.20 pH	25.49 °C	506.47 µS/cm	1.61 mg/L	7.80 NTU	41.5 mV	25.00 ft	150.00 ml/min
8/1/2023 11:25 AM	15:00	7.18 pH	25.24 °C	507.03 µS/cm	1.54 mg/L	5.10 NTU	39.8 mV	25.00 ft	150.00 ml/min
8/1/2023 11:30 AM	20:00	7.16 pH	25.07 °C	508.13 µS/cm	1.30 mg/L	4.20 NTU	41.2 mV	25.00 ft	150.00 ml/min
8/1/2023 11:35 AM	25:00	7.15 pH	25.20 °C	506.08 µS/cm	1.07 mg/L	2.80 NTU	49.1 mV	25.00 ft	150.00 ml/min
8/1/2023 11:40 AM	30:00	7.15 pH	25.06 °C	500.67 µS/cm	1.10 mg/L	2.50 NTU	45.2 mV	25.00 ft	150.00 ml/min
8/1/2023 11:45 AM	35:00	7.14 pH	24.93 °C	509.14 µS/cm	1.08 mg/L	3.00 NTU	46.7 mV	25.00 ft	150.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/1/2023 9:56:02 AM

Project: Plant McIntosh AP-1

Operator Name: H. Auld

Location Name: MGWA-6A Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 29.67 ft Total Depth: 39.67 ft Initial Depth to Water: 23.44 ft	Pump Type: Peri Pump Tubing Type: Poly Pump Intake From TOC: 34.6 ft Estimated Total Volume Pumped: 6.75 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 16.3 in	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

Sampled at 1040 on 8-1-23. Sunny, 80s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/1/2023 9:56 AM	00:00	4.45 pH	36.90 °C	2.37 µS/cm	6.69 mg/L	5.00 NTU	208.2 mV	23.44 ft	150.00 ml/min
8/1/2023 9:59 AM	03:13	6.59 pH	27.15 °C	463.88 µS/cm	2.38 mg/L	5.05 NTU	62.3 mV	24.30 ft	150.00 ml/min
8/1/2023 10:04 AM	08:13	6.99 pH	24.45 °C	479.31 µS/cm	2.09 mg/L	4.30 NTU	49.0 mV	24.50 ft	150.00 ml/min
8/1/2023 10:09 AM	13:13	7.11 pH	24.46 °C	479.82 µS/cm	1.96 mg/L	3.30 NTU	32.9 mV	24.60 ft	150.00 ml/min
8/1/2023 10:14 AM	18:13	7.17 pH	24.38 °C	478.94 µS/cm	1.82 mg/L	2.50 NTU	23.2 mV	24.60 ft	150.00 ml/min
8/1/2023 10:19 AM	23:13	7.18 pH	24.39 °C	481.28 µS/cm	1.54 mg/L	1.70 NTU	-2.0 mV	24.70 ft	150.00 ml/min
8/1/2023 10:24 AM	28:13	7.19 pH	24.40 °C	481.35 µS/cm	1.36 mg/L	1.60 NTU	-43.0 mV	24.70 ft	150.00 ml/min
8/1/2023 10:29 AM	33:13	7.20 pH	24.44 °C	480.15 µS/cm	1.33 mg/L	2.00 NTU	-22.5 mV	24.80 ft	150.00 ml/min
8/1/2023 10:34 AM	38:13	7.20 pH	24.29 °C	479.37 µS/cm	1.26 mg/L	1.20 NTU	-26.4 mV	24.80 ft	150.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/2/2023 9:36:57 AM

Project: Plant McIntosh AP-1

Operator Name: Taylor Goble

Location Name: MGWC-7 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 32.29 ft Total Depth: 42.29 ft Initial Depth to Water: 24.98 ft	Pump Type: Peristaltic Pump Tubing Type: Poly Pump Intake From TOC: 37 ft Estimated Total Volume Pumped: 6300 ml Flow Cell Volume: 90 ml Final Flow Rate: 140 ml/min Final Draw Down: 0.82 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989619
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Test Notes:

Sampled at 1021. Sunny 79 degrees.

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	+/- 25	+/- 0.3	
8/2/2023 9:36 AM	00:00	7.35 pH	24.50 °C	491.09 µS/cm	1.56 mg/L	0.50 NTU	129.3 mV	25.80 ft	140.00 ml/min
8/2/2023 9:41 AM	05:00	7.08 pH	23.52 °C	522.76 µS/cm	1.45 mg/L	0.38 NTU	95.7 mV	25.80 ft	140.00 ml/min
8/2/2023 9:46 AM	10:00	7.03 pH	23.57 °C	521.70 µS/cm	1.27 mg/L	0.31 NTU	96.5 mV	25.80 ft	140.00 ml/min
8/2/2023 9:51 AM	15:00	6.99 pH	23.53 °C	505.53 µS/cm	1.13 mg/L	0.28 NTU	66.5 mV	25.80 ft	140.00 ml/min
8/2/2023 9:56 AM	20:00	6.96 pH	23.60 °C	512.53 µS/cm	1.03 mg/L	0.25 NTU	68.6 mV	25.80 ft	140.00 ml/min
8/2/2023 10:01 AM	25:00	6.94 pH	23.61 °C	515.57 µS/cm	0.85 mg/L	0.30 NTU	64.3 mV	25.80 ft	140.00 ml/min
8/2/2023 10:06 AM	30:00	6.93 pH	23.68 °C	516.53 µS/cm	0.73 mg/L	0.33 NTU	58.0 mV	25.80 ft	140.00 ml/min
8/2/2023 10:11 AM	35:00	6.91 pH	23.60 °C	512.05 µS/cm	0.58 mg/L	0.35 NTU	55.1 mV	25.80 ft	140.00 ml/min
8/2/2023 10:16 AM	40:00	6.92 pH	23.84 °C	511.54 µS/cm	0.52 mg/L	0.47 NTU	52.2 mV	25.80 ft	140.00 ml/min
8/2/2023 10:21 AM	45:00	6.90 pH	23.91 °C	507.62 µS/cm	0.47 mg/L	0.44 NTU	47.3 mV	25.80 ft	140.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/1/2023 3:14:50 PM

Project: Plant McIntosh AP-1

Operator Name: Taylor Goble

Location Name: MGWC-8 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 42.56 ft Total Depth: 52.56 ft Initial Depth to Water: 35.15 ft	Pump Type: Portable Bladder Pump Tubing Type: Poly Pump Intake From TOC: 47 ft Estimated Total Volume Pumped: 6900 ml Flow Cell Volume: 90 ml Final Flow Rate: 230 ml/min Final Draw Down: 0.42 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989619
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Test Notes:

Sampled at 1544. Partly cloudy 89 degrees.

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	+/- 25	+/- 0.3	
8/1/2023 3:14 PM	00:00	5.75 pH	32.39 °C	440.18 µS/cm	2.97 mg/L	1.09 NTU	5.6 mV	35.44 ft	230.00 ml/min
8/1/2023 3:19 PM	05:00	5.46 pH	25.01 °C	473.07 µS/cm	1.71 mg/L	1.15 NTU	-11.4 mV	35.50 ft	230.00 ml/min
8/1/2023 3:24 PM	10:00	6.40 pH	24.09 °C	619.88 µS/cm	1.15 mg/L	2.27 NTU	-11.8 mV	35.50 ft	230.00 ml/min
8/1/2023 3:29 PM	15:00	6.71 pH	23.81 °C	669.65 µS/cm	0.96 mg/L	1.34 NTU	-26.4 mV	35.57 ft	230.00 ml/min
8/1/2023 3:34 PM	20:00	6.75 pH	23.72 °C	675.96 µS/cm	0.83 mg/L	1.17 NTU	1.0 mV	35.57 ft	230.00 ml/min
8/1/2023 3:39 PM	25:00	6.76 pH	23.73 °C	686.90 µS/cm	0.76 mg/L	0.95 NTU	-12.6 mV	35.57 ft	230.00 ml/min
8/1/2023 3:44 PM	30:00	6.77 pH	23.80 °C	691.20 µS/cm	0.67 mg/L	0.90 NTU	-11.1 mV	35.57 ft	230.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/1/2023 9:54:12 AM

Project: Plant McIntosh AP-1

Operator Name: Taylor Goble

Location Name: MGWA-10 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 43.09 ft Total Depth: 53.09 ft Initial Depth to Water: 20.13 ft	Pump Type: Peristaltic Pump Tubing Type: Poly Pump Intake From TOC: 48 ft Estimated Total Volume Pumped: 6000 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 2.92 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989619
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Test Notes:

Sampled at 1054. Partly cloudy 83 degrees. Water line disconnected at 30 minute mark, causing an errant reading at the time. Re-connected line and continued log

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	+/- 25	+/- 0.3	
8/1/2023 9:54 AM	00:00	6.71 pH	29.84 °C	81.99 µS/cm	6.00 mg/L	1.72 NTU	173.5 mV	20.33 ft	100.00 ml/min
8/1/2023 9:59 AM	05:00	5.57 pH	24.36 °C	58.50 µS/cm	4.87 mg/L	1.31 NTU	111.5 mV	21.24 ft	100.00 ml/min
8/1/2023 10:04 AM	10:00	5.65 pH	24.08 °C	59.55 µS/cm	5.08 mg/L	1.05 NTU	134.1 mV	22.01 ft	100.00 ml/min
8/1/2023 10:09 AM	15:00	5.60 pH	24.52 °C	58.92 µS/cm	5.09 mg/L	0.97 NTU	100.8 mV	22.48 ft	100.00 ml/min
8/1/2023 10:14 AM	20:00	5.57 pH	24.63 °C	58.76 µS/cm	4.76 mg/L	0.91 NTU	95.3 mV	22.63 ft	100.00 ml/min
8/1/2023 10:19 AM	25:00	5.57 pH	24.52 °C	58.49 µS/cm	4.47 mg/L	1.12 NTU	121.7 mV	22.79 ft	100.00 ml/min
8/1/2023 10:24 AM	30:00	5.76 pH	24.70 °C	0.00 µS/cm	5.63 mg/L	1.04 NTU	53.1 mV	22.85 ft	100.00 ml/min
8/1/2023 10:29 AM	35:00	5.52 pH	25.31 °C	60.23 µS/cm	3.36 mg/L	1.11 NTU	99.7 mV	22.88 ft	100.00 ml/min
8/1/2023 10:34 AM	40:00	5.55 pH	27.19 °C	61.35 µS/cm	3.10 mg/L	0.98 NTU	92.1 mV	22.91 ft	100.00 ml/min
8/1/2023 10:39 AM	45:00	5.45 pH	24.91 °C	57.90 µS/cm	2.41 mg/L	0.82 NTU	83.3 mV	22.94 ft	100.00 ml/min
8/1/2023 10:44 AM	50:00	5.43 pH	24.49 °C	57.38 µS/cm	2.10 mg/L	0.76 NTU	82.4 mV	22.97 ft	100.00 ml/min
8/1/2023 10:49 AM	55:00	5.44 pH	24.45 °C	56.82 µS/cm	2.04 mg/L	0.75 NTU	84.7 mV	23.01 ft	100.00 ml/min
8/1/2023 10:54 AM	01:00:00	5.46 pH	24.43 °C	56.98 µS/cm	2.05 mg/L	0.83 NTU	81.9 mV	23.05 ft	100.00 ml/min

Low-Flow Test Report:

Test Date / Time: 8/1/2023 11:50:47 AM

Project: Plant McIntosh AP-1

Operator Name: Taylor Goble

Location Name: MGWA-11 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 45.81 ft Total Depth: 55.81 ft Initial Depth to Water: 23.67 ft	Pump Type: Peristaltic Pump Tubing Type: Poly Pump Intake From TOC: 50 ft Estimated Total Volume Pumped: 6600 ml Flow Cell Volume: 90 ml Final Flow Rate: 220 ml/min Final Draw Down: 0.5 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989619
--	---	--

Test Notes:

Sampled at 1220. Partly cloudy 87 degrees

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	+/- 25	+/- 0.3	
8/1/2023 11:50 AM	00:00	7.35 pH	30.34 °C	220.64 µS/cm	4.60 mg/L	0.97 NTU	14.2 mV	24.07 ft	220.00 ml/min
8/1/2023 11:55 AM	05:00	7.68 pH	24.76 °C	238.46 µS/cm	0.24 mg/L	0.36 NTU	-50.8 mV	24.12 ft	220.00 ml/min
8/1/2023 12:00 PM	10:00	7.70 pH	24.23 °C	236.96 µS/cm	0.13 mg/L	0.33 NTU	-116.3 mV	24.15 ft	220.00 ml/min
8/1/2023 12:05 PM	15:00	7.69 pH	24.03 °C	240.84 µS/cm	0.10 mg/L	0.33 NTU	-140.7 mV	24.17 ft	220.00 ml/min
8/1/2023 12:10 PM	20:00	7.62 pH	23.88 °C	284.64 µS/cm	0.10 mg/L	0.31 NTU	-66.9 mV	24.17 ft	220.00 ml/min
8/1/2023 12:15 PM	25:00	7.61 pH	23.78 °C	286.55 µS/cm	0.09 mg/L	0.35 NTU	-122.3 mV	24.17 ft	220.00 ml/min
8/1/2023 12:20 PM	30:00	7.61 pH	23.96 °C	288.03 µS/cm	0.09 mg/L	0.39 NTU	-123.8 mV	24.17 ft	220.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/2/2023 11:05:39 AM

Project: Plant McIntosh AP-1

Operator Name: Taylor Goble

Location Name: MGWC-12 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 42.9 ft Total Depth: 52.9 ft Initial Depth to Water: 28.76 ft	Pump Type: Peristaltic Pump Tubing Type: Poly Pump Intake From TOC: 47 ft Estimated Total Volume Pumped: 7000 ml Flow Cell Volume: 90 ml Final Flow Rate: 175 ml/min Final Draw Down: 0.76 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989619
--	--	--

Test Notes:

Sampled at 1145. Sunny 84 degrees.

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	+/- 25	+/- 0.3	
8/2/2023 11:05 AM	00:00	7.16 pH	32.41 °C	233.52 µS/cm	5.05 mg/L	0.55 NTU	126.7 mV	29.22 ft	175.00 ml/min
8/2/2023 11:10 AM	05:00	6.96 pH	23.13 °C	248.06 µS/cm	3.43 mg/L	0.57 NTU	76.3 mV	29.47 ft	175.00 ml/min
8/2/2023 11:15 AM	10:00	6.94 pH	22.72 °C	251.90 µS/cm	3.48 mg/L	0.63 NTU	67.1 mV	29.52 ft	175.00 ml/min
8/2/2023 11:20 AM	15:00	6.95 pH	22.74 °C	252.36 µS/cm	3.43 mg/L	0.43 NTU	63.5 mV	29.52 ft	175.00 ml/min
8/2/2023 11:25 AM	20:00	6.94 pH	22.60 °C	252.32 µS/cm	3.39 mg/L	0.41 NTU	61.6 mV	29.52 ft	175.00 ml/min
8/2/2023 11:30 AM	25:00	6.95 pH	22.55 °C	264.33 µS/cm	3.30 mg/L	0.37 NTU	59.1 mV	29.52 ft	175.00 ml/min
8/2/2023 11:35 AM	30:00	7.13 pH	22.48 °C	284.02 µS/cm	1.25 mg/L	0.42 NTU	-27.9 mV	29.52 ft	175.00 ml/min
8/2/2023 11:40 AM	35:00	7.15 pH	22.57 °C	282.92 µS/cm	0.89 mg/L	0.30 NTU	-40.0 mV	29.52 ft	175.00 ml/min
8/2/2023 11:45 AM	40:00	7.20 pH	22.66 °C	284.61 µS/cm	0.48 mg/L	0.34 NTU	-52.7 mV	29.52 ft	175.00 ml/min

Samples

Sample ID:	Description:
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Daily Instrument Calibration Log

SITE: Plant McIntosh
 TECHNICIAN: T. Goble
 WATER LEVEL: Solinst
 WATER LEVEL S/N: 236986

INSTRUMENT S/N: 989619
 INSTRUMENT TYPE: AquaTroll
 CAL. SOLUTIONS:
 ID: pH 4/cond LOT #: 24000044 EXP. DATE: 5/24
 ID: pH 7 LOT #: 22290139 EXP. DATE: 4/24
 ID: pH 10 LOT #: 22110130 EXP. DATE: 4/24
 ID: ORP LOT #: 21390144 EXP. DATE: 11/23
 ID: _____ LOT #: _____ EXP. DATE: _____ 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: 8-1-23
 RDO: 100% sat. = 98.46% Midday pH check
 PH: 4.00 = 4.86 7.00 = 7.12 10.00 = 9.99 7.0 = 7.04
 PH Recal (if needed): 4.00 = _____ 7.00 = _____ 10.00 = _____ 7.0 = NA post recal check ✓
 CONDUCTIVITY: 4490 = 5217
 ORP (mV) 228 = 220.5

Calibration Date: 8-2-23
 RDO: 100% sat. = 101.79 Midday pH check
 PH: 4.00 = 4.04 7.00 = 7.03 10.00 = 9.98 7.0 = NA
 PH Recal (if needed): 4.00 = _____ 7.00 = _____ 10.00 = _____ 7.0 = _____ post recal check
 CONDUCTIVITY: 4490 = 4456
 ORP (mV) 229 = 224.7

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: T. Goble

INSTRUMENT S/N: 15030C039370
INSTRUMENT TYPE: Hach 2100Q
CAL. SOLUTION: 0 NTU - LOT # — EXP. DATE: New DI
10 NTU - LOT # A2264 EXP. DATE: 1/24
20 NTU - LOT # A2231 EXP. DATE: 12/23

Calibration Date: 8-1-23

Calibration Solution	Instrument Reading	
0.0	0.37	NTU
10.0	10.9	NTU
20.0	22.9	NTU

100 = 101
800 = 748

Calibration Date: 8-2-23

Calibration Solution	Instrument Reading	
0.0	0.41	NTU
10.0	10.8	NTU
20.0	21.5	NTU

100 = 101
800 = 786

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibration Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU



Daily Instrument Calibration Log

SITE: Plant McIntosh
 TECHNICIAN: Harold
 WATER LEVEL: Solinst ml01
 WATER LEVEL S/N: 532172

INSTRUMENT S/N: 884189
 INSTRUMENT TYPE: AquaTroll
 CAL. SOLUTIONS:
 ID: AmtoCal LOT #: 22250153 EXP. DATE: 11/2023
 ID: PH 7 LOT #: 2216893 EXP. DATE: 11/2023
 ID: PH 10 LOT #: 21320202 EXP. DATE: 12/2023
 ID: ORP LOT #: 21390144 EXP. DATE: 11/2023
 ID: _____ LOT #: _____ EXP. DATE: _____ Midday pH check
 ID: _____ LOT #: _____ EXP. DATE: _____ Must be less than .10
 ID: _____ LOT #: _____ EXP. DATE: _____ (6.90-7.10 range)

Calibration Date: 8-1-23
 RDO: 100% sat. = 98.5% Midday pH check
 PH: 4.00 = 3.98 7.00 = 7.25 10.00 = 10.07 7.0 = 7.08
 PH Recal (if needed): 4.00 = _____ 7.00 = _____ 10.00 = _____ 7.0 = _____ post recal check
 CONDUCTIVITY: 524490 = 5265
 ORP (mV) 228 = 205

Calibration Date: 8-2-23
 RDO: 100% sat. = 100.13 Midday pH check
 PH: 4.00 = 4.08 7.00 = 7.06 10.00 = 10.05 7.0 = 7.07
 PH Recal (if needed): 4.00 = _____ 7.00 = _____ 10.00 = _____ 7.0 = _____ post recal check
 CONDUCTIVITY: 4490 = 4715
 ORP (mV) 228 = 247

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: H. Aniel

INSTRUMENT S/N: 21030D000600
INSTRUMENT TYPE: Hach 2100Q
CAL. SOLUTION: 0 NTU - LOT # NA EXP. DATE: -
10 NTU - LOT # A2264 EXP. DATE: 01/24
20 NTU - LOT # A2231 EXP. DATE: 12/23

Calibration Date: 8-1-23

Calibration Solution	Instrument Reading	
0.0	0.3	NTU
10.0	10.5	NTU
20.0	19.9	NTU

Calibration Date: 8-2-23

Calibration Solution	Instrument Reading	
0.0	0.4	NTU
10.0	10.6	NTU
20.0	19.4	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

APPENDIX B

Statistical Analysis Reports

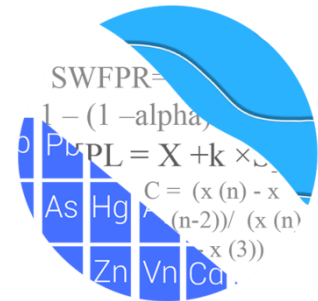
APPENDIX B

*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

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

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
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-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
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
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
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-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
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-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
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
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
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-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
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-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
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

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
Boron (mg/L)	MGWA-6 (bg)	-0.01886	-132	-81	Yes	20	20	n/a	n/a	0.01	NP
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
Boron (mg/L)	MGWC-2	-0.272	-138	-81	Yes	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-3	-0.02947	-29	-81	No	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-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
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-1	0	-52	-81	No	20	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-3	0	36	81	No	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
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
Sulfate (mg/L)	MGWA-10 (bg)	-0.1405	-90	-81	Yes	20	35	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-11 (bg)	0.187	59	81	No	20	30	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)	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
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)	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
TDS (mg/L)	MGWC-2	-33.46	-142	-81	Yes	20	0	n/a	n/a	0.01	NP
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
TDS (mg/L)	MGWC-8	68.04	110	81	Yes	20	0	n/a	n/a	0.01	NP

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)

PLANT MCINTOSH AP 1 GWPS				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
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)
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.
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.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes	22	0.01965	0	No	0.01	NP (normality)
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

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Selenium (mg/L)	MGWC-7	0.005	0.00026	0.05	No	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.

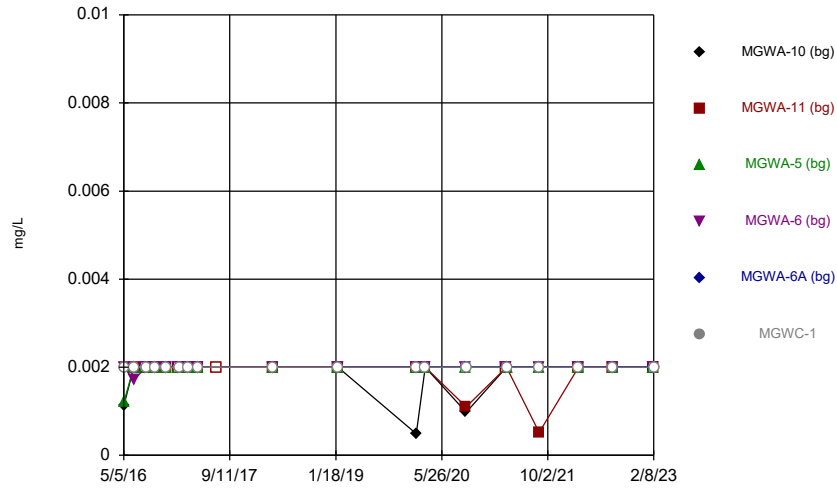
Appendix IV Trend Tests - All Results (No Significant)

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

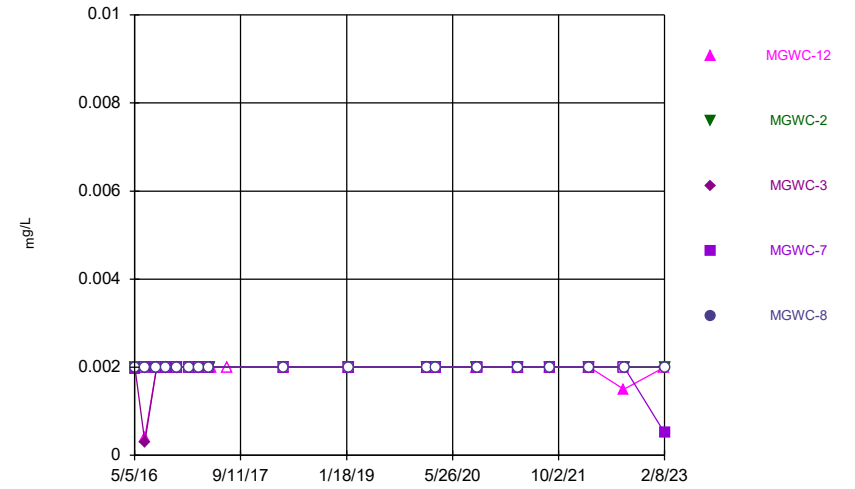
FIGURE A.

Time Series



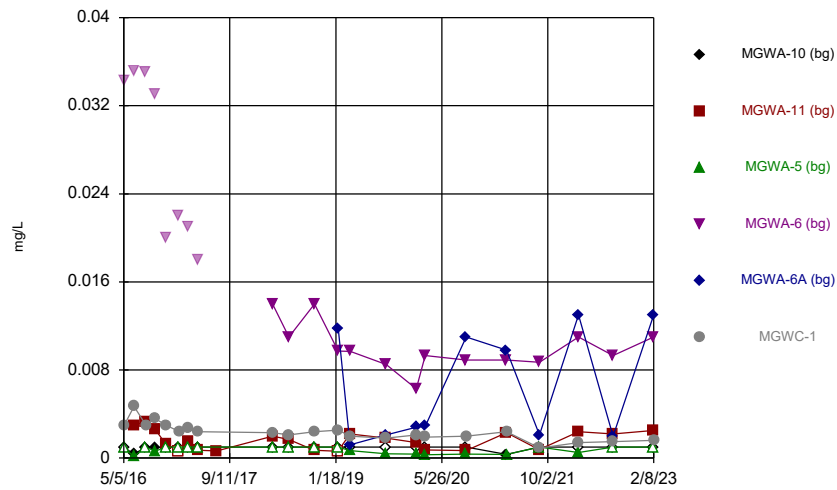
Constituent: Antimony Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



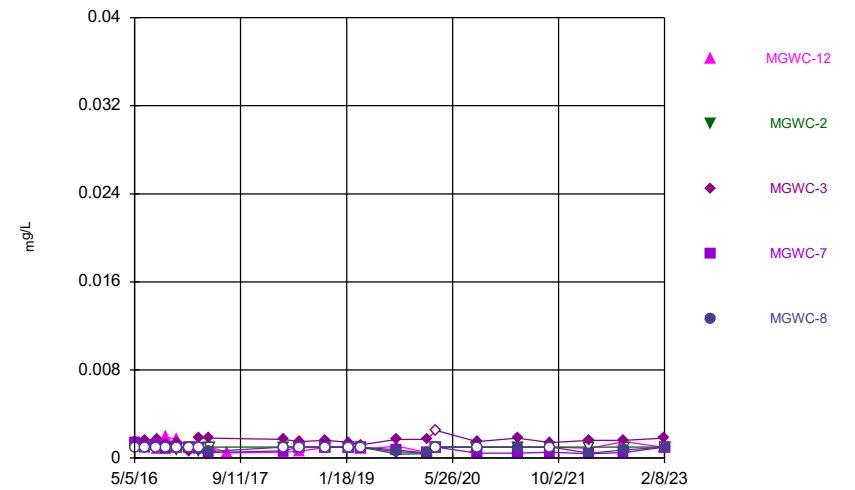
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



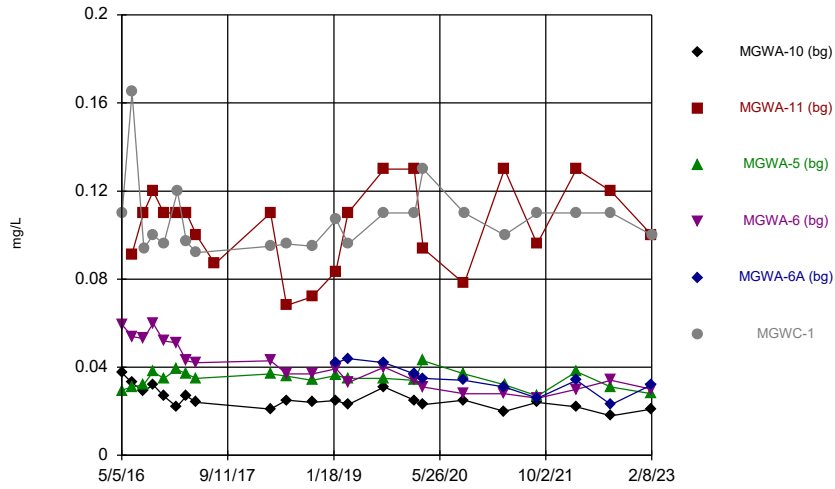
Constituent: Arsenic Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



Constituent: Arsenic Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

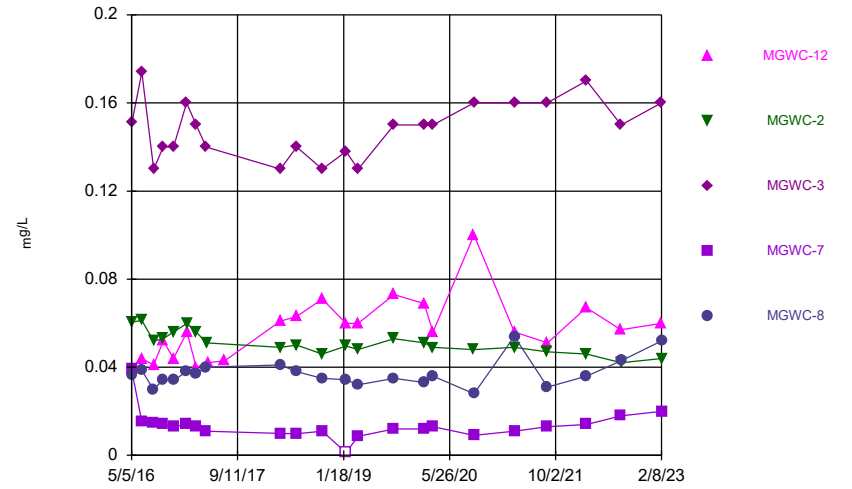
Time Series



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.

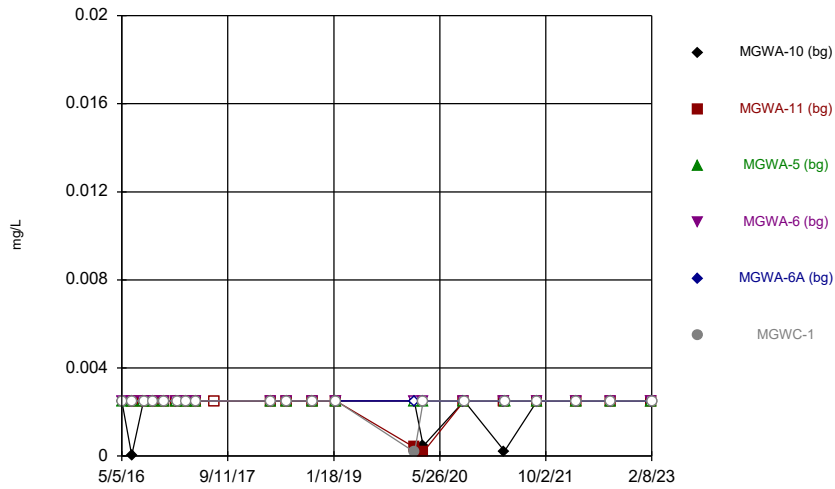
Time Series



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.

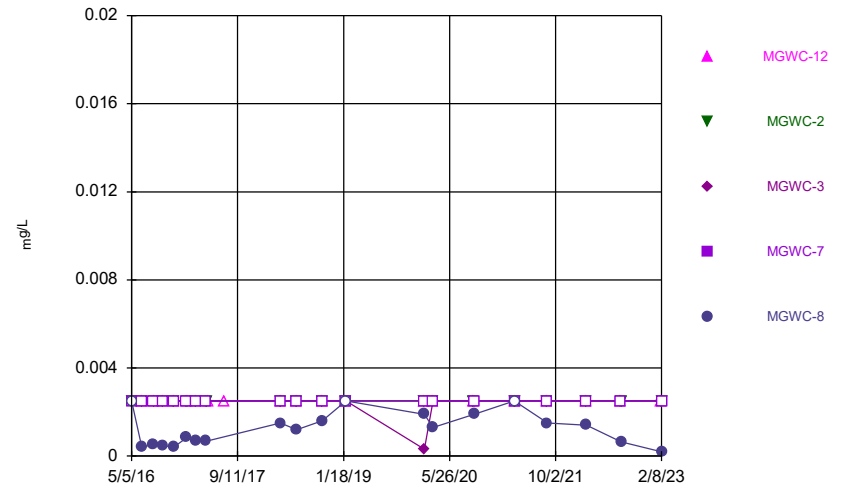
Time Series



Constituent: Beryllium Analysis Run 3/23/2023 8:44 PM View: Constituents View
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

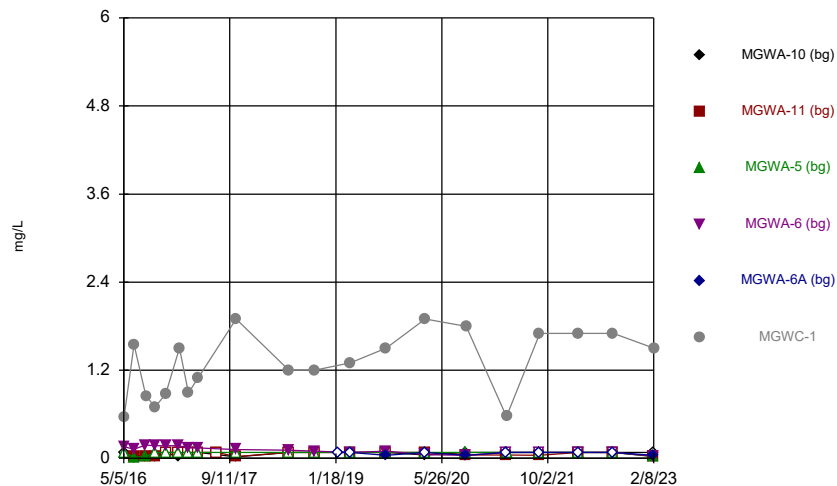
Hollow symbols indicate censored values.

Time Series



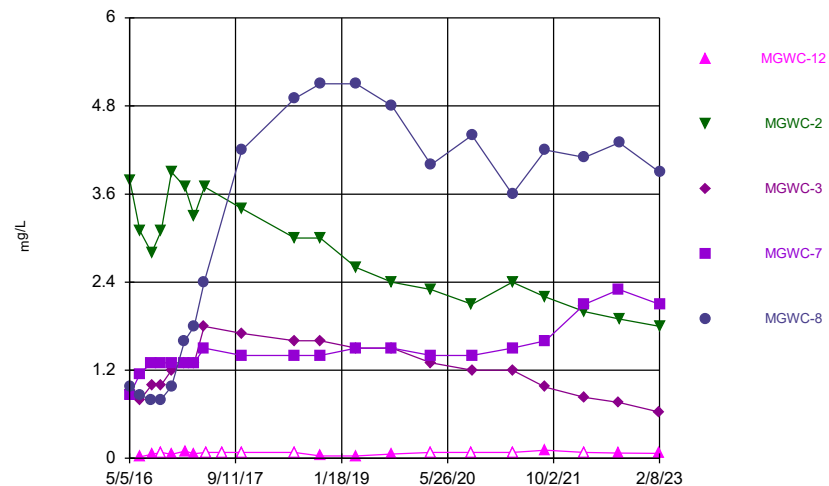
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



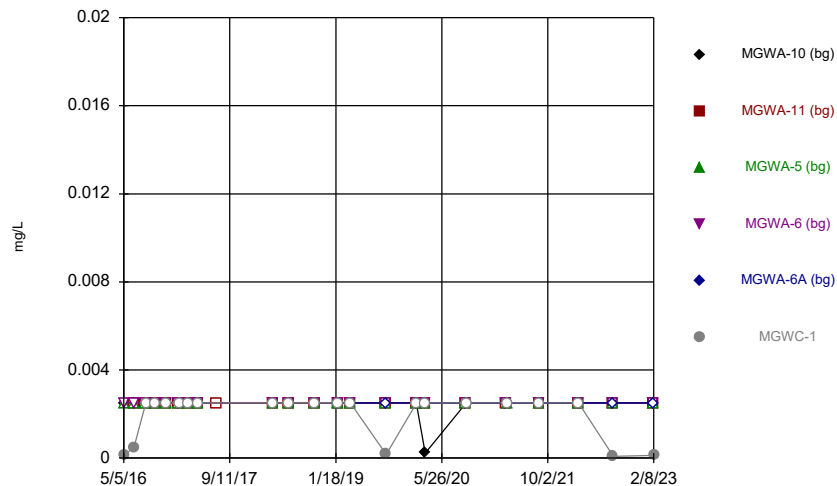
Constituent: Boron Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



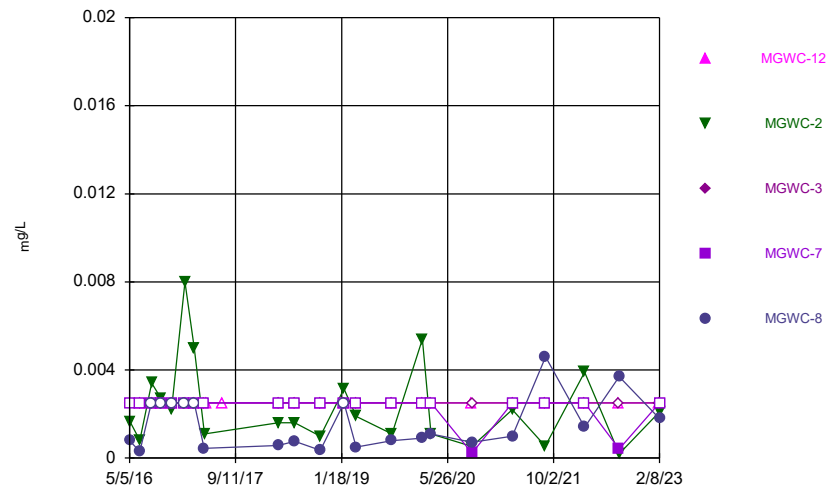
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



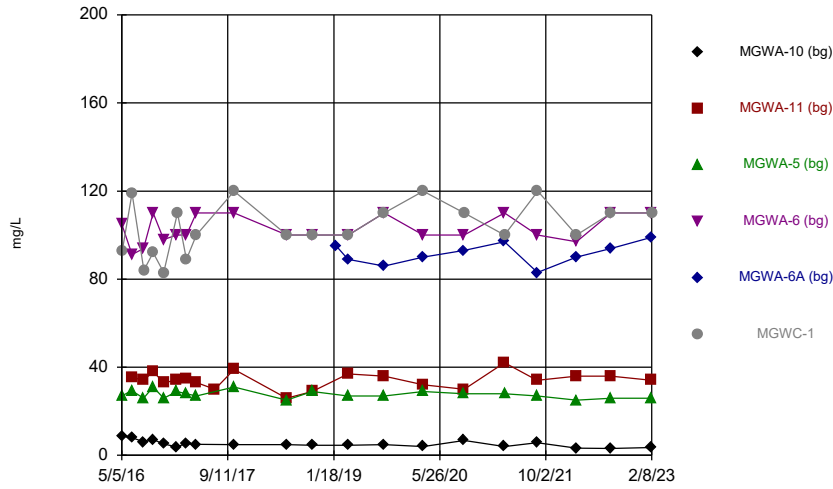
Constituent: Cadmium Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



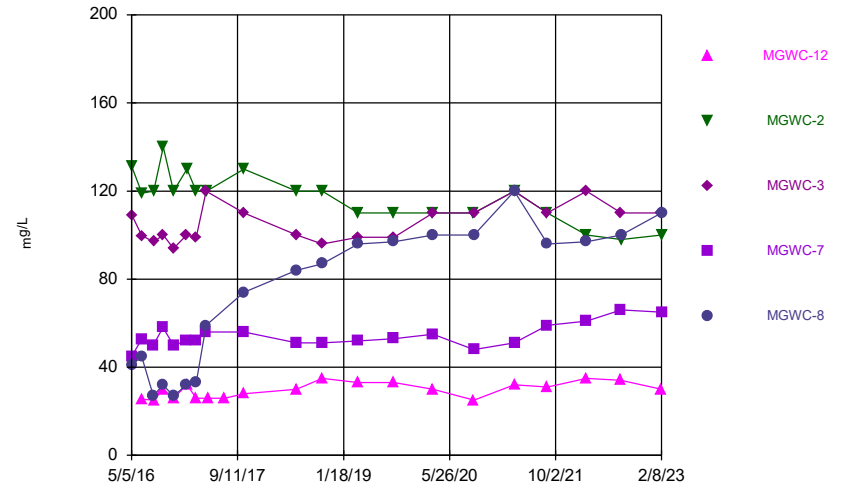
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



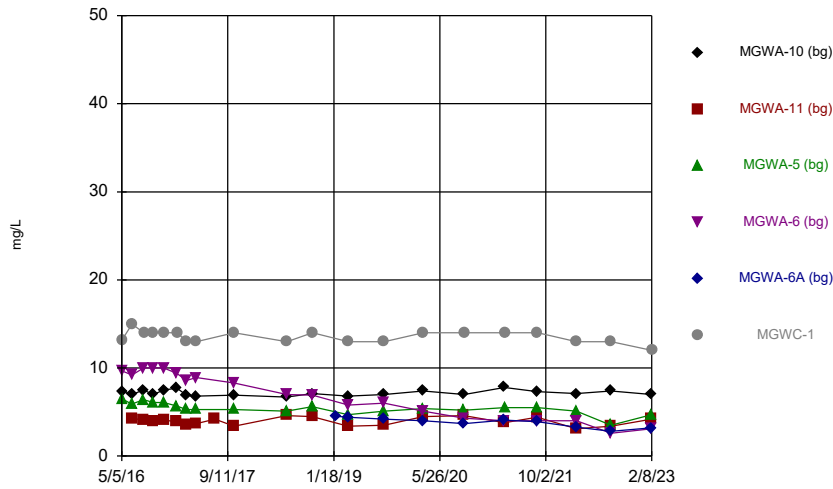
Constituent: Calcium Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



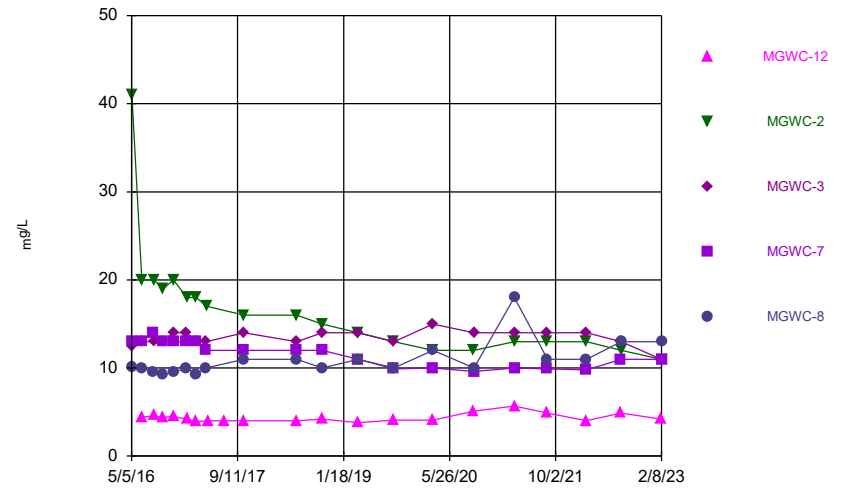
Constituent: Calcium Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



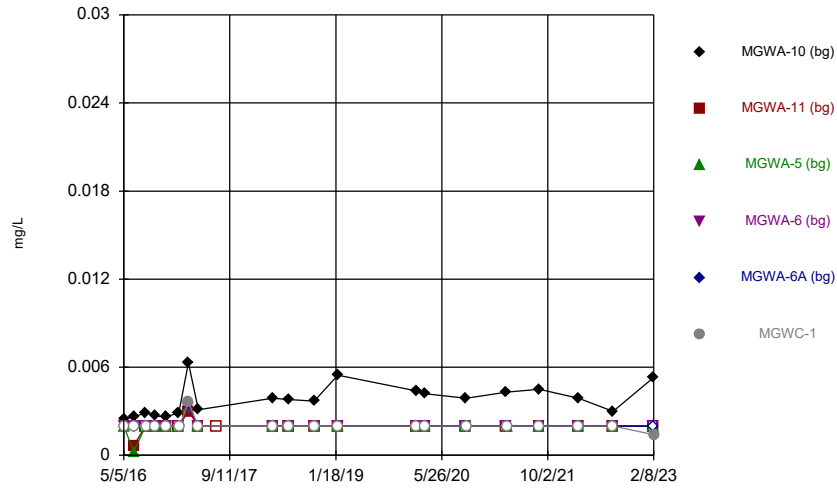
Constituent: Chloride Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



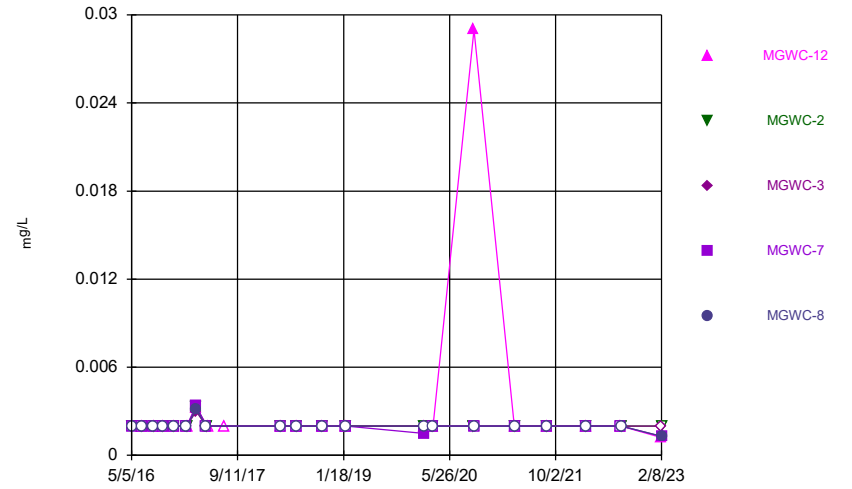
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



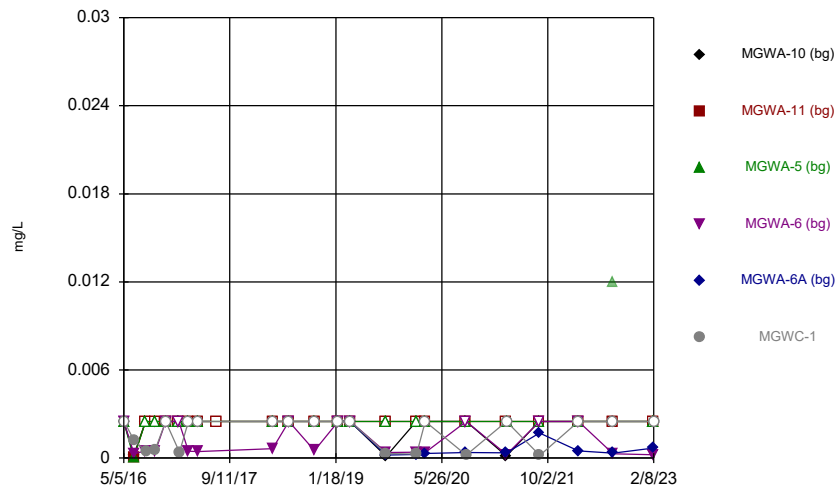
Constituent: Chromium Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



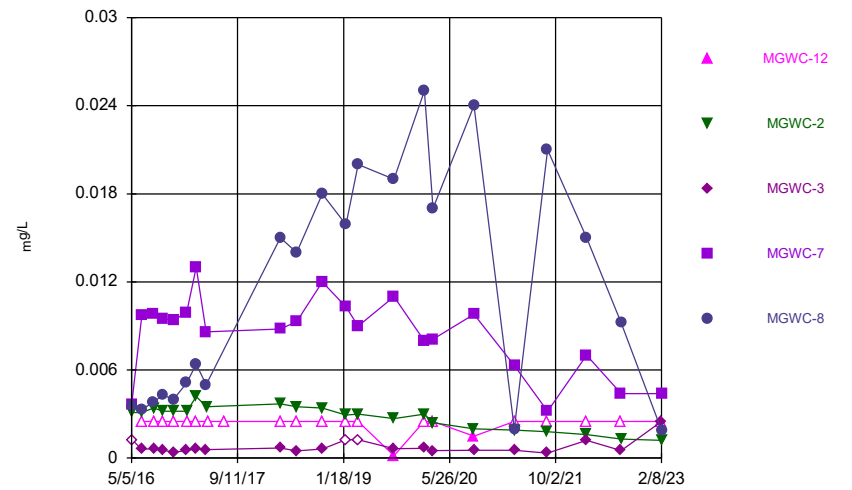
Constituent: Chromium Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



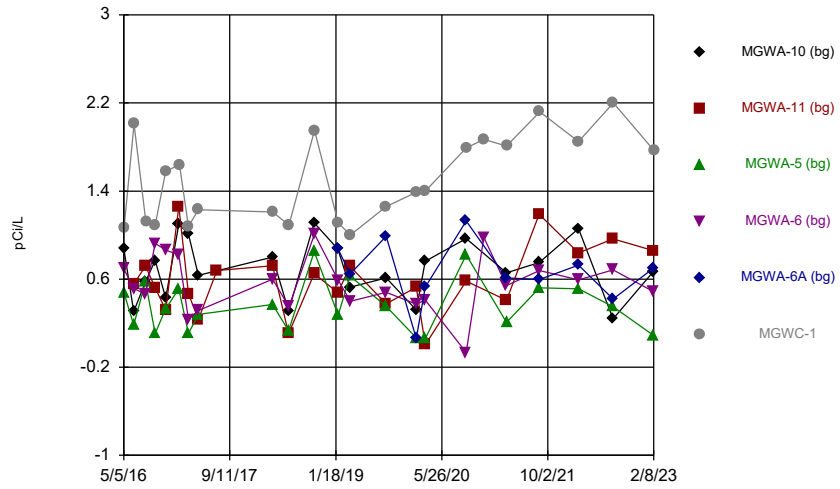
Constituent: Cobalt Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



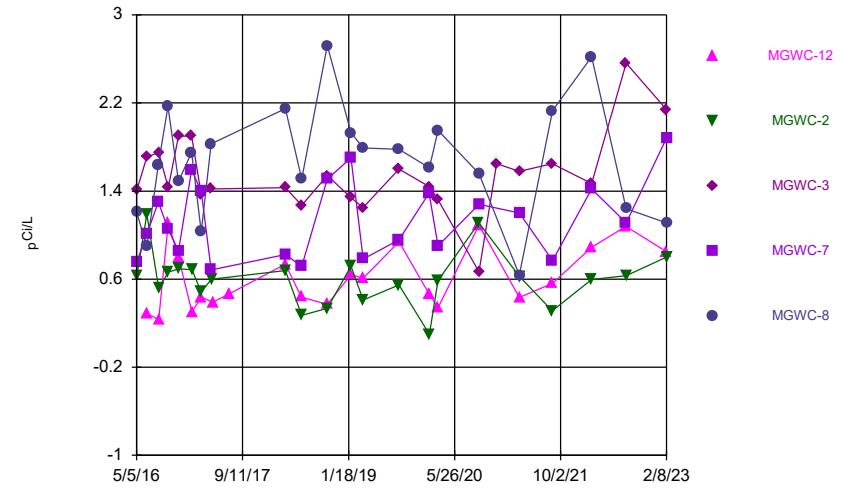
Constituent: Cobalt Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



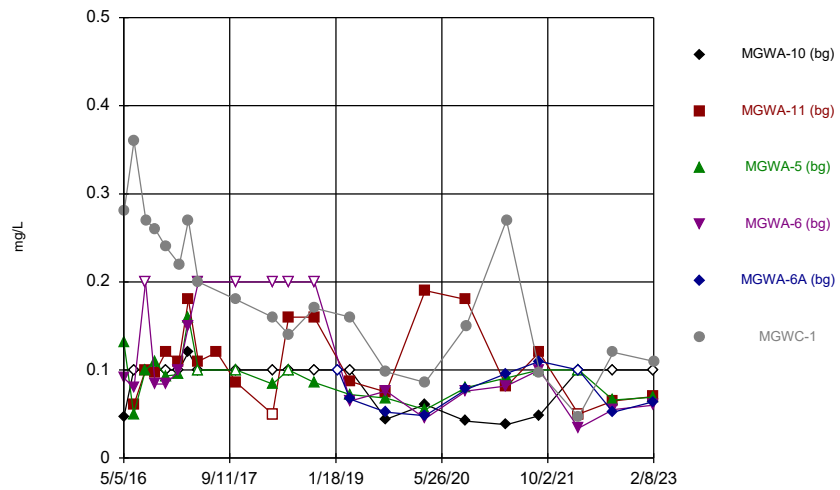
Constituent: Combined Radium 226 + 228 Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



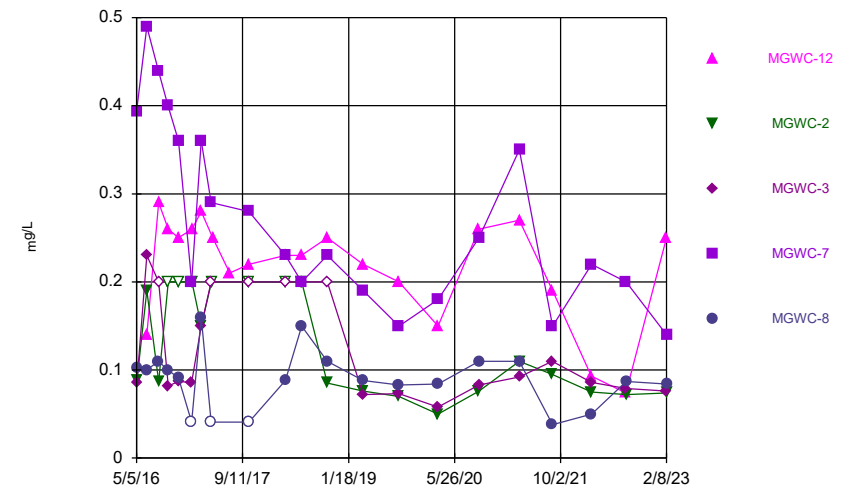
Constituent: Combined Radium 226 + 228 Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



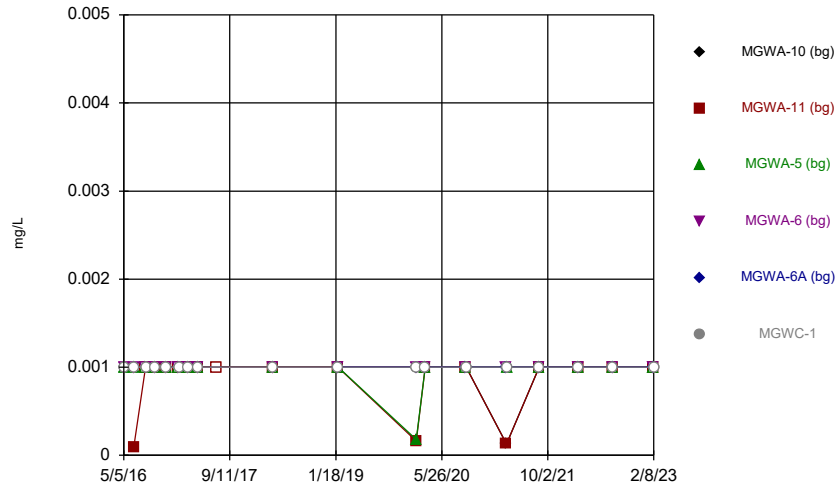
Constituent: Fluoride Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



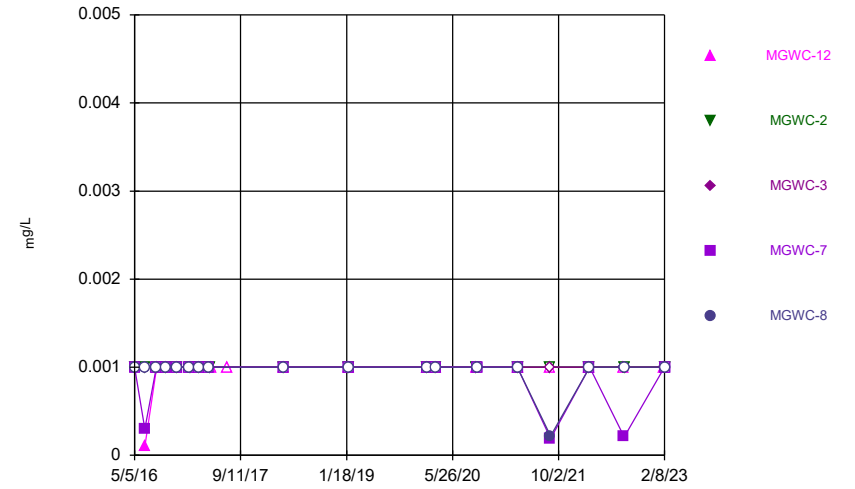
Constituent: Fluoride Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



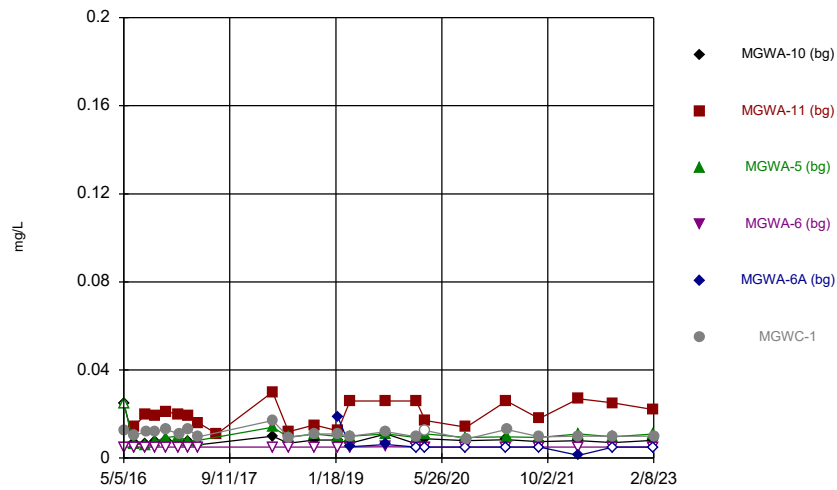
Constituent: Lead Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



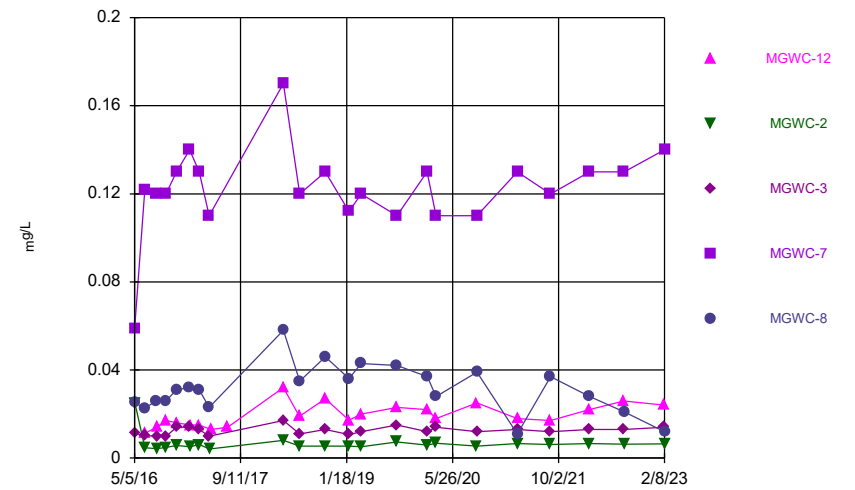
Constituent: Lead Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



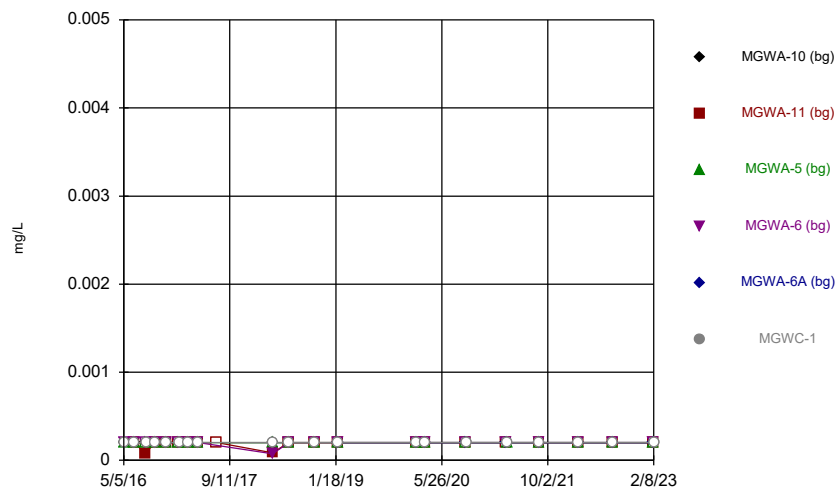
Constituent: Lithium Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



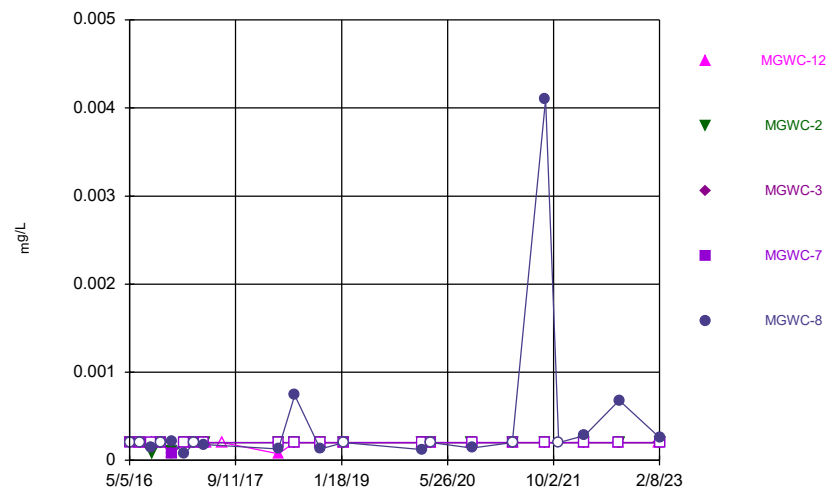
Constituent: Lithium Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



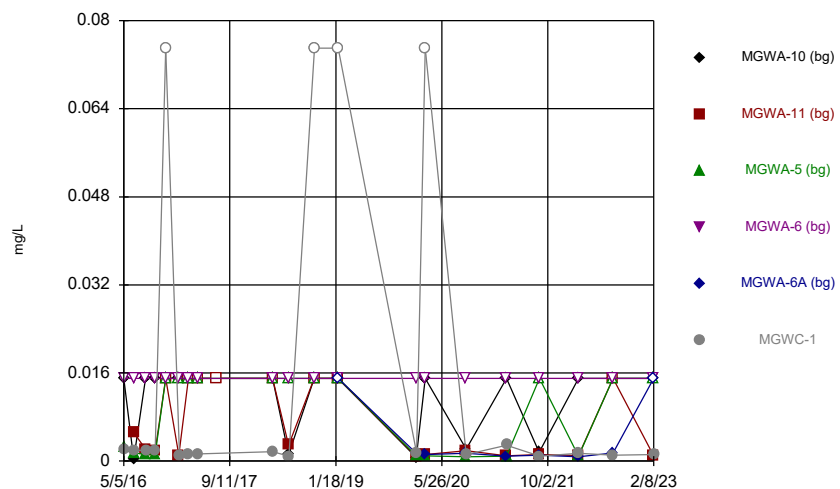
Constituent: Mercury Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



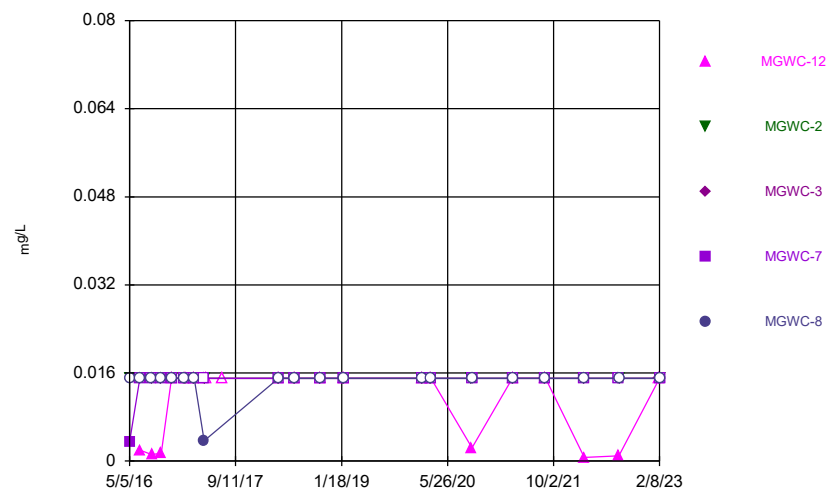
Constituent: Mercury Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



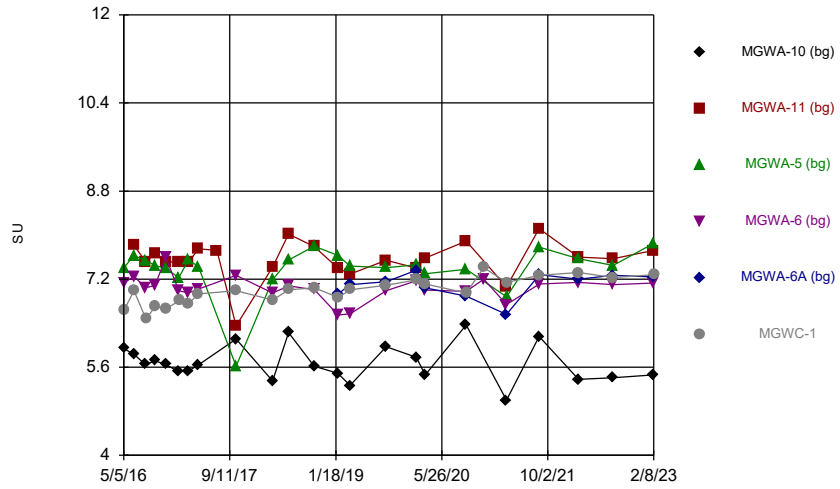
Constituent: Molybdenum Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



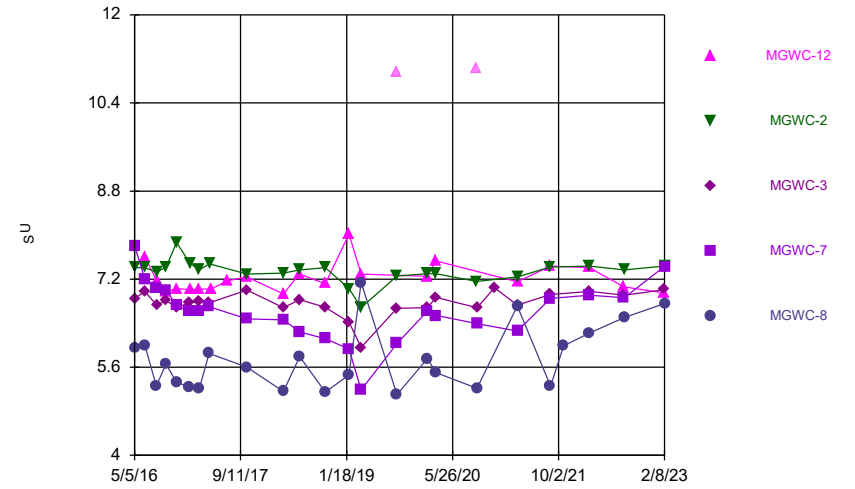
Constituent: Molybdenum Analysis Run 3/23/2023 8:44 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



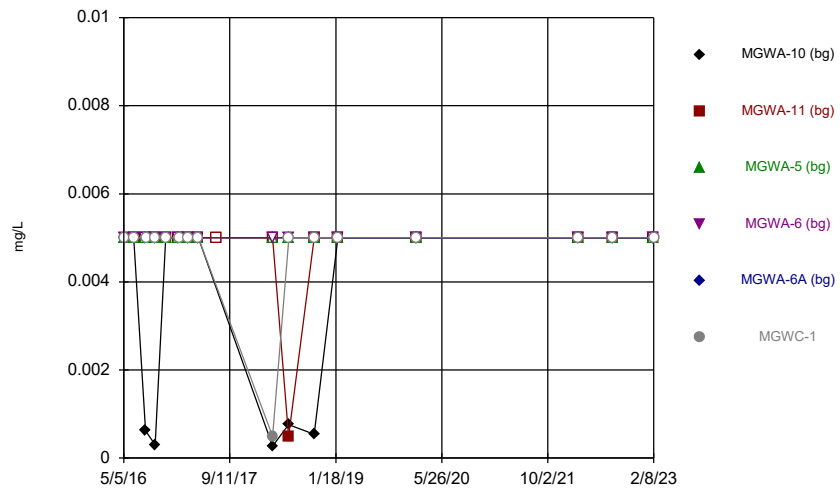
Constituent: pH Analysis Run 3/23/2023 8:45 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



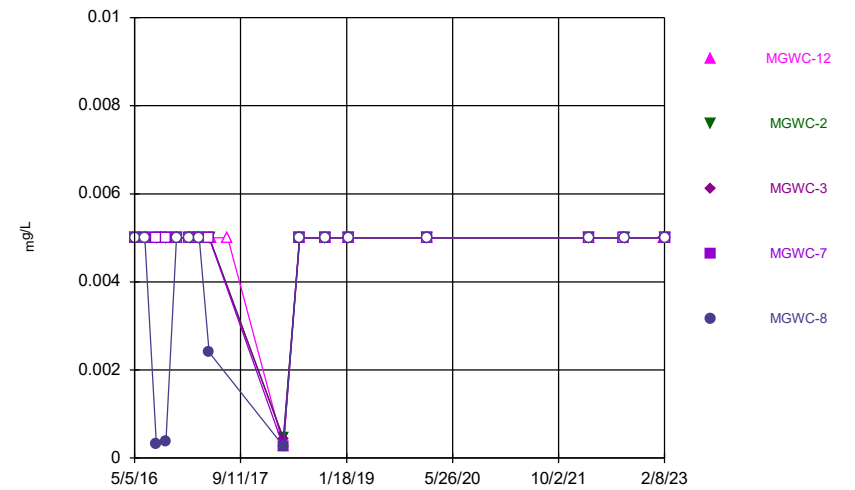
Constituent: pH Analysis Run 3/23/2023 8:45 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



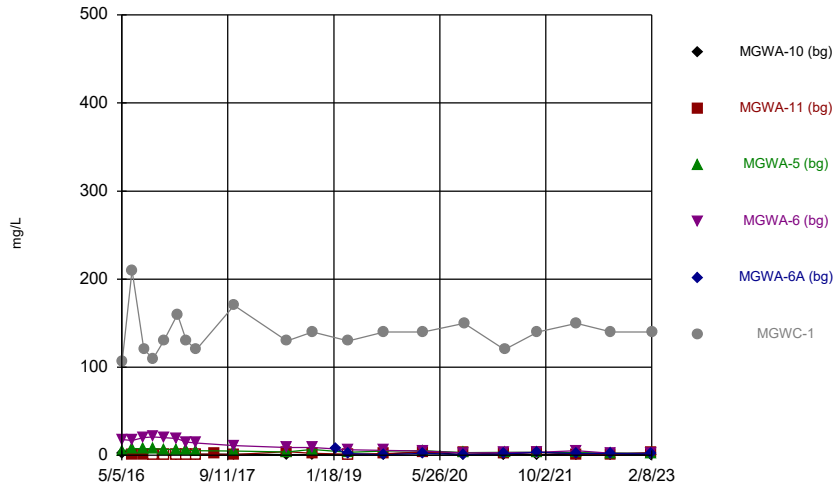
Constituent: Selenium Analysis Run 3/23/2023 8:45 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



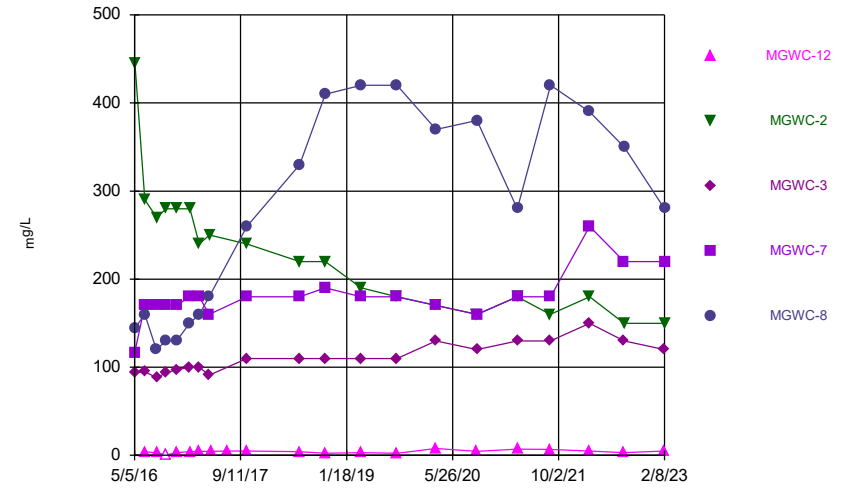
Constituent: Selenium Analysis Run 3/23/2023 8:45 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



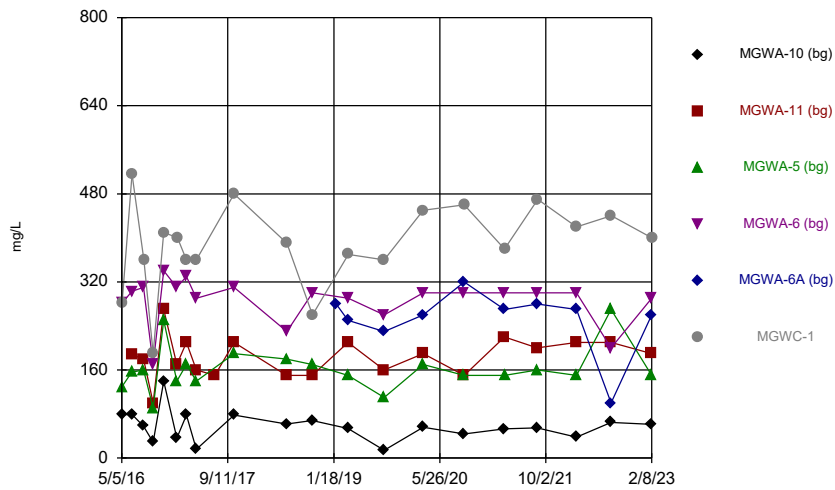
Constituent: Sulfate Analysis Run 3/23/2023 8:45 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



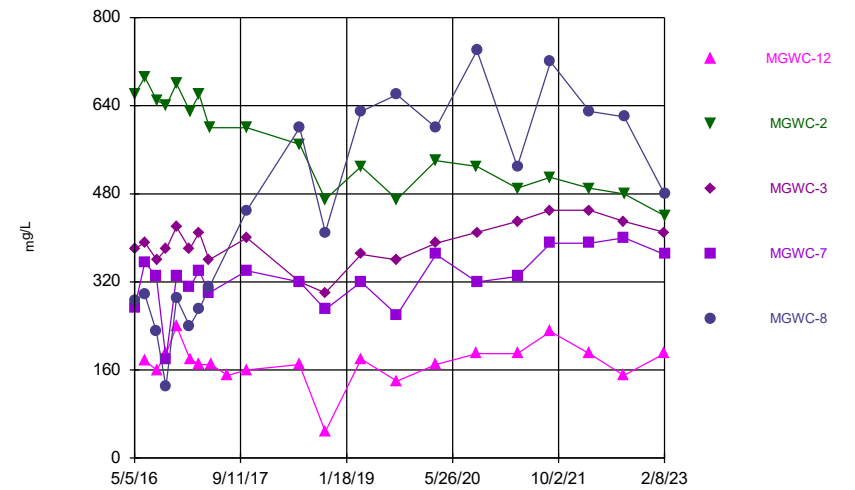
Constituent: Sulfate Analysis Run 3/23/2023 8:45 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



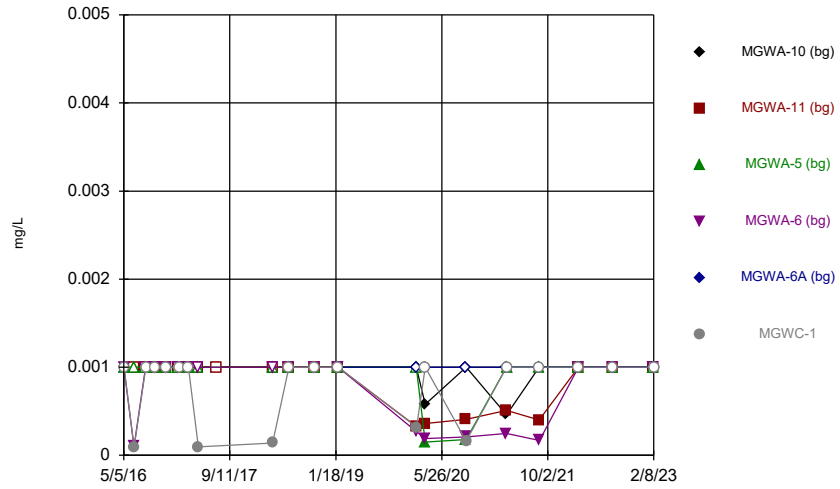
Constituent: TDS Analysis Run 3/23/2023 8:45 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



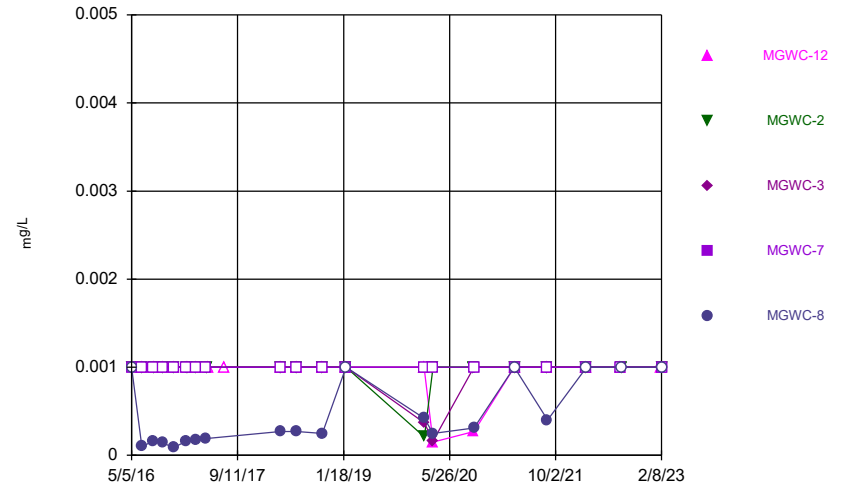
Constituent: TDS Analysis Run 3/23/2023 8:45 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

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

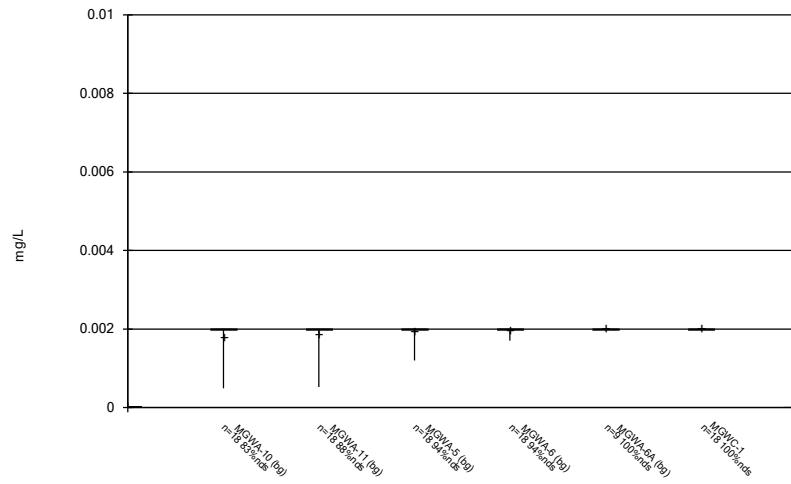
Constituent: Thallium (mg/L) Analysis Run 3/23/2023 8:45 PM View: Constituents View

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

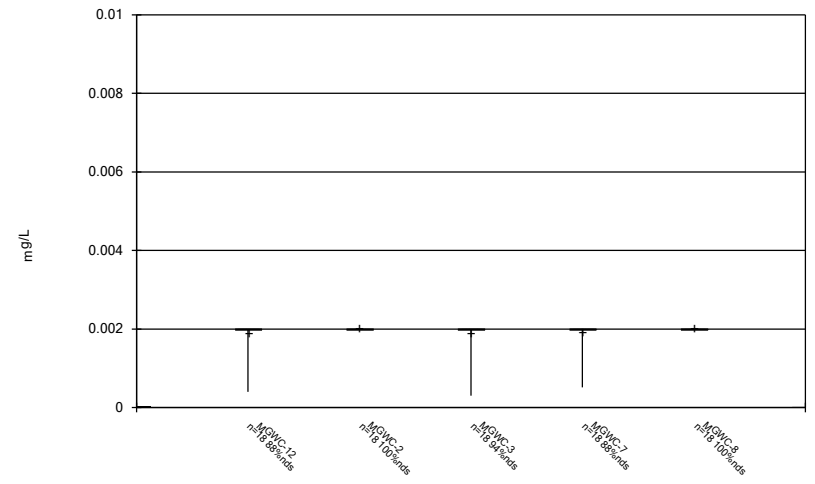
FIGURE B.

Box & Whiskers Plot



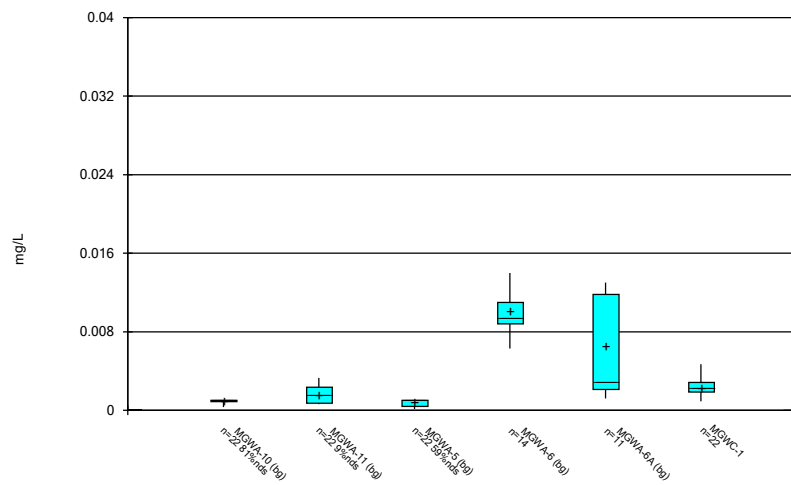
Constituent: Antimony Analysis Run 3/23/2023 8:58 PM View: Constituents View
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



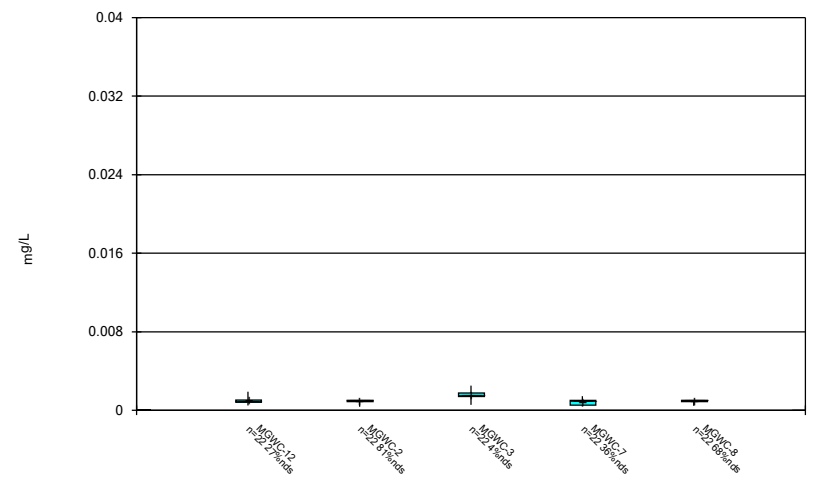
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



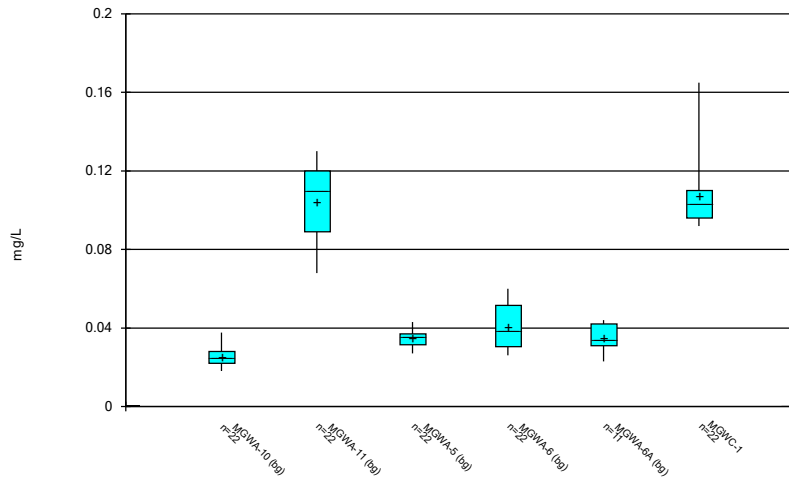
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



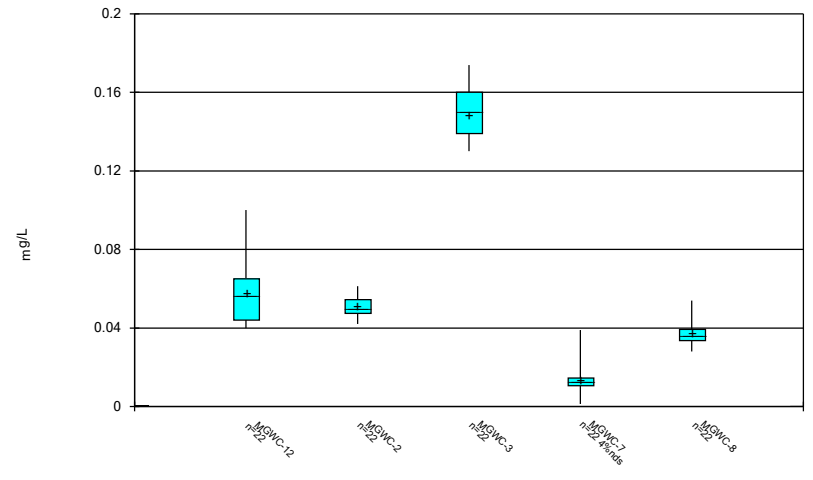
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



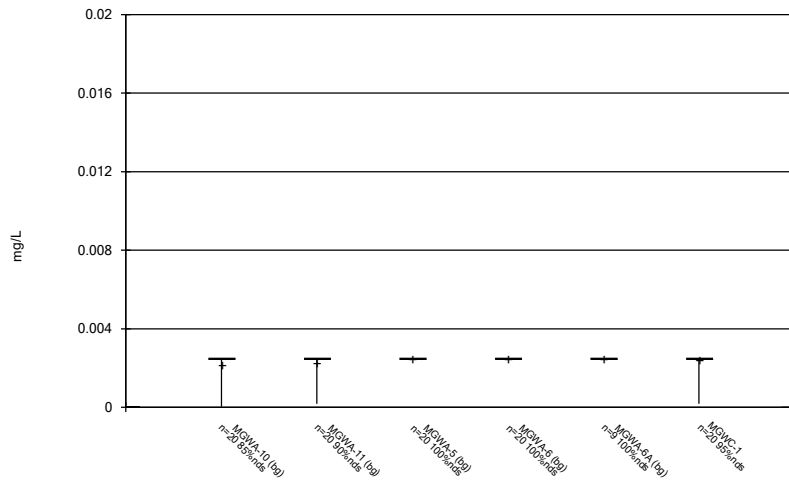
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



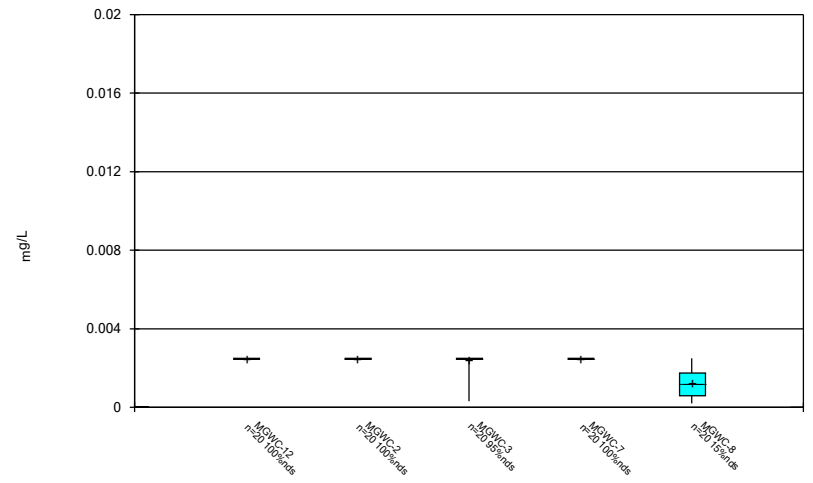
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



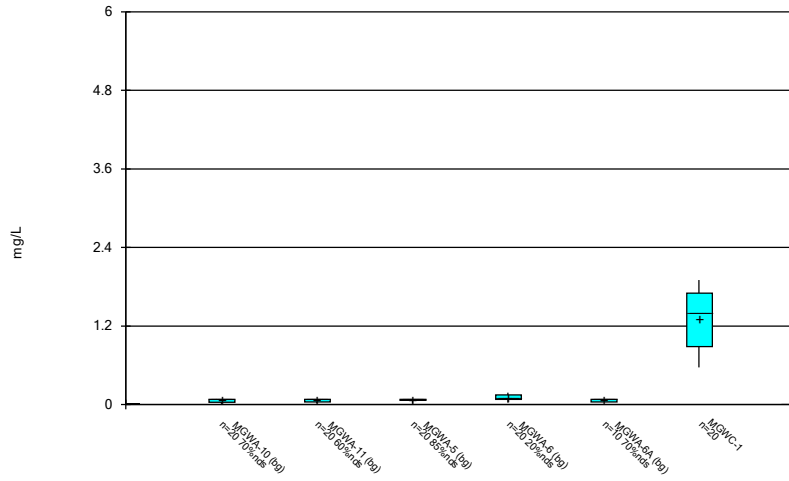
Constituent: Beryllium Analysis Run 3/23/2023 8:58 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



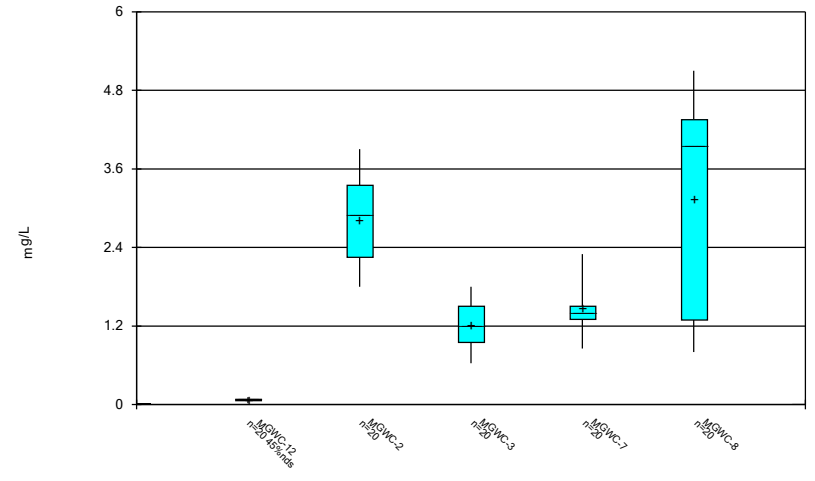
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



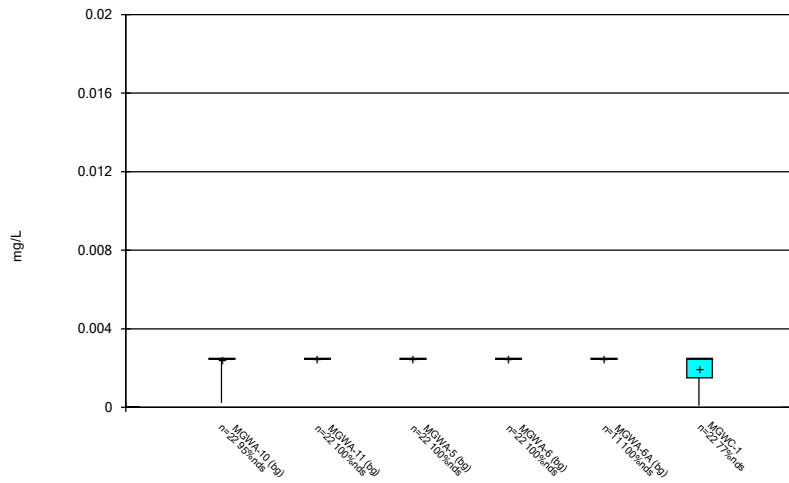
Constituent: Boron Analysis Run 3/23/2023 8:58 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



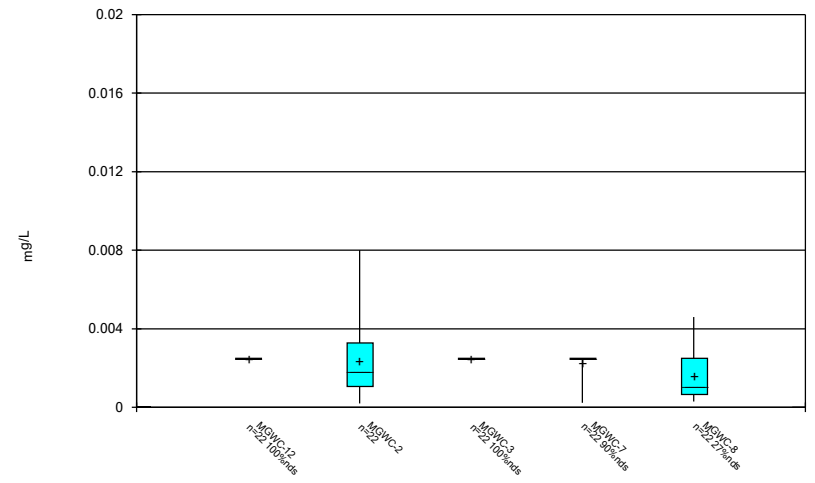
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



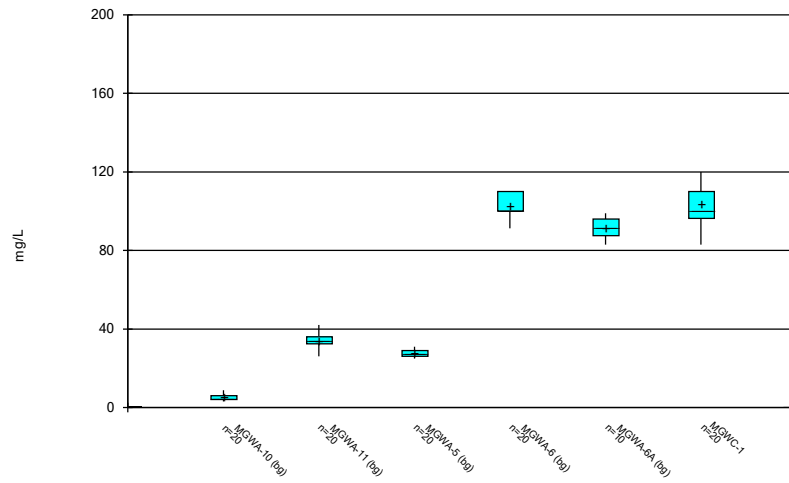
Constituent: Cadmium Analysis Run 3/23/2023 8:58 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



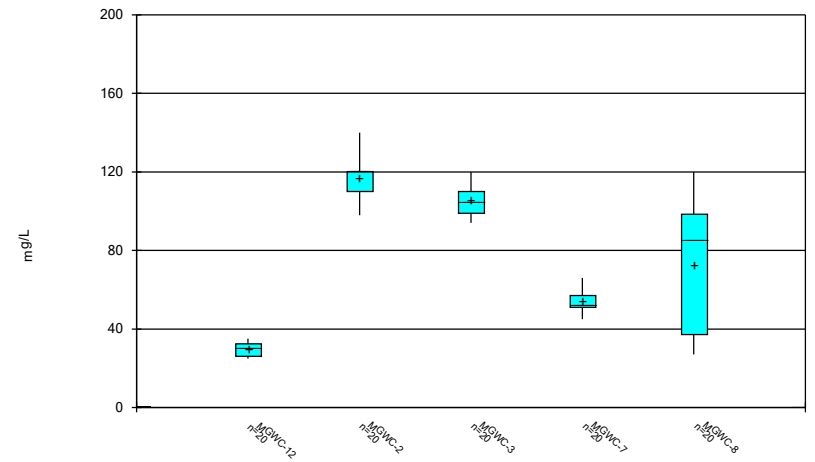
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



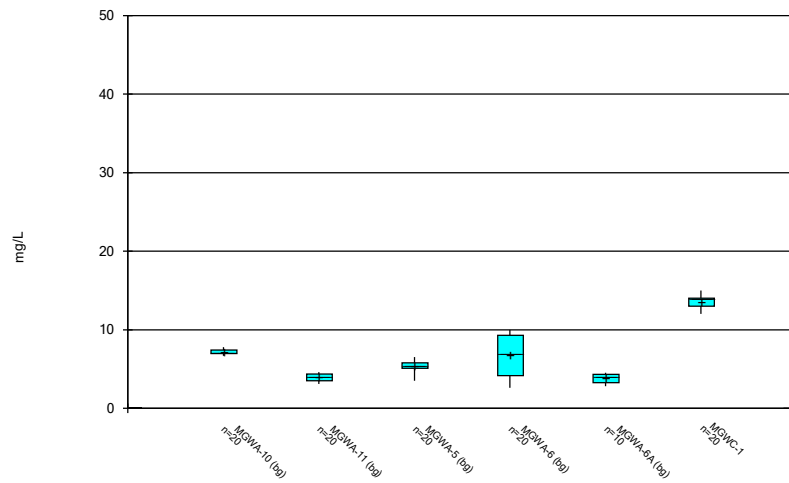
Constituent: Calcium Analysis Run 3/23/2023 8:58 PM View: Constituents View
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



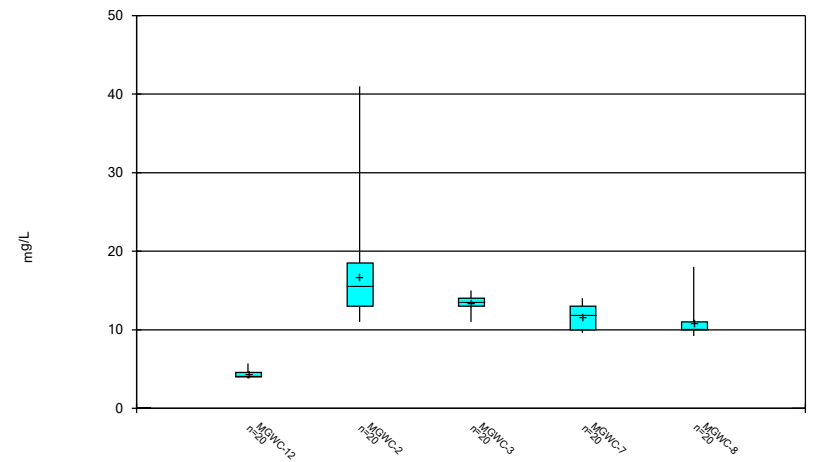
Constituent: Calcium Analysis Run 3/23/2023 8:58 PM View: Constituents View
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



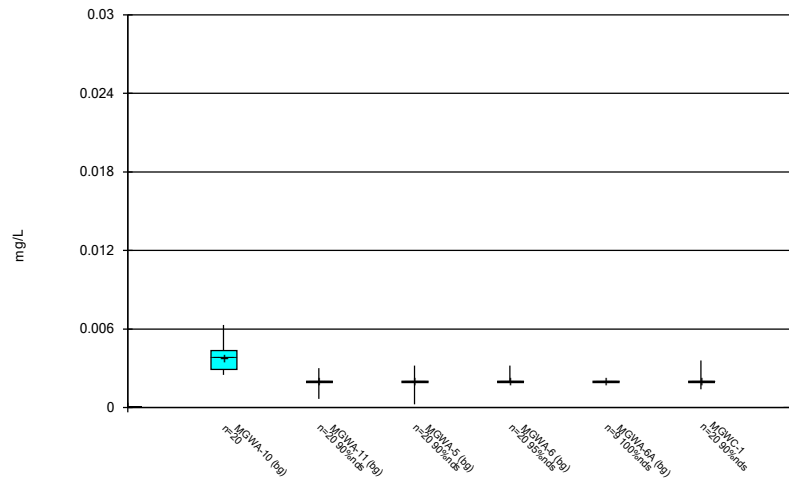
Constituent: Chloride Analysis Run 3/23/2023 8:58 PM View: Constituents View
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



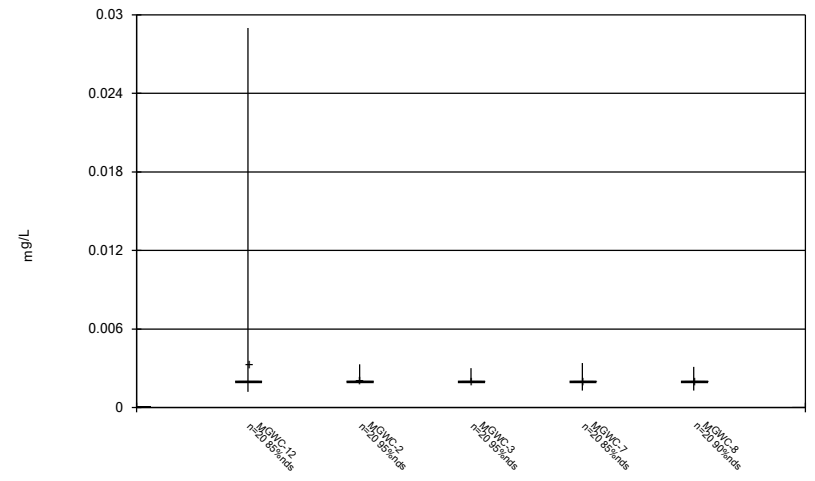
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



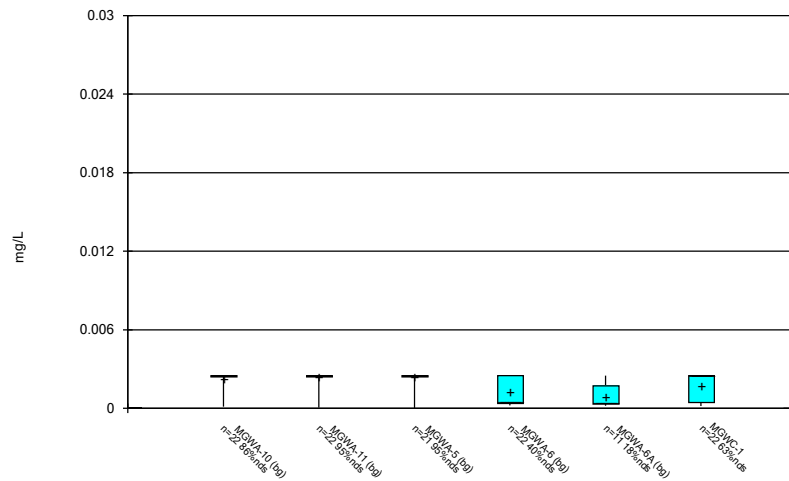
Constituent: Chromium Analysis Run 3/23/2023 8:58 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



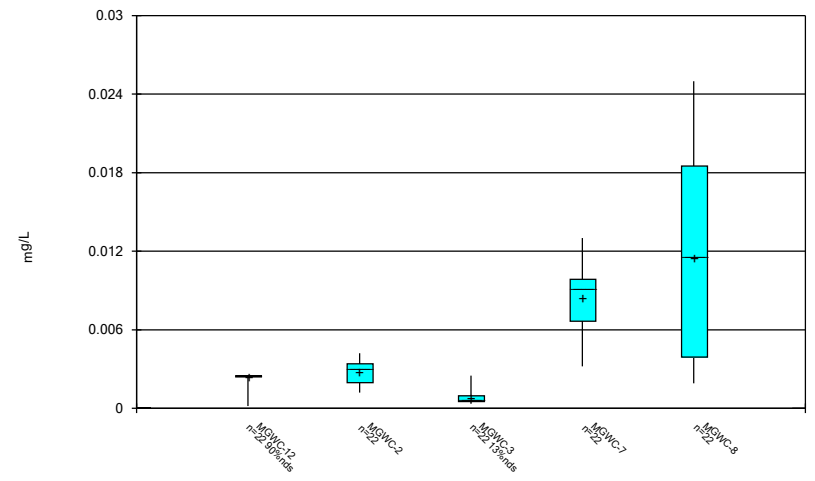
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



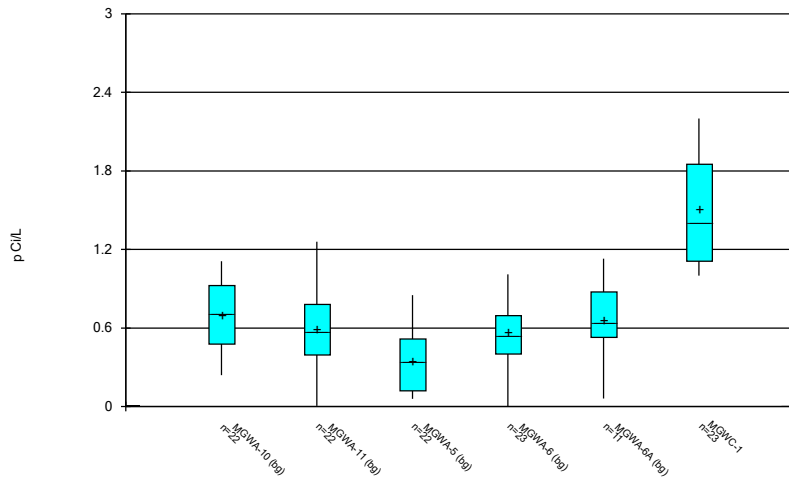
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



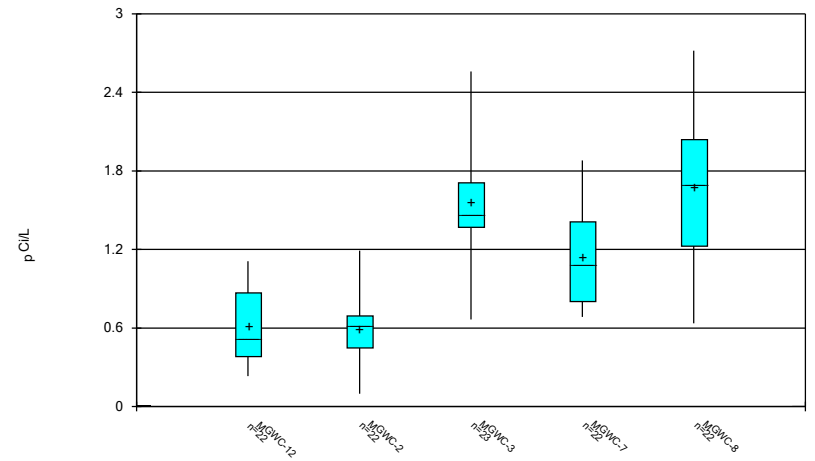
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



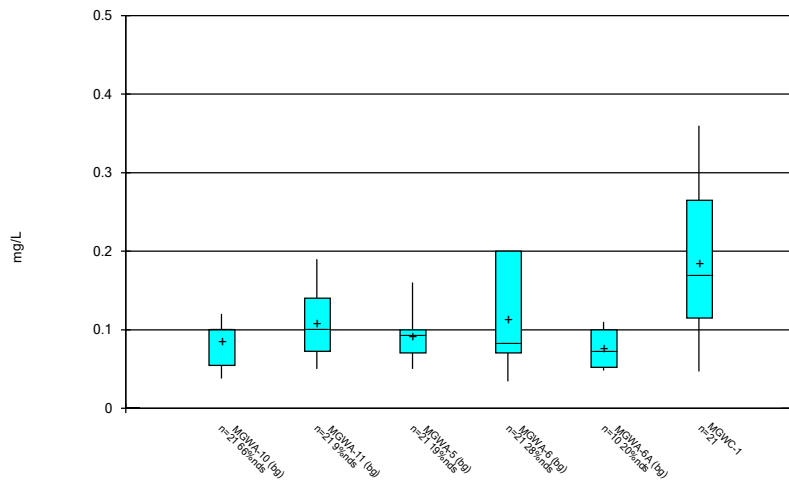
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



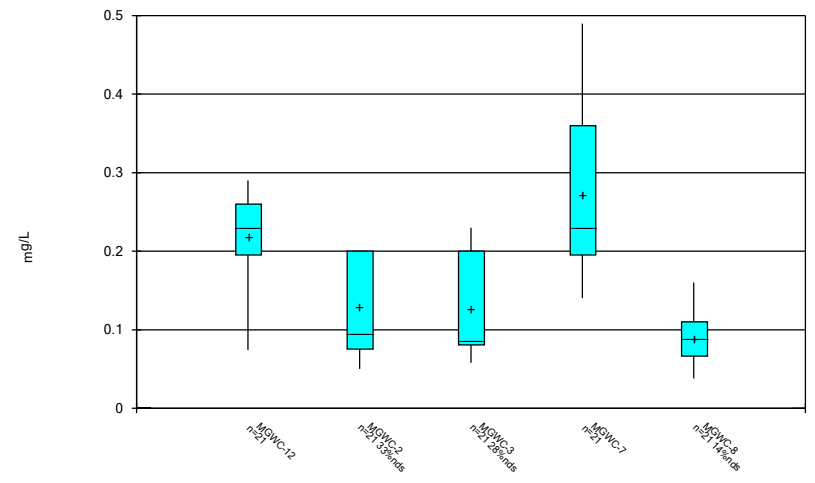
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



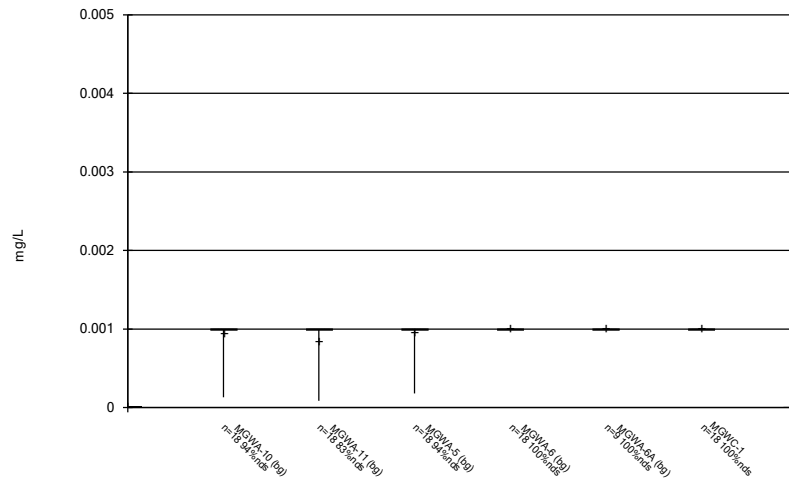
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



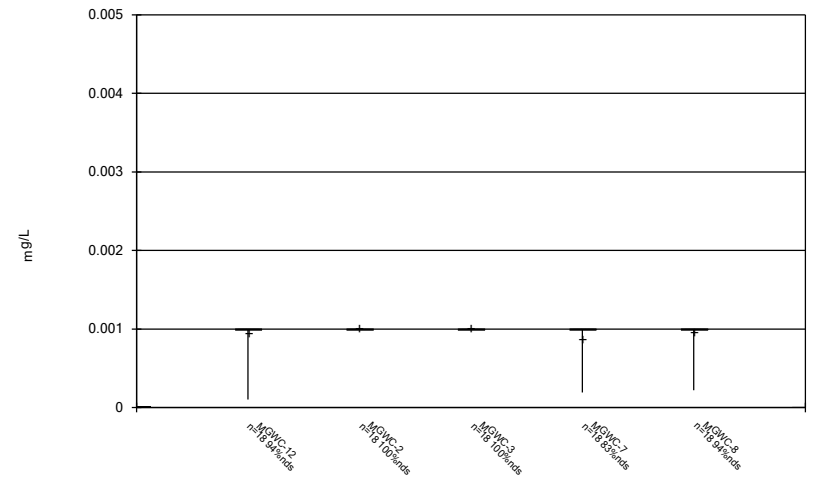
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



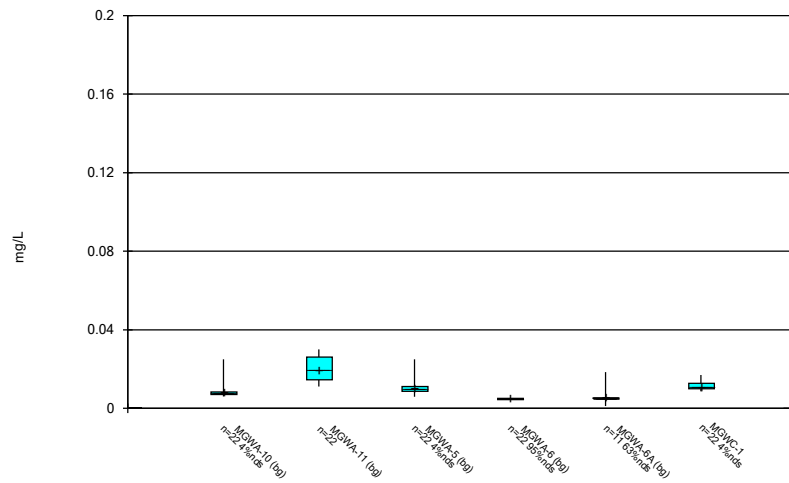
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



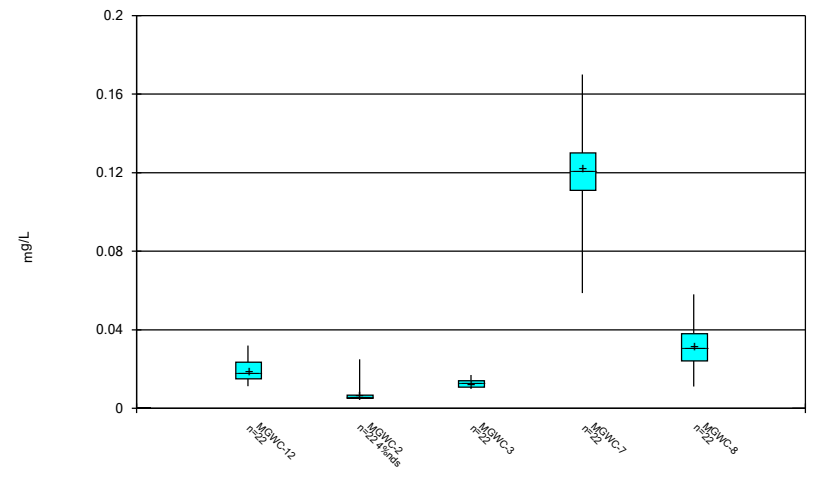
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Box & Whiskers Plot



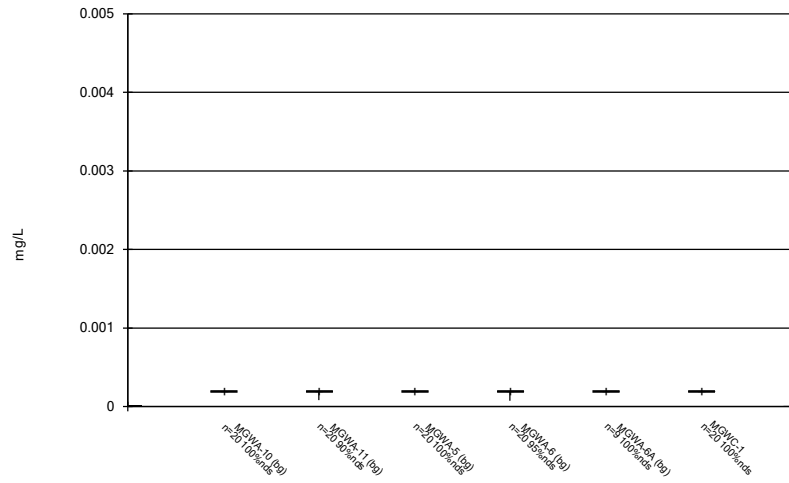
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



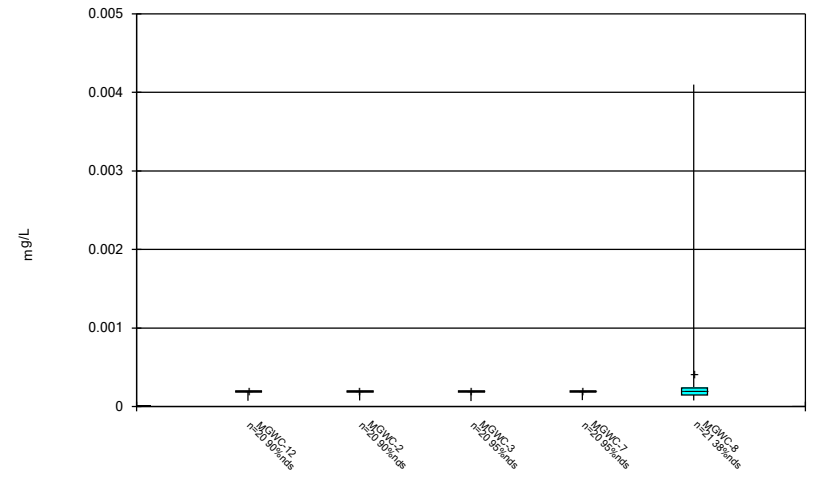
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



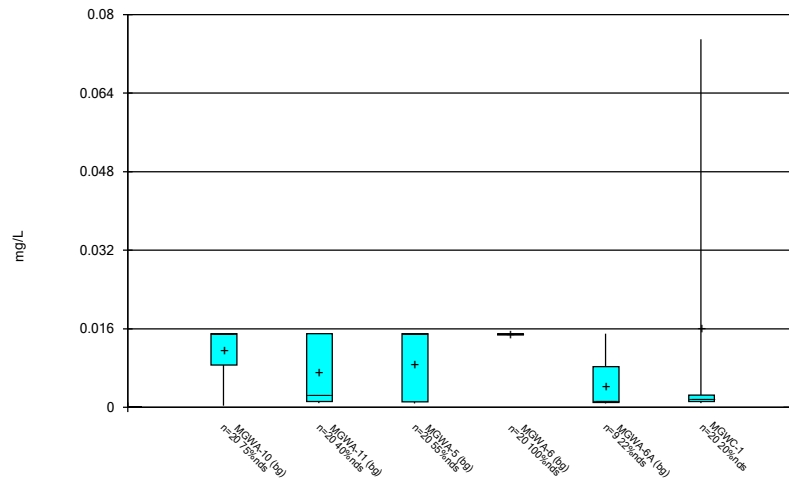
Constituent: Mercury Analysis Run 3/23/2023 8:59 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



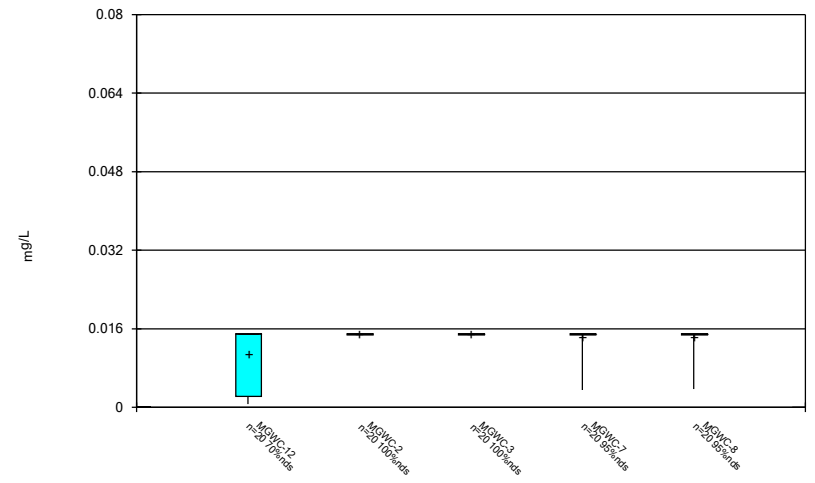
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



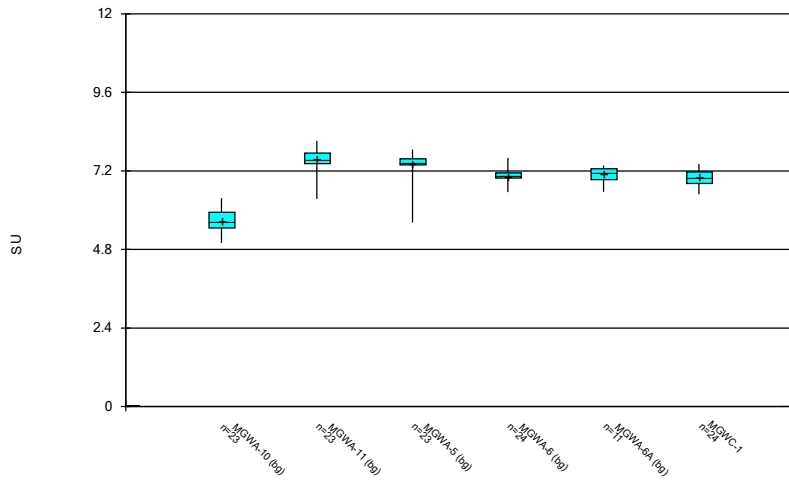
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



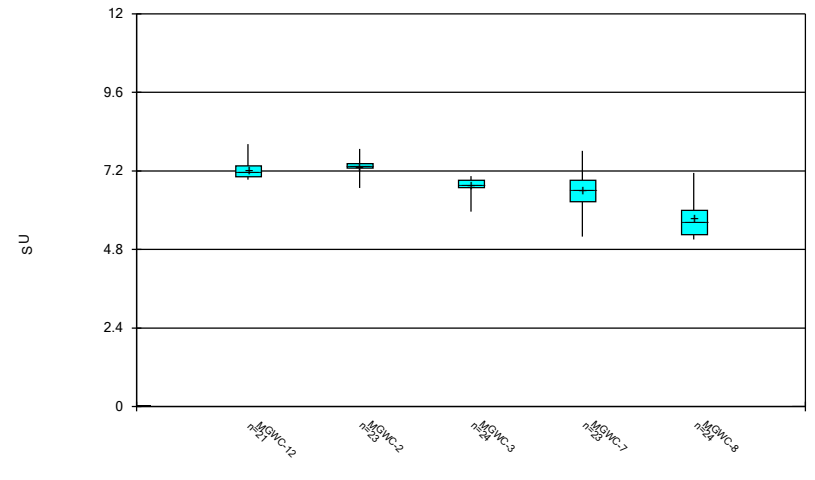
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



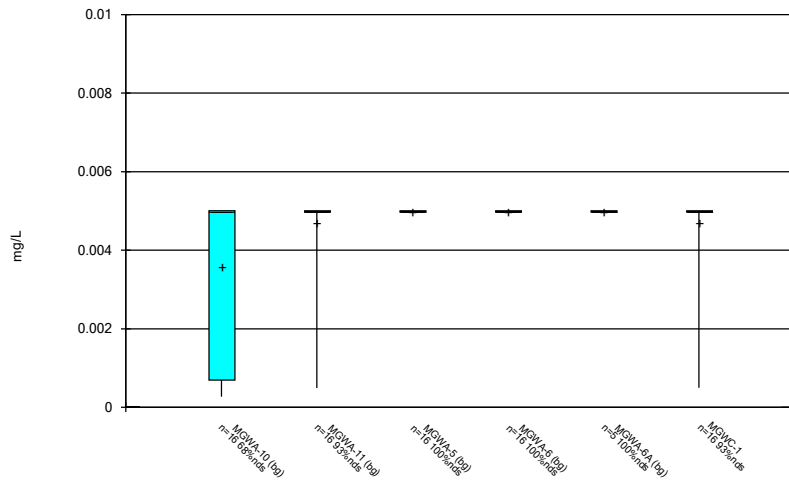
Constituent: pH Analysis Run 3/23/2023 8:59 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



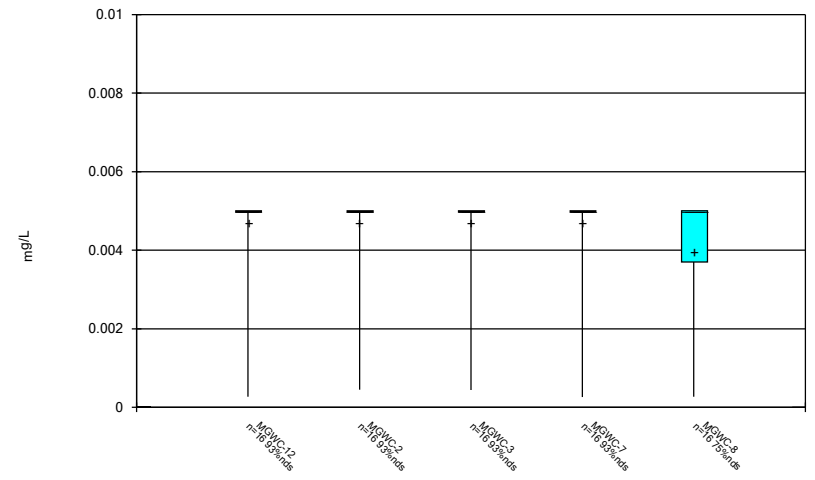
Constituent: pH Analysis Run 3/23/2023 8:59 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



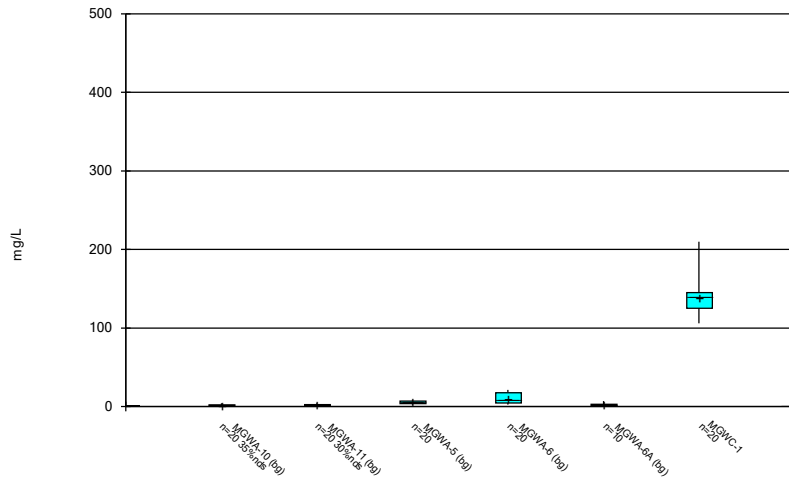
Constituent: Selenium Analysis Run 3/23/2023 8:59 PM View: Constituents View
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



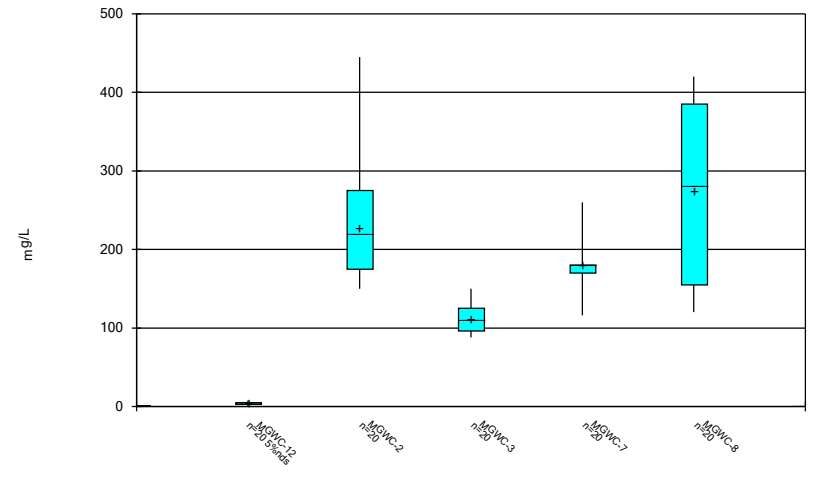
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



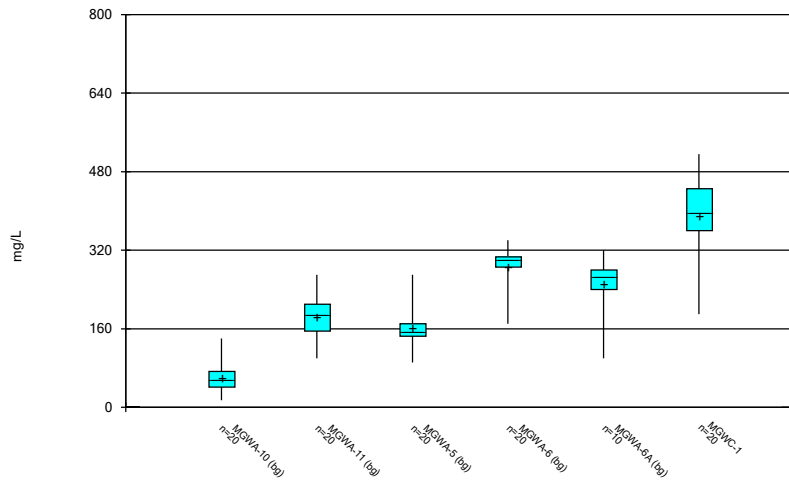
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



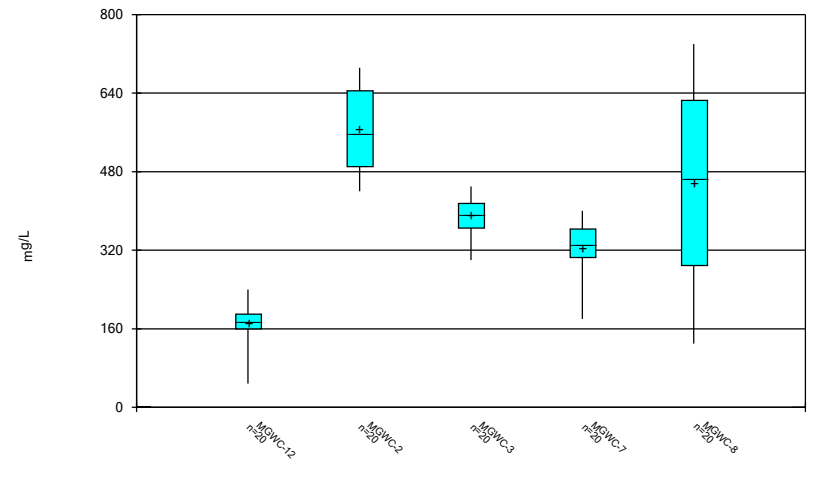
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



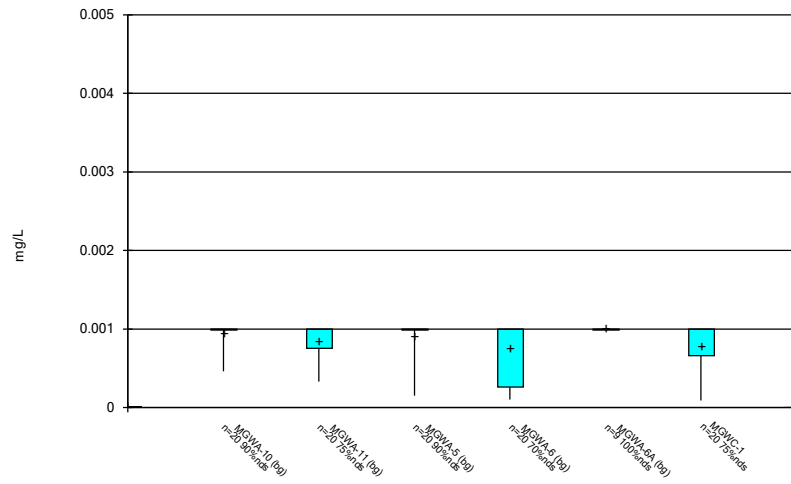
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Box & Whiskers Plot



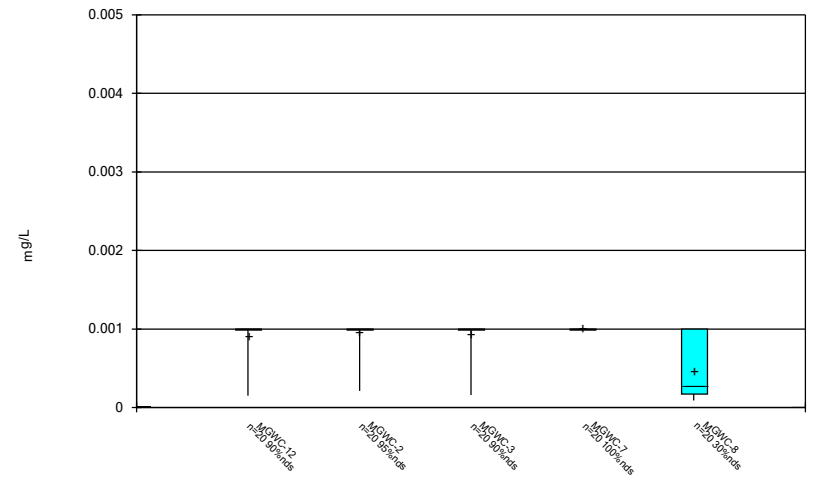
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



Constituent: 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

MGVA-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

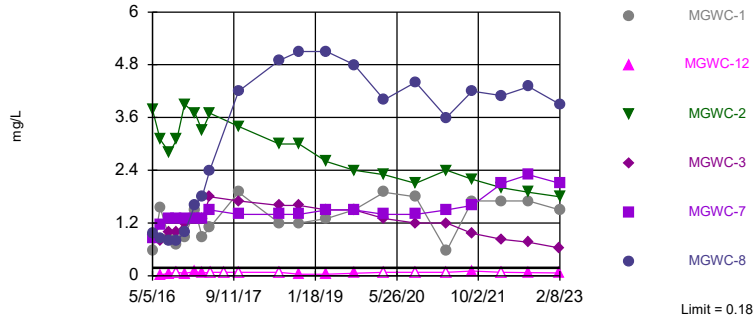
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 3/7/2023, 4:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
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-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
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
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
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-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
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-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
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
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
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-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
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-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
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

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



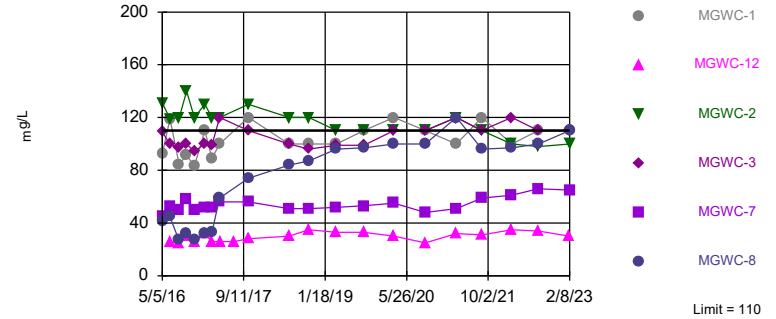
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 90 background values. 60% NDs. Annual per-constituent alpha = 0.002845. Individual comparison alpha = 0.0002374 (1 of 2). Comparing 6 points to limit.

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



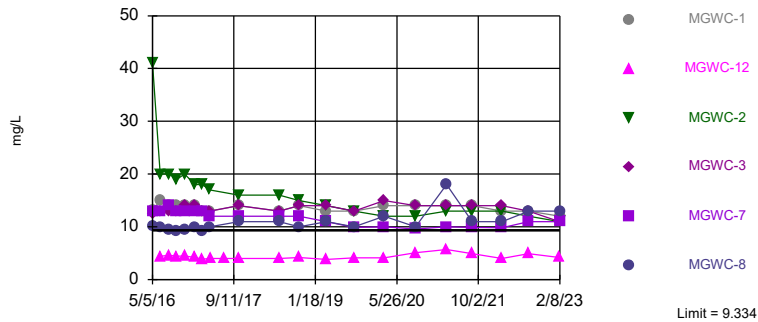
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 90 background values. Annual per-constituent alpha = 0.002845. Individual comparison alpha = 0.0002374 (1 of 2). Comparing 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



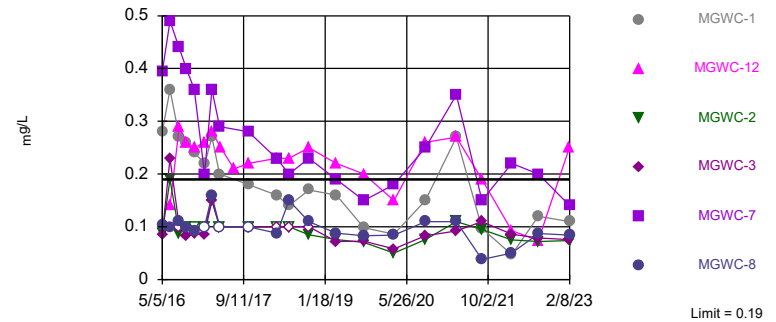
Background Data Summary (based on square root transformation): Mean=2.338, Std. Dev.=0.3884, n=90. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9724, critical = 0.961. Kappa = 1.847 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. 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

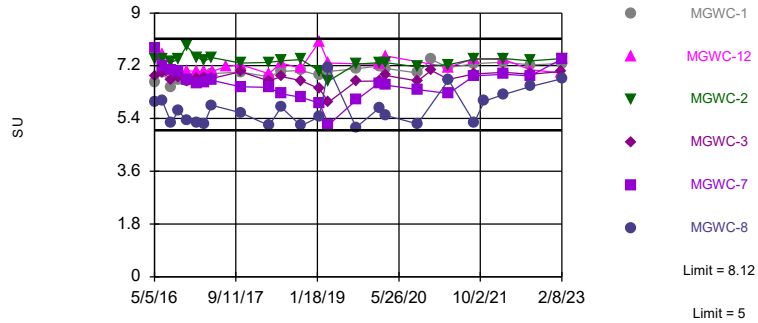


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 94 background values. 29.79% NDs. Annual per-constituent alpha = 0.002633. Individual comparison alpha = 0.0002197 (1 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



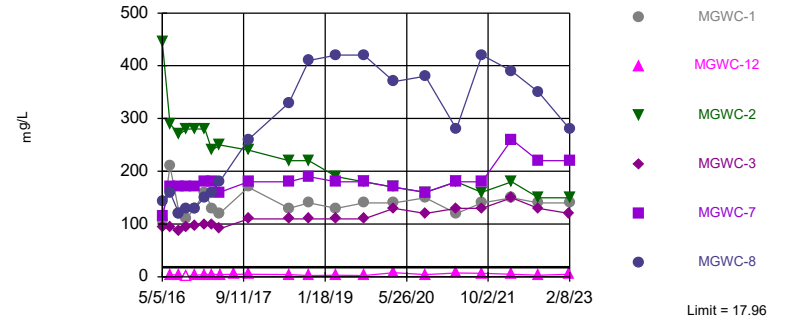
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 104 background values. Annual per-constituent alpha = 0.004352. Individual comparison alpha = 0.000363 (1 of 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

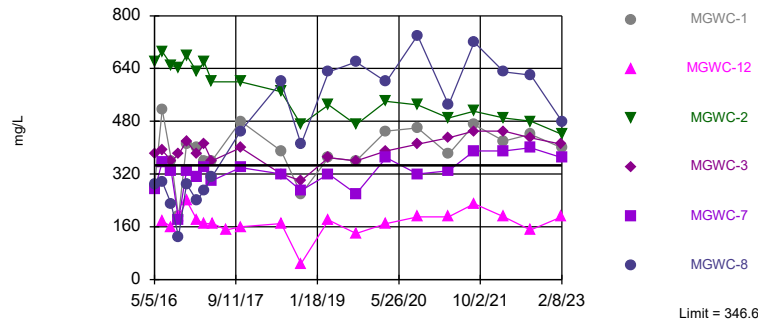


Background Data Summary (based on natural log transformation): Mean=0.9196, Std. Dev.=1.066, n=90, 14.44% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9699, critical = 0.961. Kappa = 1.847 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison 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

<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

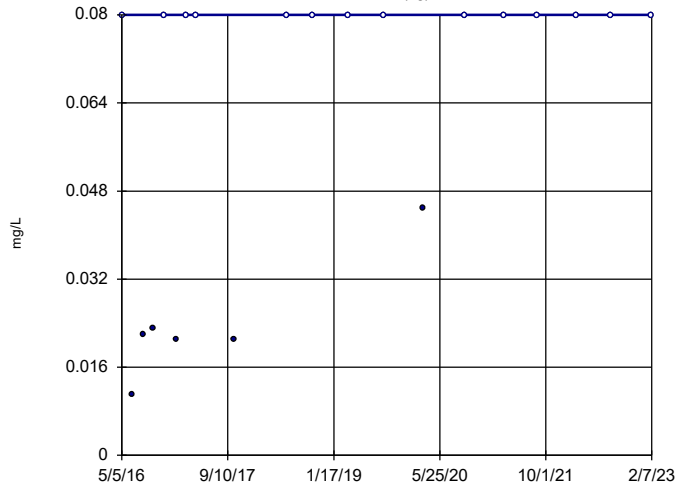
Appendix III Trend Tests - All Results

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
Boron (mg/L)	MGWA-6 (bg)	-0.01886	-132	-81	Yes	20	20	n/a	n/a	0.01	NP
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
Boron (mg/L)	MGWC-2	-0.272	-138	-81	Yes	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-3	-0.02947	-29	-81	No	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-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
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-1	0	-52	-81	No	20	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-3	0	36	81	No	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
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
Sulfate (mg/L)	MGWA-10 (bg)	-0.1405	-90	-81	Yes	20	35	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-11 (bg)	0.187	59	81	No	20	30	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)	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
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)	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
TDS (mg/L)	MGWC-2	-33.46	-142	-81	Yes	20	0	n/a	n/a	0.01	NP
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
TDS (mg/L)	MGWC-8	68.04	110	81	Yes	20	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

MGWA-10 (bg)

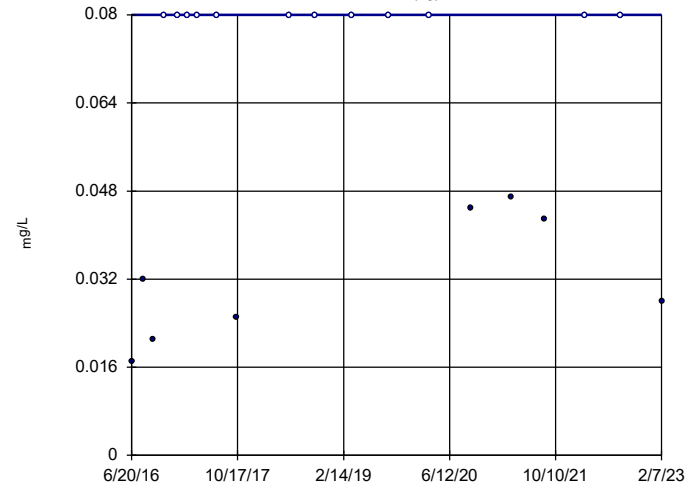


n = 20
Slope = 0
units per year.
Mann-Kendall
statistic = 56
critical = 81
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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-11 (bg)

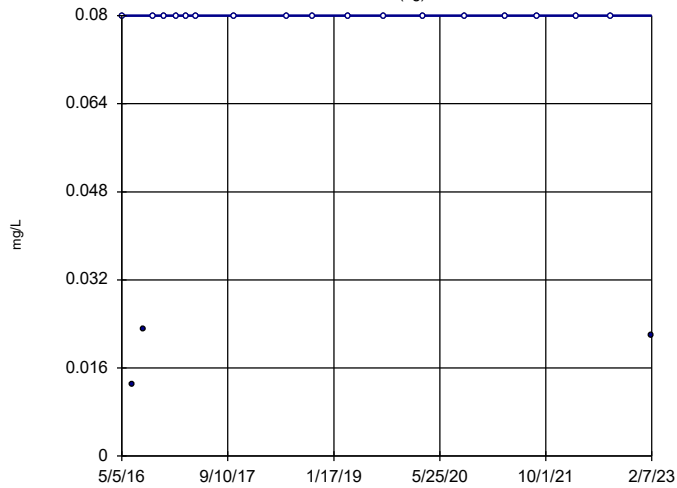


n = 20
Slope = 0
units per year.
Mann-Kendall
statistic = 14
critical = 81
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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-5 (bg)

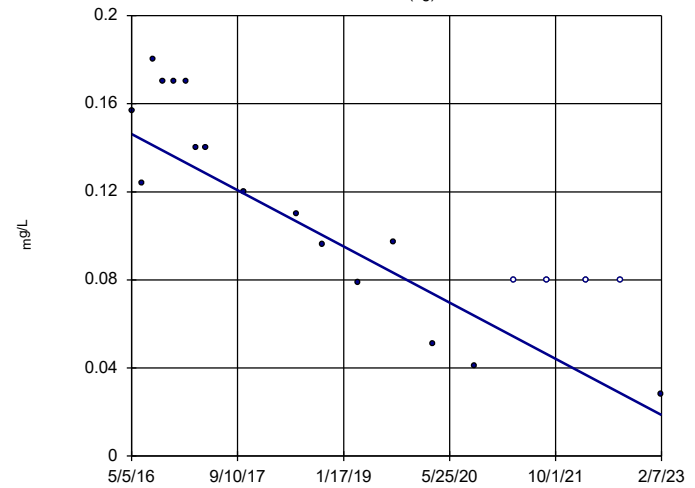


n = 20
Slope = 0
units per year.
Mann-Kendall
statistic = 14
critical = 81
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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-6 (bg)

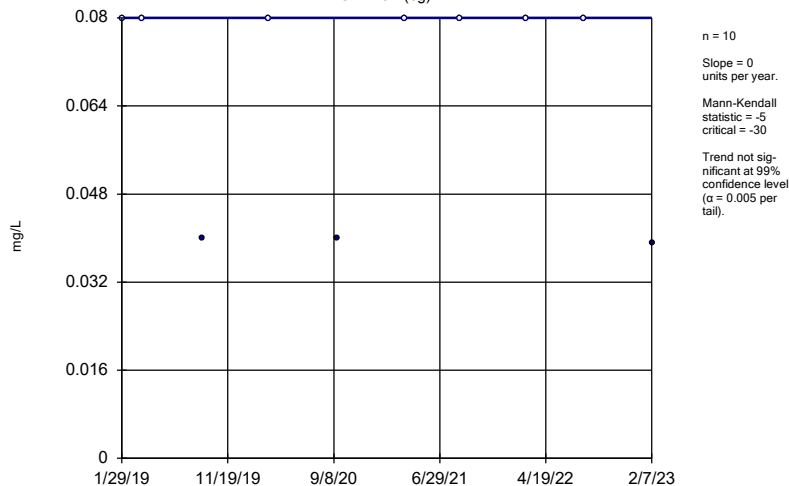


n = 20
Slope = -0.01886
units per year.
Mann-Kendall
statistic = -132
critical = -81
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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

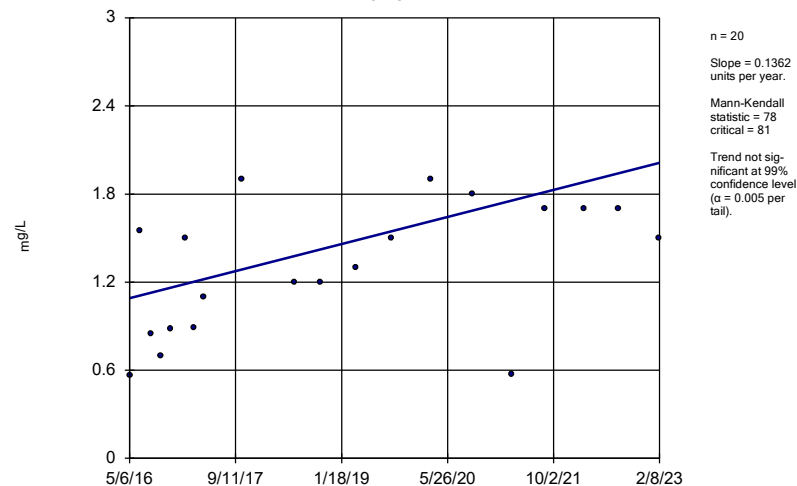
MGWA-6A (bg)



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

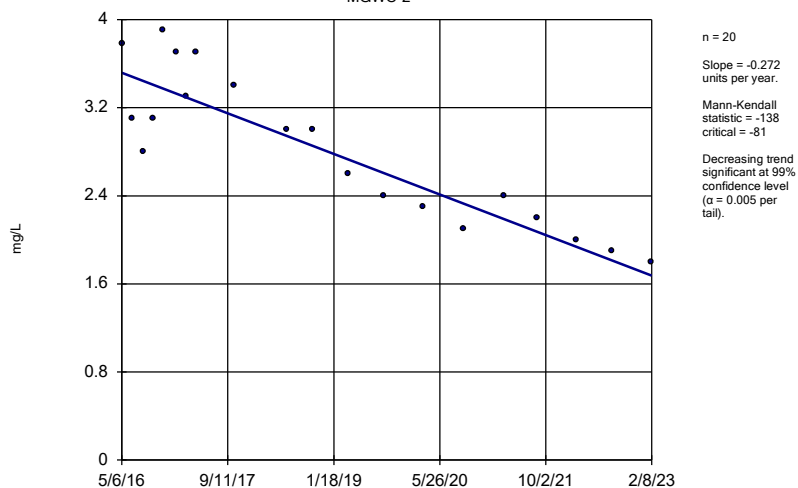
MGWC-1



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

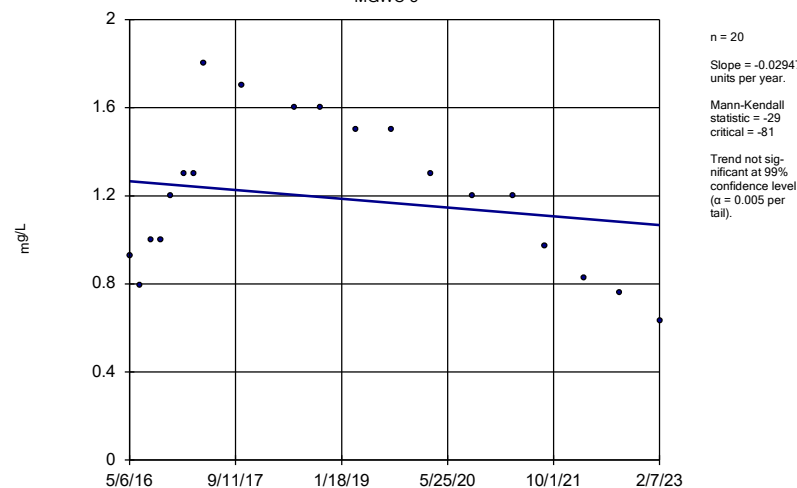
MGWC-2



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

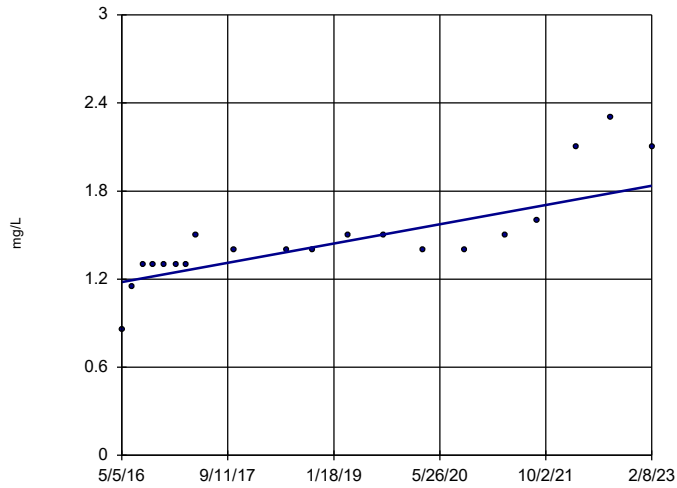
MGWC-3



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

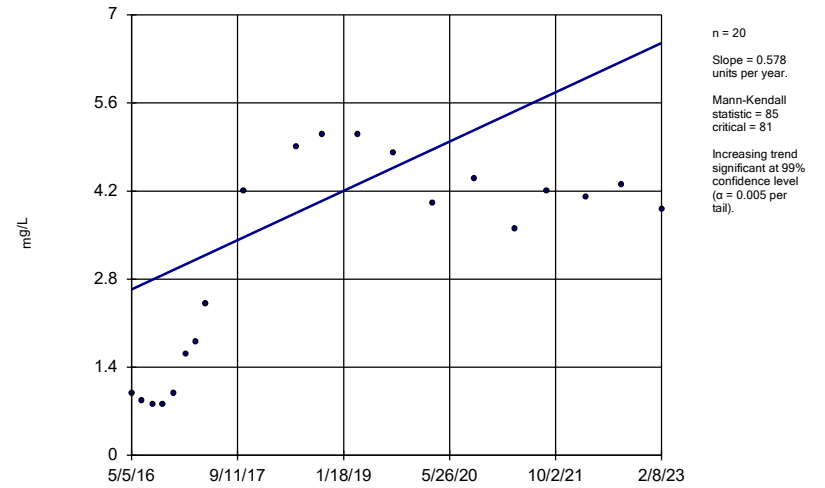
MGWC-7



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

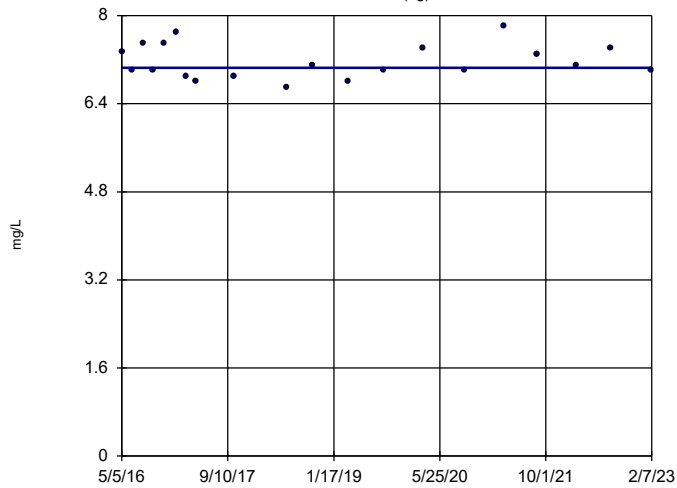
MGWC-8



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

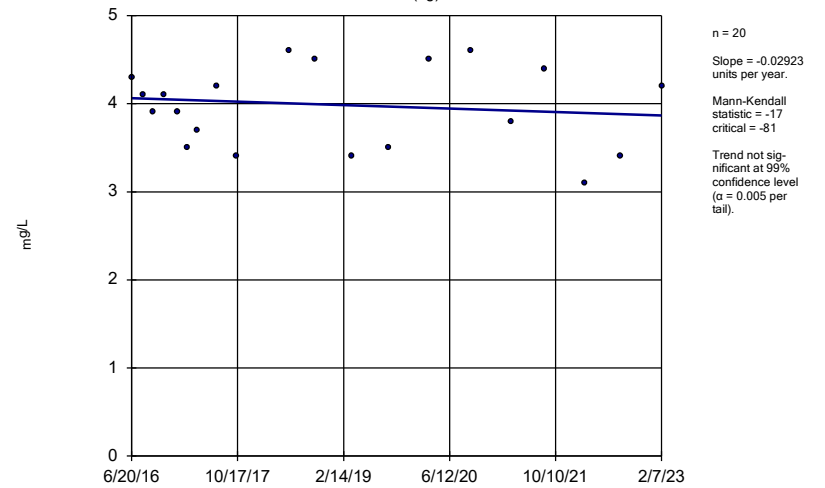
MGWA-10 (bg)



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

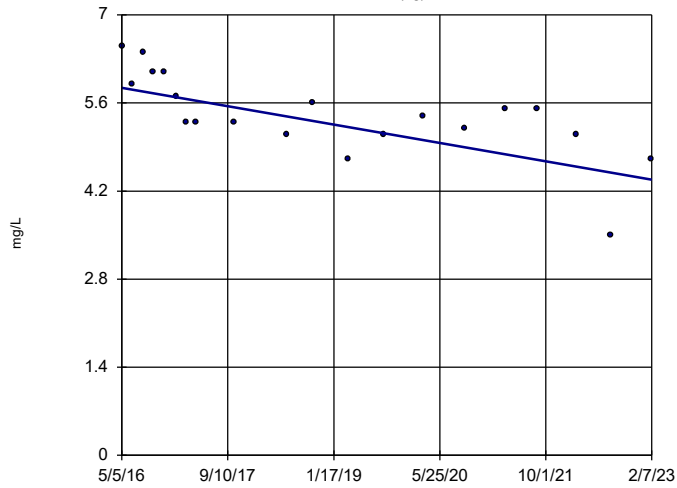
MGWA-11 (bg)



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)

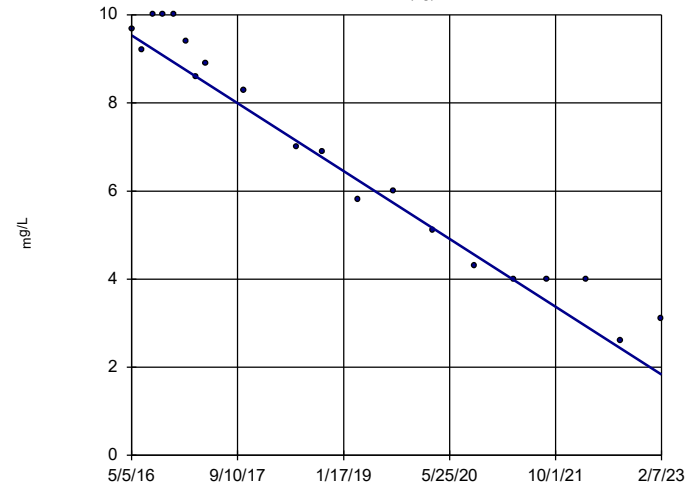


n = 20
 Slope = -0.2156 units per year.
 Mann-Kendall statistic = -111
 critical = -81
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

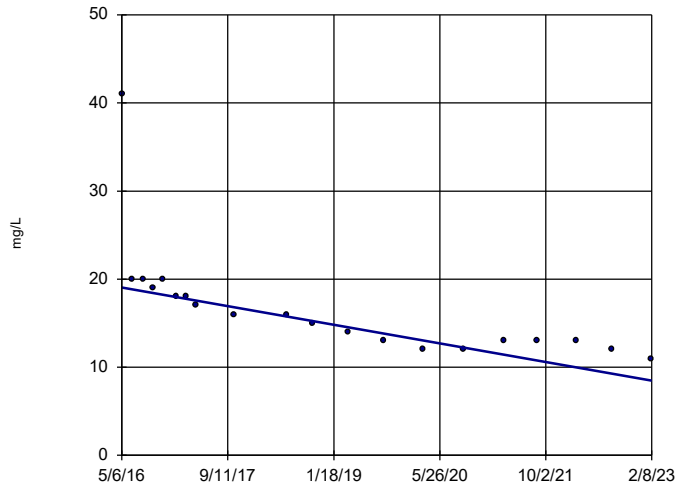
Sen's Slope Estimator

MGWA-6 (bg)



Sen's Slope Estimator

MGWC-2

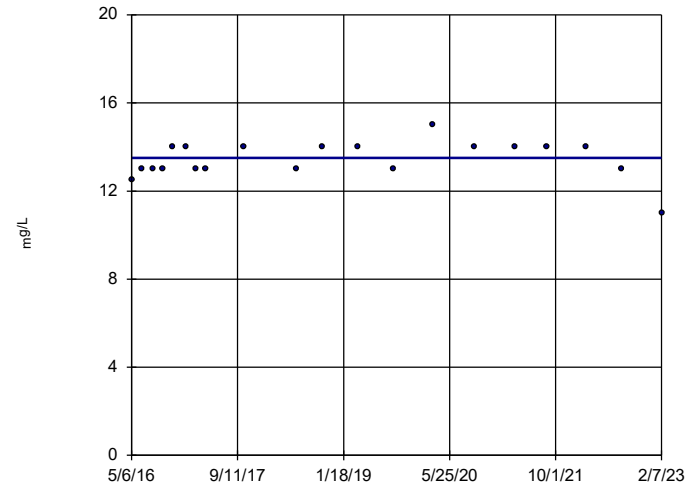


n = 20
 Slope = -1.562
 units per year.
 Mann-Kendall
 statistic = -162
 critical = -81
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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

MGWC-3

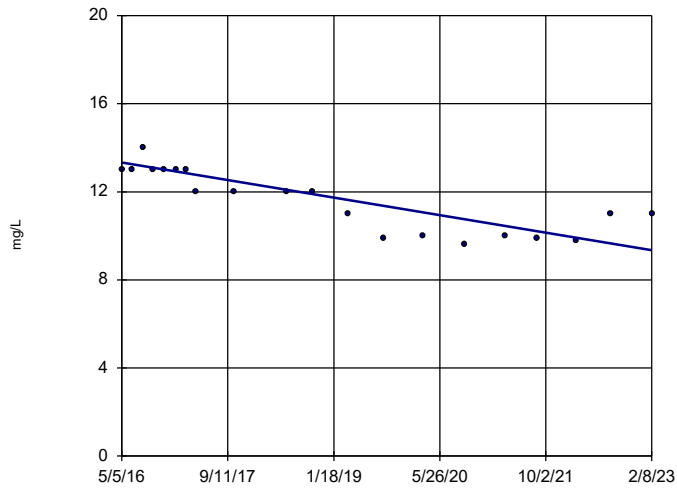


n = 20
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 36
 critical = 81
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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

MGWC-7

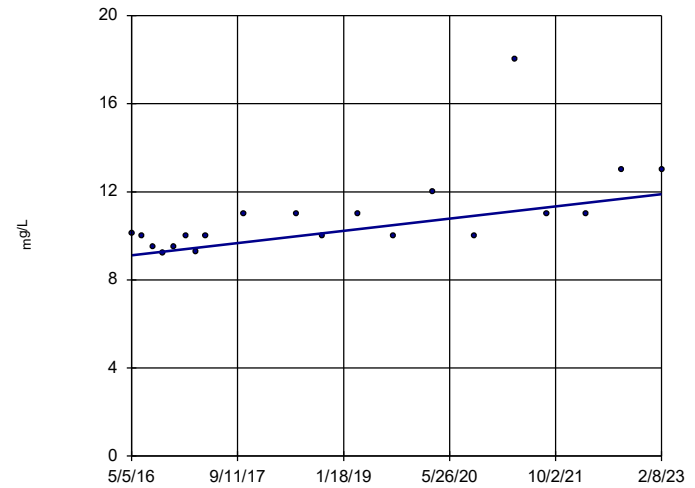


n = 20
 Slope = -0.5888
 units per year.
 Mann-Kendall
 statistic = -126
 critical = -81
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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

MGWC-8

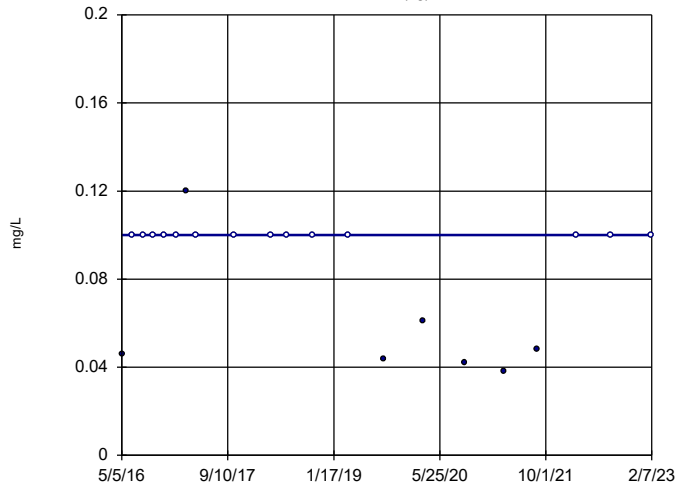


n = 20
 Slope = 0.4104
 units per year.
 Mann-Kendall
 statistic = 97
 critical = 81
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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-10 (bg)

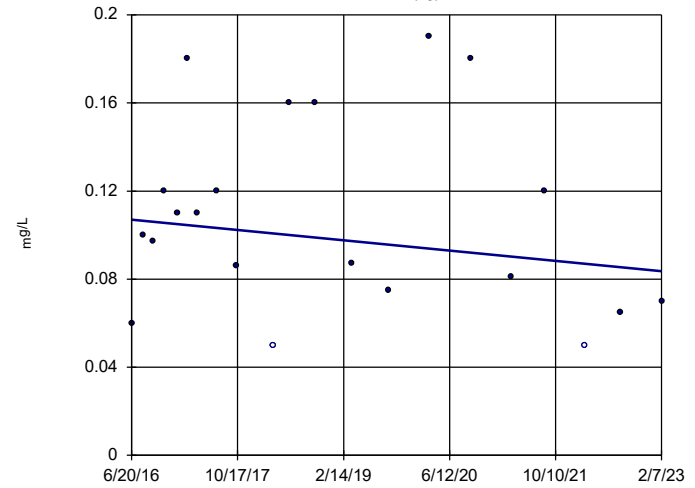


n = 21
Slope = 0
units per year.
Mann-Kendall
statistic = -37
critical = -87
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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)

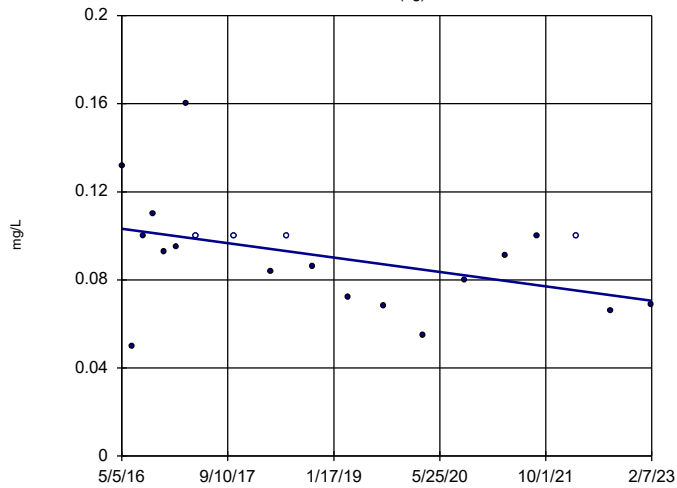


n = 21
Slope = -0.00351
units per year.
Mann-Kendall
statistic = -19
critical = -87
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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)

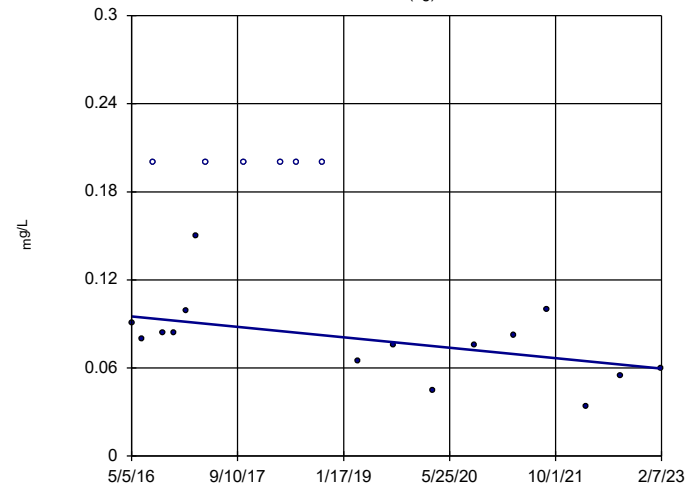


n = 21
Slope = -0.004835
units per year.
Mann-Kendall
statistic = -65
critical = -87
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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)

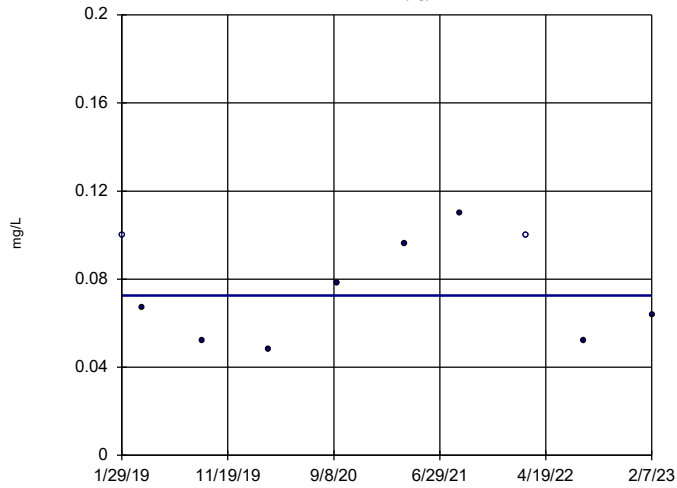


n = 21
Slope = -0.005254
units per year.
Mann-Kendall
statistic = -61
critical = -87
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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-6A (bg)

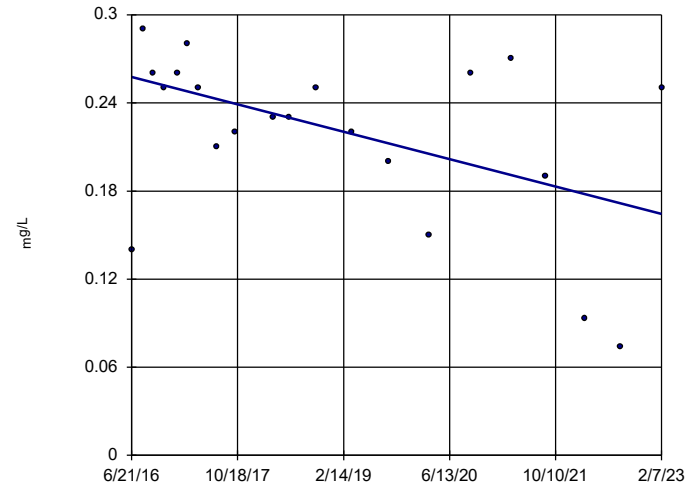


n = 10
Slope = 0
units per year.
Mann-Kendall
statistic = 1
critical = 30
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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

MGWC-12

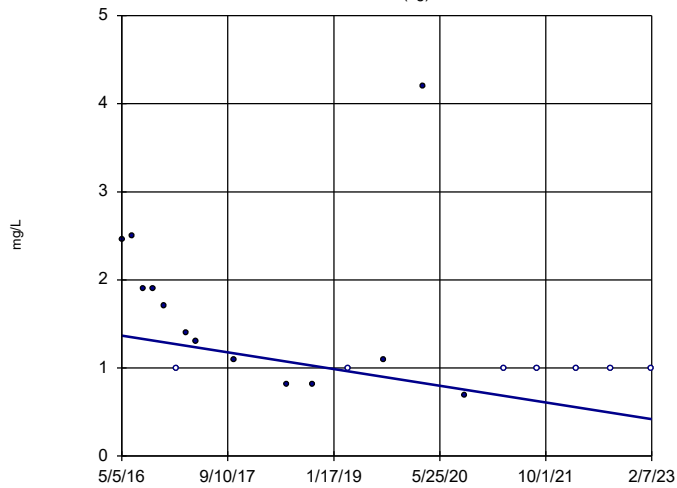


n = 21
Slope = -0.01405
units per year.
Mann-Kendall
statistic = -67
critical = -87
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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-10 (bg)

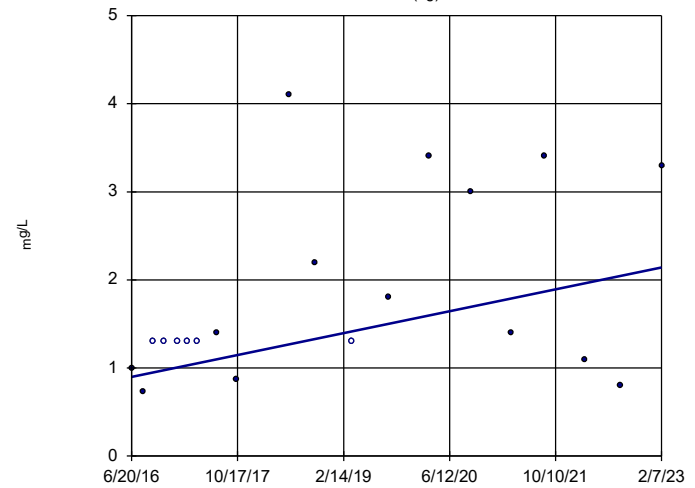


n = 20
Slope = -0.1405
units per year.
Mann-Kendall
statistic = -90
critical = -81
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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-11 (bg)

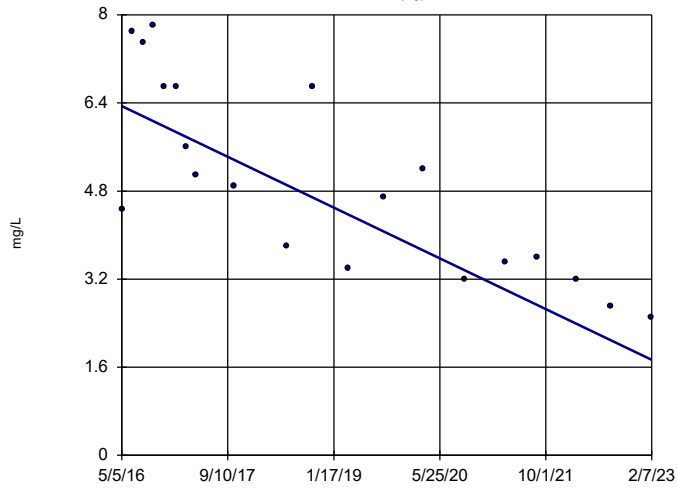


n = 20
Slope = 0.187
units per year.
Mann-Kendall
statistic = 59
critical = 81
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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

MGWA-5 (bg)

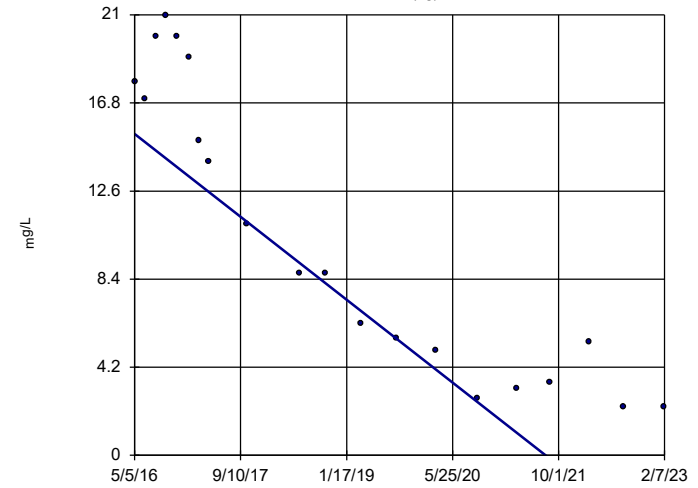


n = 20
 Slope = -0.6815
 units per year.
 Mann-Kendall
 statistic = -128
 critical = -81
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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)

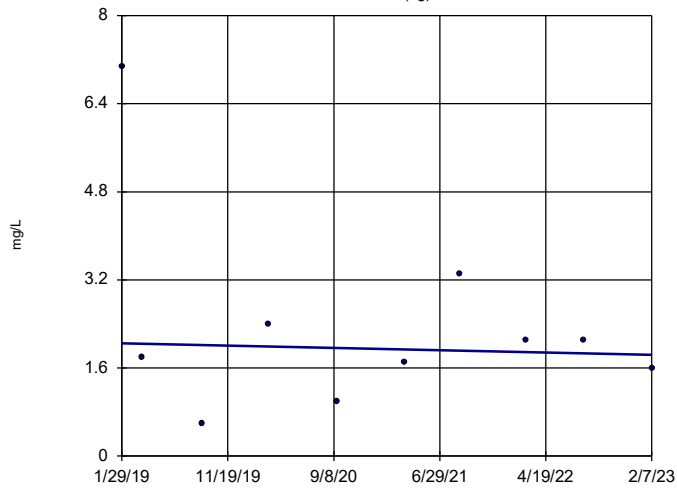


n = 20
 Slope = -2.922
 units per year.
 Mann-Kendall
 statistic = -155
 critical = -81
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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)

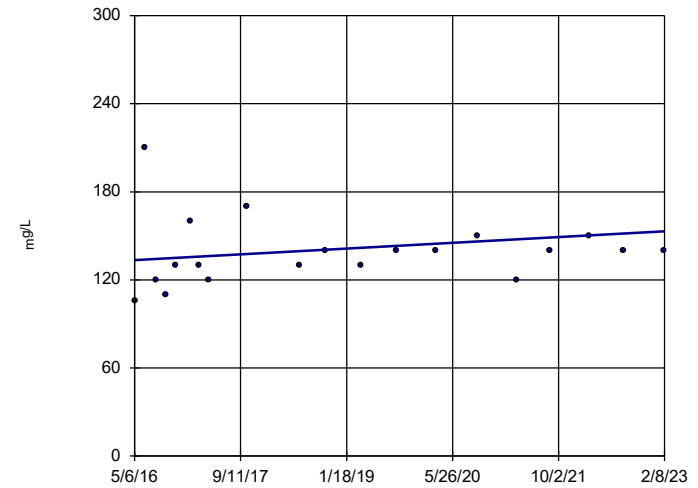


n = 10
 Slope = -0.05159
 units per year.
 Mann-Kendall
 statistic = -4
 critical = -30
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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

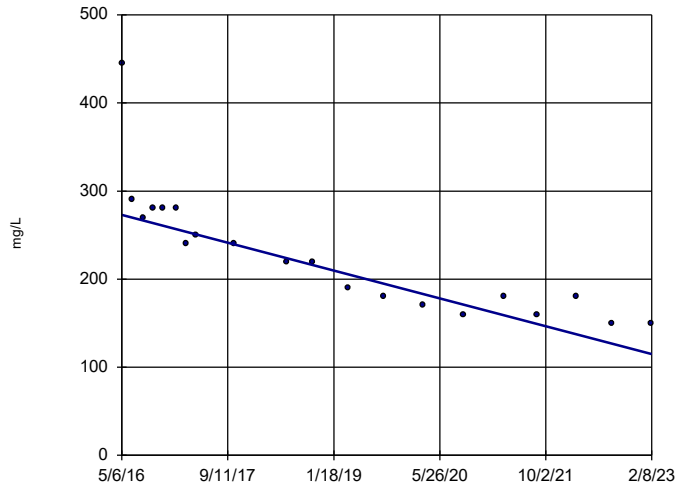


n = 20
 Slope = 2.916
 units per year.
 Mann-Kendall
 statistic = 47
 critical = 81
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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

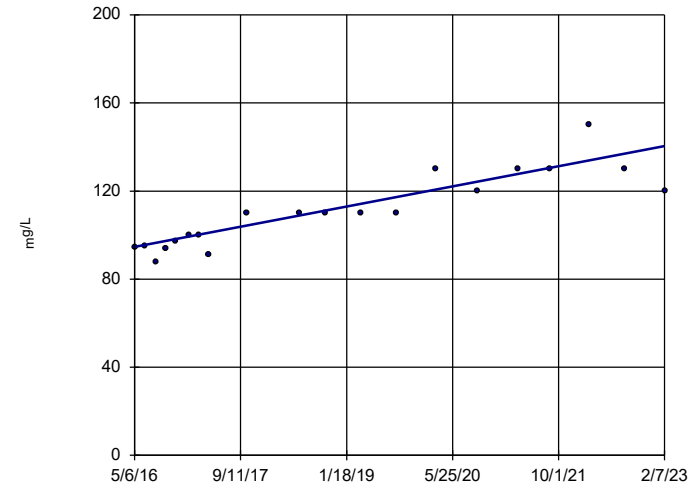


n = 20
 Slope = -23.35
 units per year.
 Mann-Kendall
 statistic = -162
 critical = -81
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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

MGWC-3

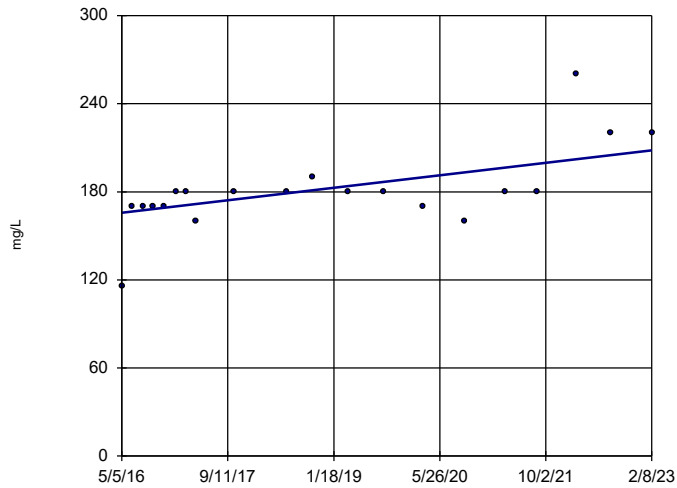


n = 20
 Slope = 6.754
 units per year.
 Mann-Kendall
 statistic = 138
 critical = 81
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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

MGWC-7

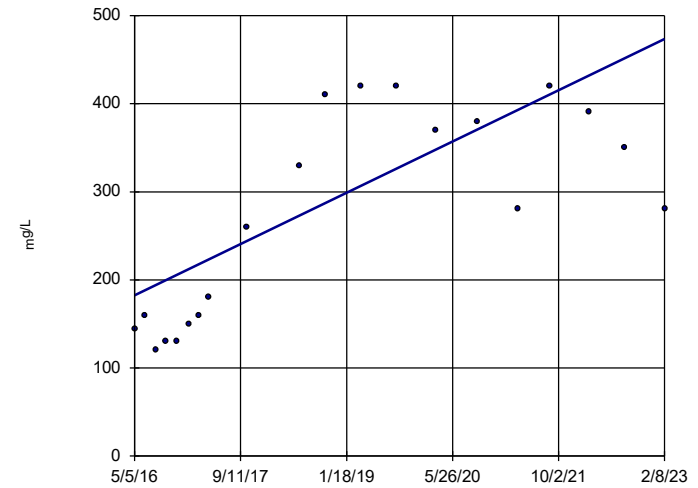


n = 20
 Slope = 6.288
 units per year.
 Mann-Kendall
 statistic = 88
 critical = 81
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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

MGWC-8

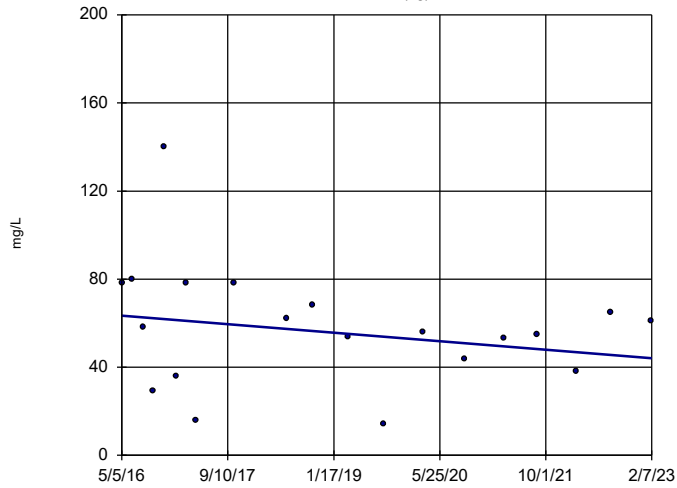


n = 20
 Slope = 42.97
 units per year.
 Mann-Kendall
 statistic = 106
 critical = 81
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

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-10 (bg)

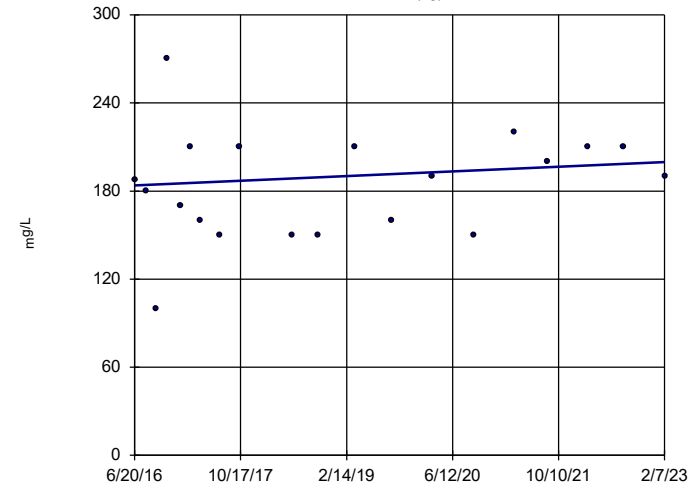


n = 20
 Slope = -2.862
 units per year.
 Mann-Kendall
 statistic = -41
 critical = -81
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

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)

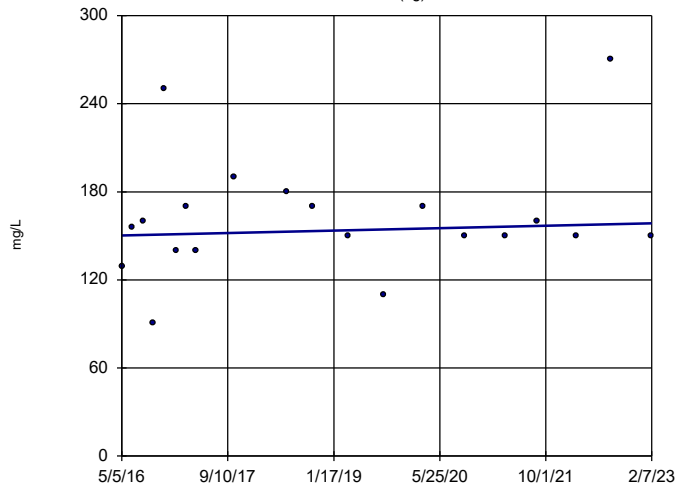


n = 20
 Slope = 2.39
 units per year.
 Mann-Kendall
 statistic = 26
 critical = 81
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

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)

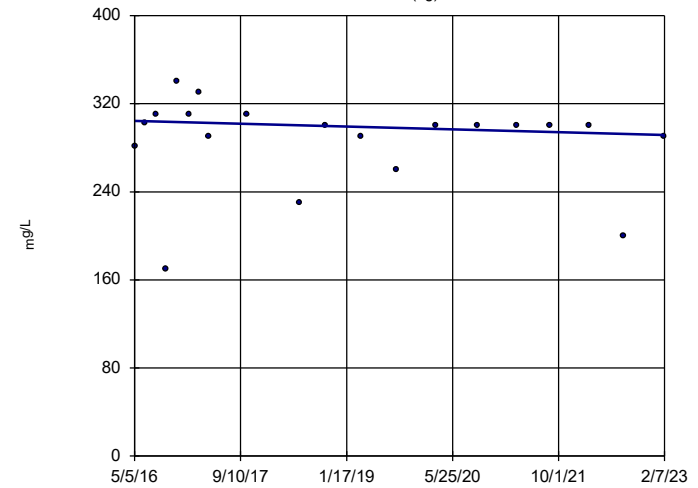


n = 20
 Slope = 1.211
 units per year.
 Mann-Kendall
 statistic = 17
 critical = 81
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

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)

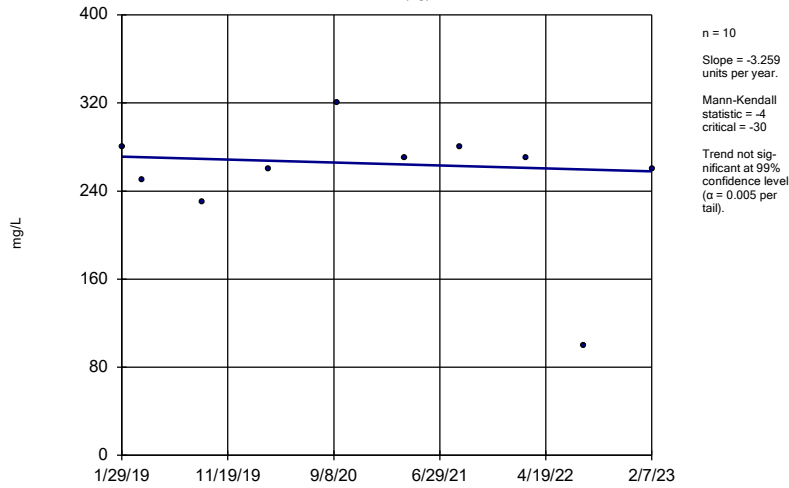


n = 20
 Slope = -1.884
 units per year.
 Mann-Kendall
 statistic = -35
 critical = -81
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

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

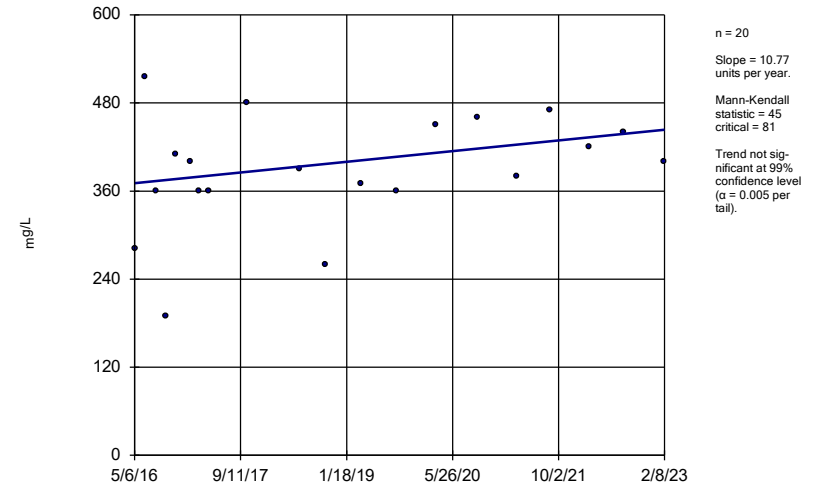
MGWA-6A (bg)



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

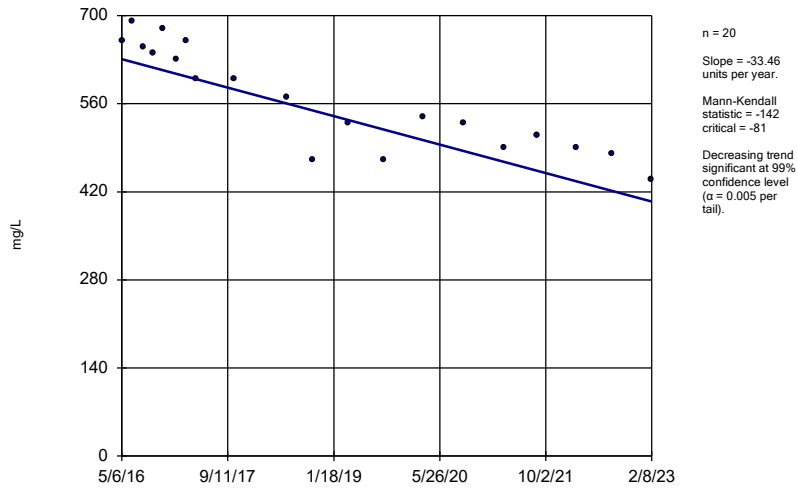
MGWC-1



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

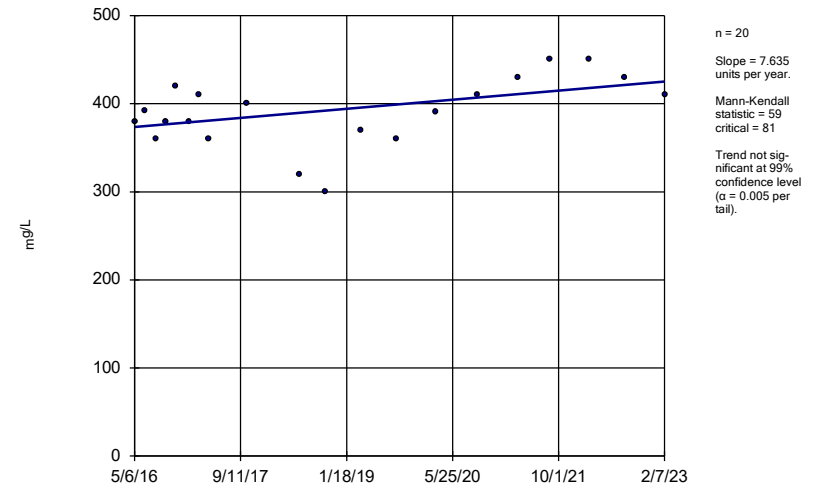
MGWC-2



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

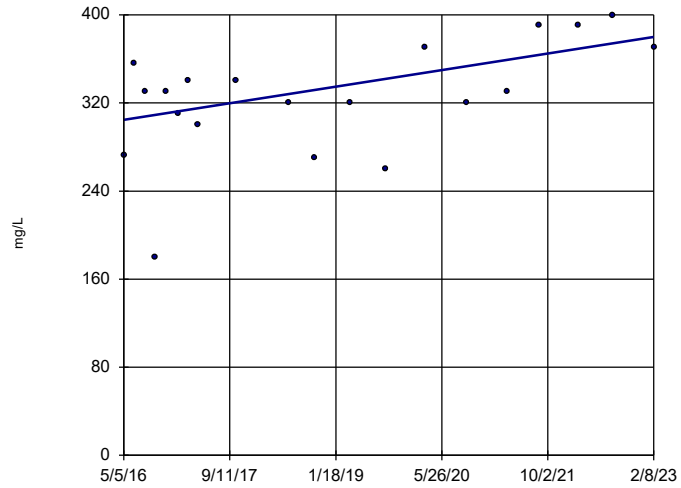
MGWC-3



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

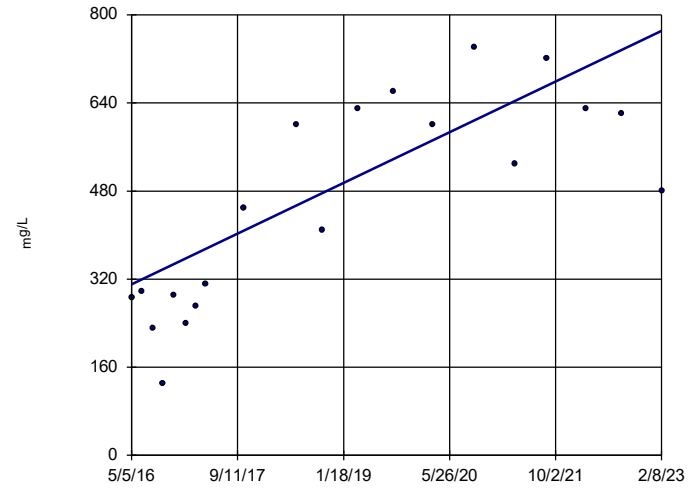


n = 20
Slope = 11.09
units per year.
Mann-Kendall
statistic = 65
critical = 81
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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



n = 20
Slope = 68.04
units per year.
Mann-Kendall
statistic = 110
critical = 81
Increasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: TDS Analysis Run 3/7/2023 4:08 PM View: Appendix III - Trend Test
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

FIGURE F.

Upper Tolerance Limits Summary Table

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 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.

PLANT MCINTOSH AP 1 GWPS				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
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)
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.
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.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes	22	0.01965	0	No	0.01	NP (normality)
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)

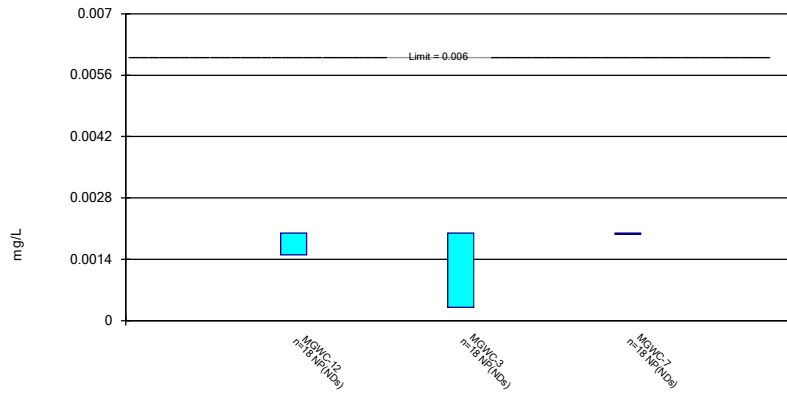
Confidence Intervals - All Results

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	ln(x)	0.01	Param.

Non-Parametric Confidence Interval

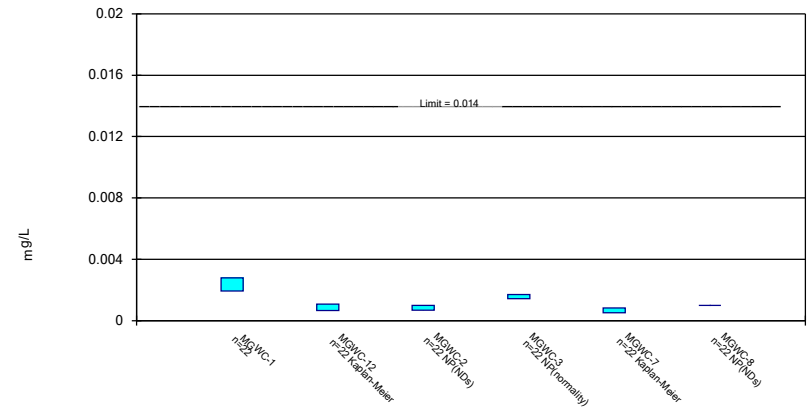
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

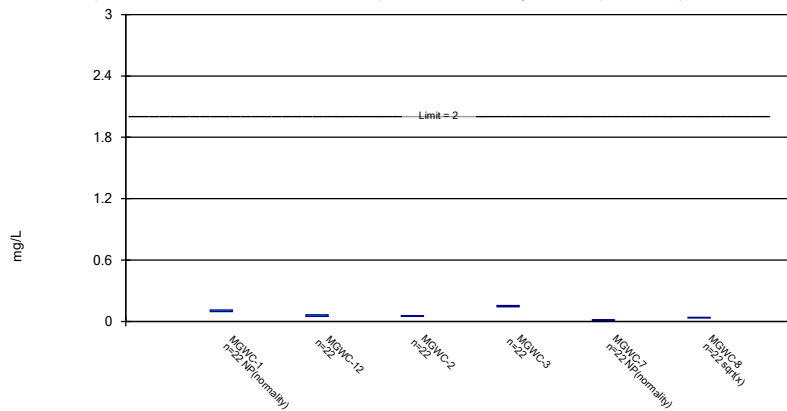
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

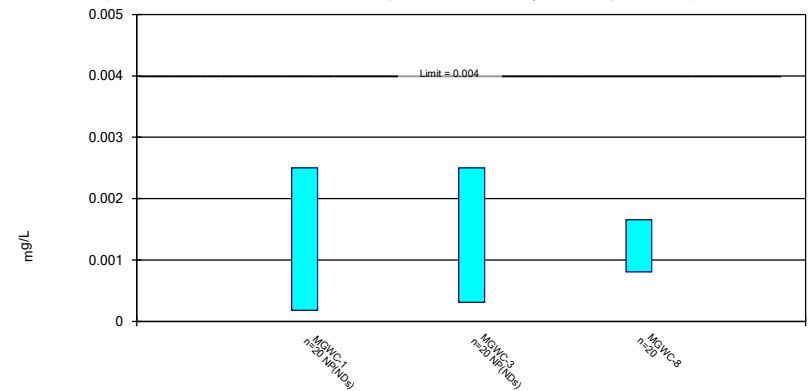
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

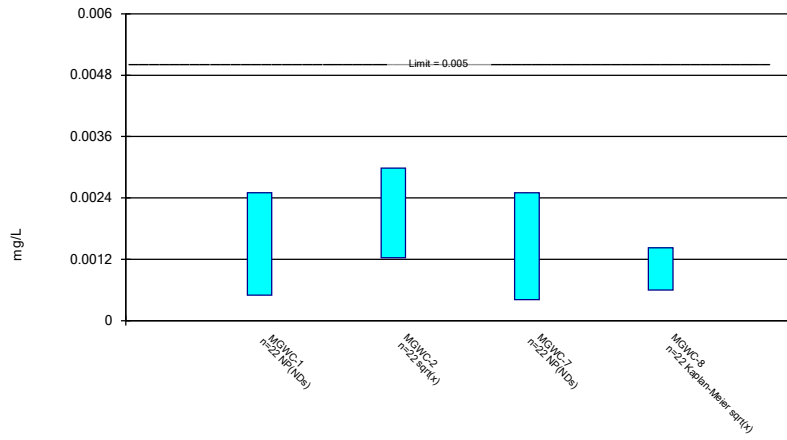
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

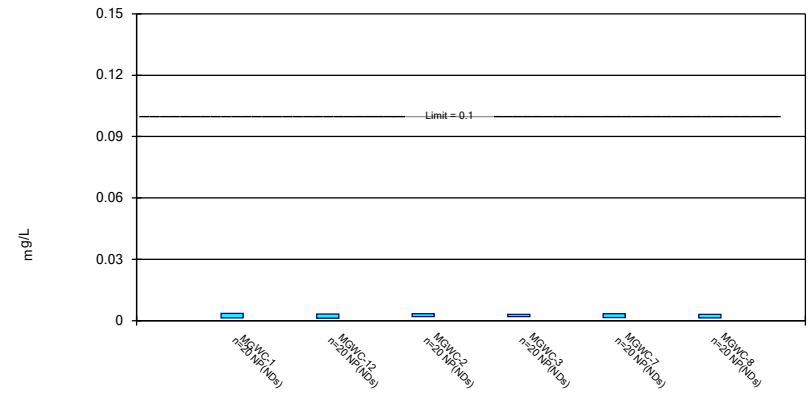
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

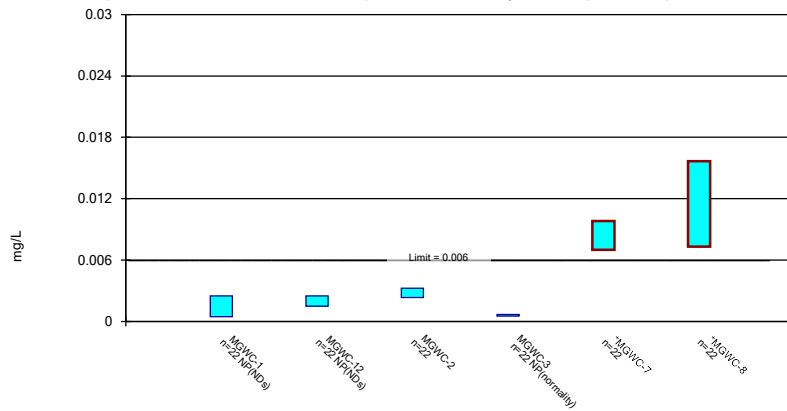
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

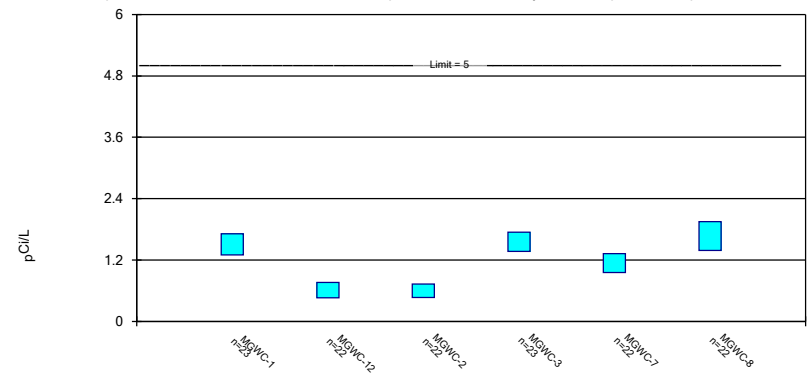
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

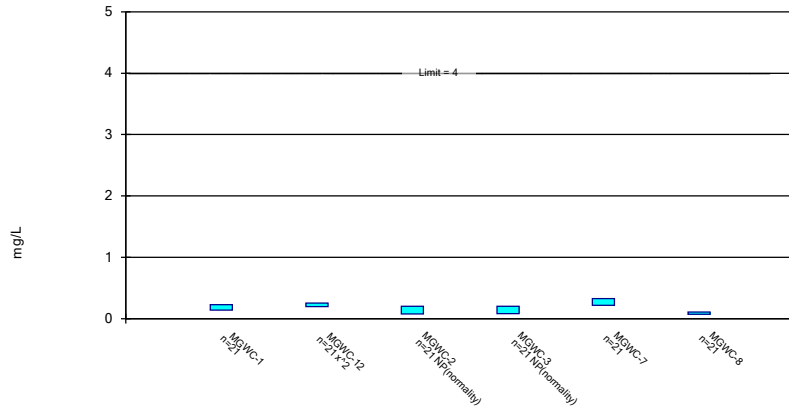
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

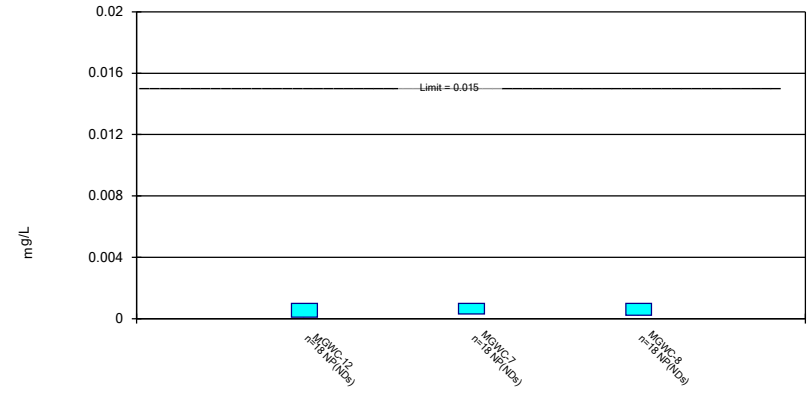
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

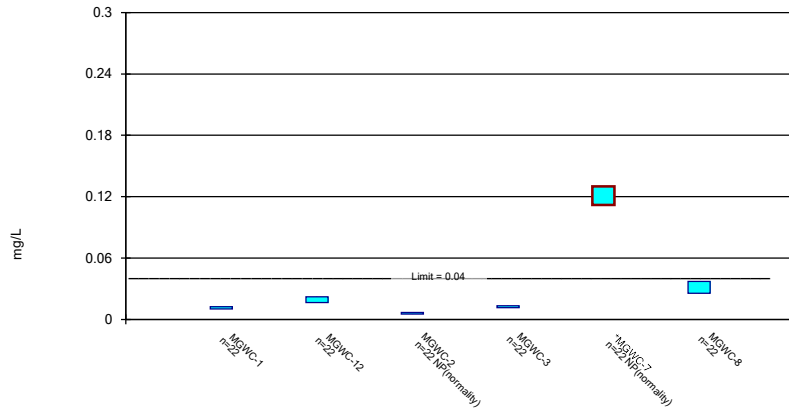
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

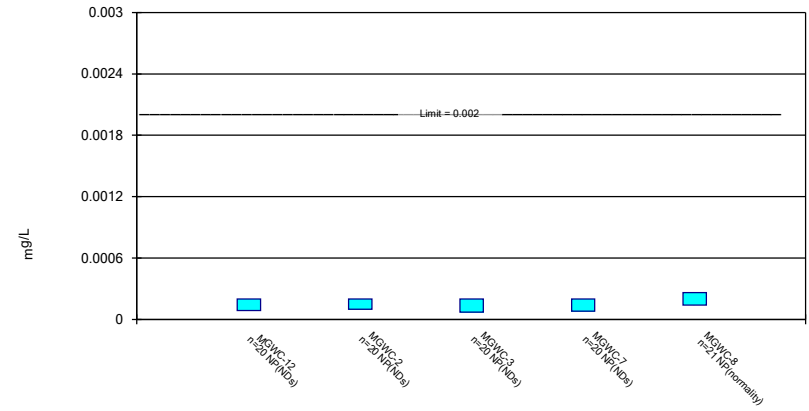
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

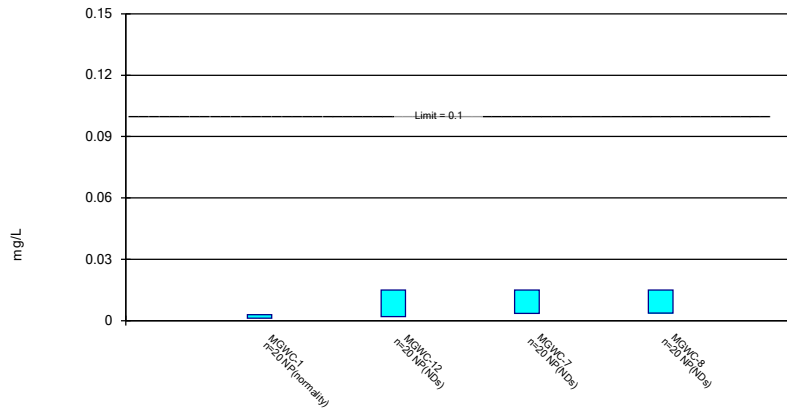
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

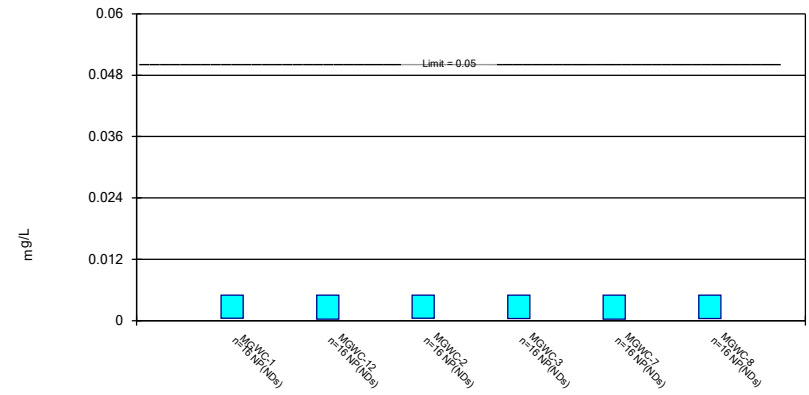
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

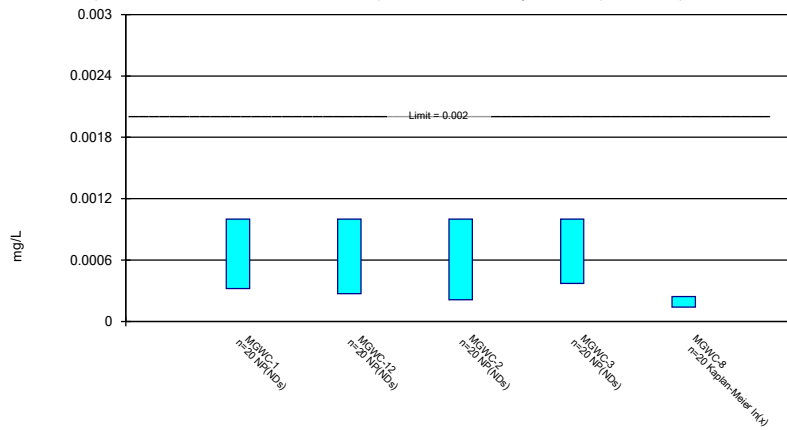
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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.

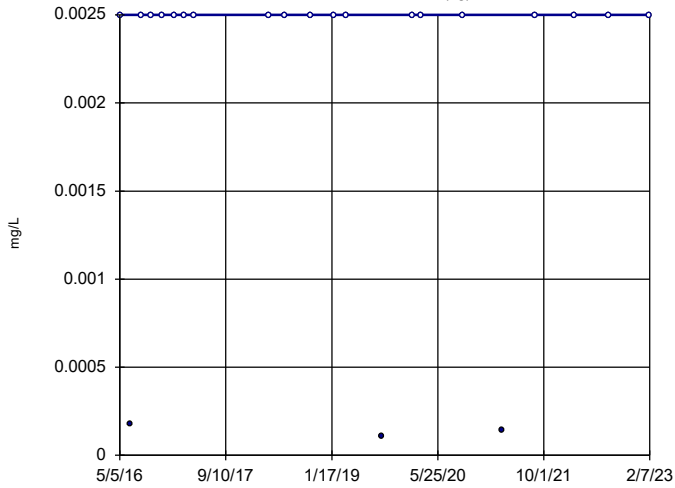
Appendix IV Trend Tests - All Results (No Significant)

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)

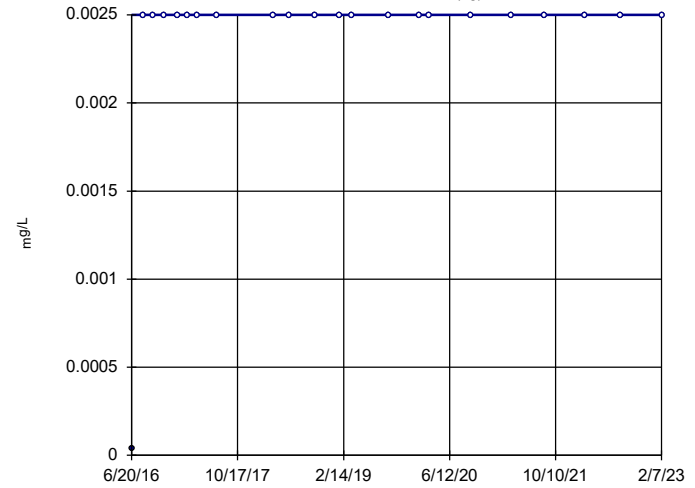


n = 22
Slope = 0
units per year.
Mann-Kendall
statistic = 0
critical = 92
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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)

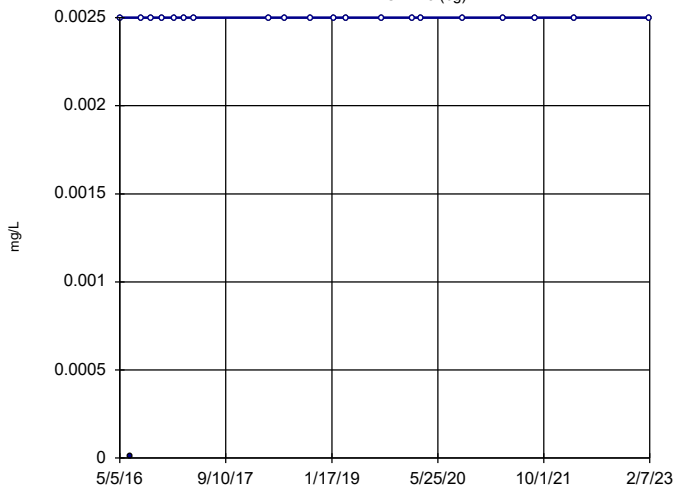


n = 22
Slope = 0
units per year.
Mann-Kendall
statistic = 21
critical = 92
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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)

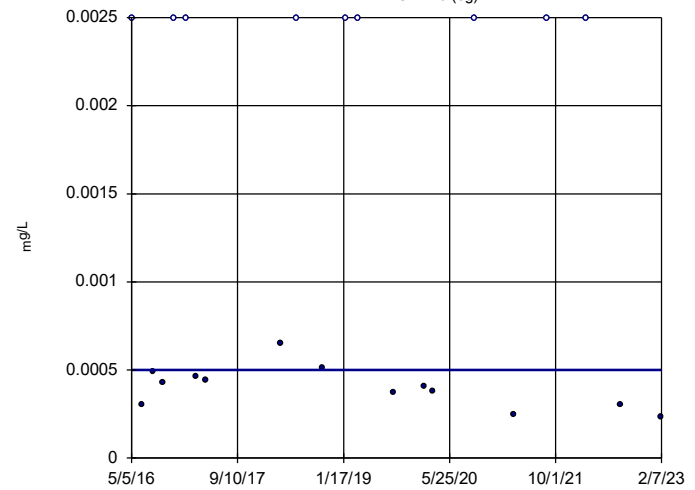


n = 21
Slope = 0
units per year.
Mann-Kendall
statistic = 18
critical = 87
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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)

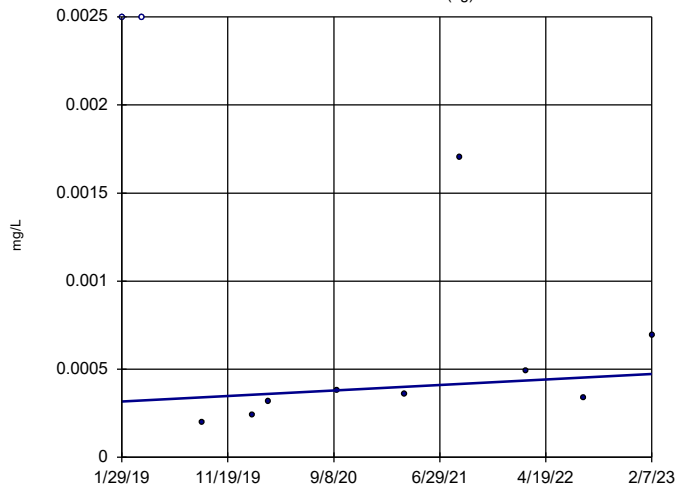


n = 22
Slope = 0
units per year.
Mann-Kendall
statistic = -34
critical = -92
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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)

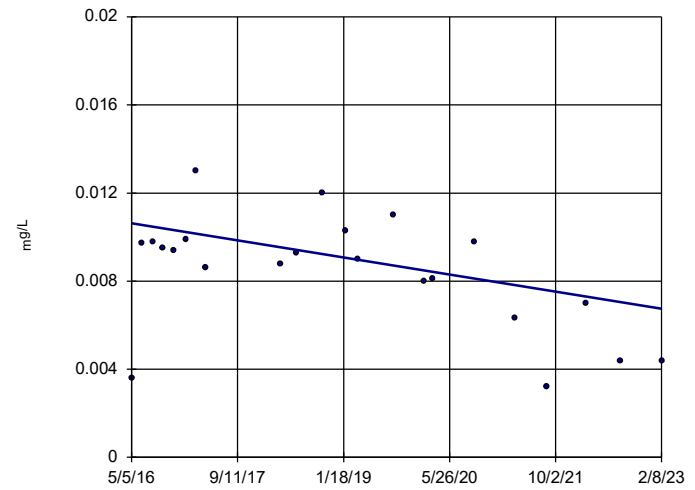


n = 11
Slope = 0.00003862
units per year.
Mann-Kendall
statistic = 4
critical = 34
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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

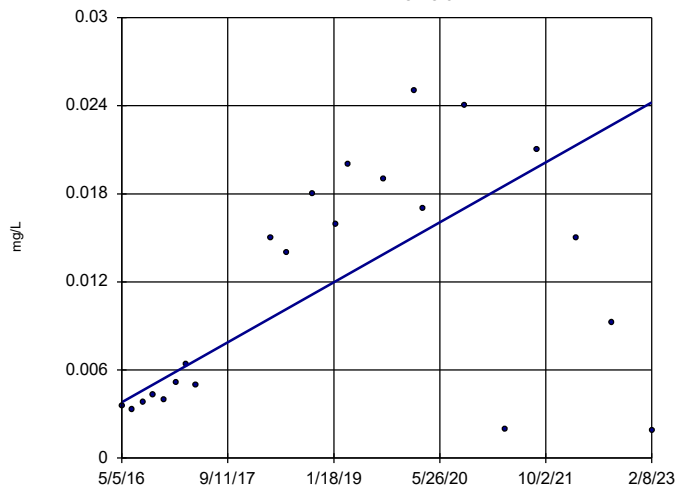


n = 22
Slope = -0.0005723
units per year.
Mann-Kendall
statistic = -79
critical = -92
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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

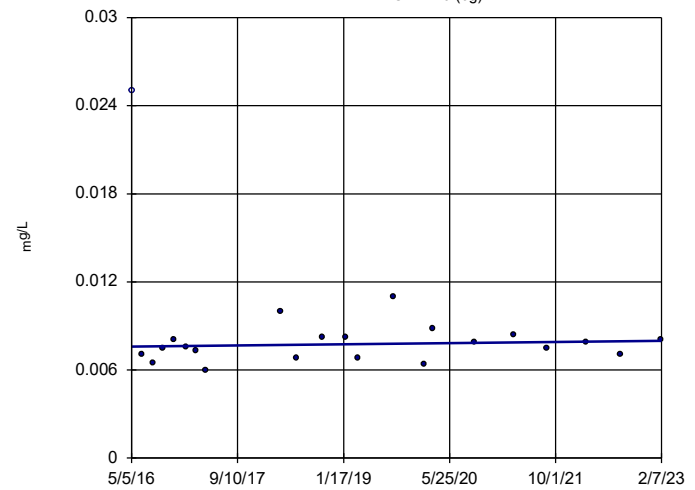


n = 22
Slope = 0.003015
units per year.
Mann-Kendall
statistic = 88
critical = 92
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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)

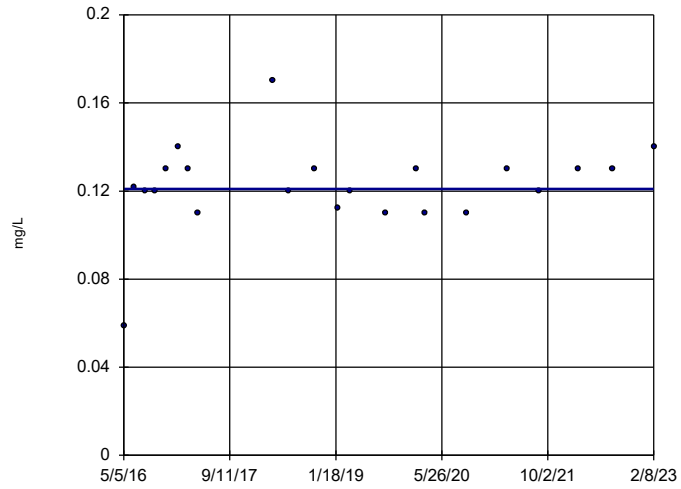


n = 22
Slope = 0.00005878
units per year.
Mann-Kendall
statistic = 14
critical = 92
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

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

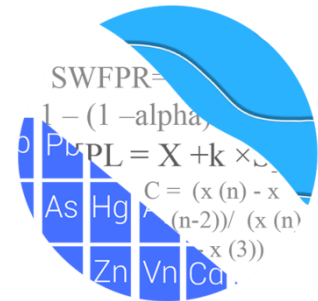
APPENDIX B

*Statistical Analysis Reports
July 2023 Monitoring Event*

GROUNDWATER STATS CONSULTING

January 31, 2024

Southern Company Services
Attn: Ms. Lauren Hartley
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308



Re: Plant McIntosh Ash Pond 1 (AP-1)
Statistical Analysis August 2023

Dear Ms. Hartley,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August 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 for parametric limits. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.

- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. While this was not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Statistical Analysis of Appendix III Parameters – August 2023

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were reassessed 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 August 2023 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The August 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
- Calcium: MGWC-3 and MGWC-8
- Chloride: MGWC-1, MGWC-2, MGWC-3, MGWC-7, and MGWC-8
- Fluoride: MGWC-7 and 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
- Calcium: MGWC-8
- Chloride: MGWC-8
- Sulfate: MGWC-3, MGWC-7, and MGWC-8
- TDS: MGWC-8

Decreasing

- Boron: MGWA-6 (upgradient) and MGWC-2
- Calcium: MGWA-10 (upgradient)
- Chloride: MGWA-5 (upgradient), MGWA-6 (upgradient), MGWA-6A (upgradient), MGWC-2, and MGWC-7
- Fluoride: MGWC-7
- Sulfate: MGWA-5 (upgradient), MGWA-6 (upgradient), MGW-10 (upgradient), and MGWC-2
- TDS: MGWC-2

Statistical Methods – Appendix IV Parameters

Appendix IV parameters are evaluated by statistically comparing the mean or median of each downgradient well/constituent pair against corresponding Groundwater Protection Standards (GWPS). The GWPS may be either regulatory (MCL or CCR rule-specified limits)

or site-specific limits that are based on upgradient background groundwater quality. Site-specific background limits are determined using tolerance limits, and the comparison of downgradient means or medians to GWPS is performed using confidence intervals. Confidence intervals are provided for Appendix IV well/constituent pairs with detections and with current reported data. The methods are described below.

Statistical Analysis of Appendix IV Parameters – August 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 through the current sample event 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 August 2023 (Figure H).

The Sanitas software was used to calculate 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 largest and smallest order statistics depending on the sample size 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 of 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

When confidence interval 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 95% confidence level (Figure I). Utilizing the 95% confidence level for trend tests readily identifies significant trends and is more sensitive than the 99% confidence level without drastically increasing the false negative rate. Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells. When similar patterns exist upgradient of the site, it is an indication of variability in groundwater which may be unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. A statistically significant decreasing trend was identified for cobalt at MGWC-7.

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,



Kristina Rayner
Senior Statistician



Andrew Collins
Project Manager

100% Non-Detects: Appendix IV Downgradient

Analysis Run 9/25/2023 4:19 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Antimony (mg/L)
MGWC-1, MGWC-2, MGWC-8

Beryllium (mg/L)
MGWC-12, MGWC-2, MGWC-7

Cadmium (mg/L)
MGWC-12, MGWC-3

Lead (mg/L)
MGWC-1, MGWC-2, MGWC-3

Mercury (mg/L)
MGWC-1

Molybdenum (mg/L)
MGWC-2, MGWC-3

Thallium (mg/L)
MGWC-7

Date Ranges

Date: 9/16/2023 10:28 AM

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Arsenic (mg/L)

MGWA-6 overall:3/29/2018-8/1/2023

Interwell Prediction Limits - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:42 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MGWC-1	0.18	n/a	8/1/2023	1.6	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-2	0.18	n/a	8/2/2023	1.8	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-3	0.18	n/a	8/1/2023	0.65	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-7	0.18	n/a	8/2/2023	2.2	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-8	0.18	n/a	8/1/2023	4.3	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Calcium (mg/L)	MGWC-3	110	n/a	8/1/2023	120	Yes	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-8	110	n/a	8/1/2023	120	Yes	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Chloride (mg/L)	MGWC-1	9.28	n/a	8/1/2023	13	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-2	9.28	n/a	8/2/2023	12	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-3	9.28	n/a	8/1/2023	12	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-7	9.28	n/a	8/2/2023	11	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-8	9.28	n/a	8/1/2023	13	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Fluoride (mg/L)	MGWC-12	0.19	n/a	8/2/2023	0.25	Yes	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-7	0.19	n/a	8/2/2023	0.2	Yes	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MGWC-1	17.27	n/a	8/1/2023	140	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-2	17.27	n/a	8/2/2023	150	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-3	17.27	n/a	8/1/2023	110	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-7	17.27	n/a	8/2/2023	200	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-8	17.27	n/a	8/1/2023	280	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-1	354.4	n/a	8/1/2023	450	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-2	354.4	n/a	8/2/2023	520	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-3	354.4	n/a	8/1/2023	420	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-7	354.4	n/a	8/2/2023	410	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-8	354.4	n/a	8/1/2023	570	Yes	95	184.5	92.03	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 9/26/2023, 12:42 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MGWC-1	0.18	n/a	8/1/2023	1.6	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-12	0.18	n/a	8/2/2023	0.062J	No	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-2	0.18	n/a	8/2/2023	1.8	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-3	0.18	n/a	8/1/2023	0.65	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-7	0.18	n/a	8/2/2023	2.2	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-8	0.18	n/a	8/1/2023	4.3	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Calcium (mg/L)	MGWC-1	110	n/a	8/1/2023	110	No	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-12	110	n/a	8/2/2023	31	No	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-2	110	n/a	8/2/2023	100	No	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-3	110	n/a	8/1/2023	120	Yes	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-7	110	n/a	8/2/2023	57	No	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-8	110	n/a	8/1/2023	120	Yes	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Chloride (mg/L)	MGWC-1	9.28	n/a	8/1/2023	13	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-12	9.28	n/a	8/2/2023	4.5	No	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-2	9.28	n/a	8/2/2023	12	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-3	9.28	n/a	8/1/2023	12	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-7	9.28	n/a	8/2/2023	11	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-8	9.28	n/a	8/1/2023	13	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Fluoride (mg/L)	MGWC-1	0.19	n/a	8/1/2023	0.15	No	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-12	0.19	n/a	8/2/2023	0.25	Yes	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-2	0.19	n/a	8/2/2023	0.087J	No	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-3	0.19	n/a	8/1/2023	0.1	No	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-7	0.19	n/a	8/2/2023	0.2	Yes	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-8	0.19	n/a	8/1/2023	0.11	No	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
pH (SU)	MGWC-1	8.12	5	8/1/2023	7.3	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
pH (SU)	MGWC-12	8.12	5	8/2/2023	7.2	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
pH (SU)	MGWC-2	8.12	5	8/2/2023	7.31	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
pH (SU)	MGWC-3	8.12	5	8/1/2023	7.09	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
pH (SU)	MGWC-7	8.12	5	8/2/2023	6.9	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
pH (SU)	MGWC-8	8.12	5	8/1/2023	6.77	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MGWC-1	17.27	n/a	8/1/2023	140	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-12	17.27	n/a	8/2/2023	4.6	No	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-2	17.27	n/a	8/2/2023	150	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-3	17.27	n/a	8/1/2023	110	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-7	17.27	n/a	8/2/2023	200	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-8	17.27	n/a	8/1/2023	280	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-1	354.4	n/a	8/1/2023	450	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-12	354.4	n/a	8/2/2023	200	No	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-2	354.4	n/a	8/2/2023	520	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-3	354.4	n/a	8/1/2023	420	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-7	354.4	n/a	8/2/2023	410	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-8	354.4	n/a	8/1/2023	570	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2

Appendix III Trend Tests - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:47 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)	-0.01744	-146	-87	Yes	21	19.05	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-2	-0.2577	-157	-87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-7	0.1234	161	87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-8	0.5334	94	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-10 (bg)	-0.3721	-120	-87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWC-8	12.82	162	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-5 (bg)	-0.1829	-118	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6 (bg)	-1.104	-180	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6A (bg)	-0.3253	-41	-34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-2	-1.414	-177	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-7	-0.5069	-131	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-8	0.4189	113	87	Yes	21	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-7	-0.03419	-138	-92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-10 (bg)	-0.1441	-110	-87	Yes	21	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-5 (bg)	-0.655	-144	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6 (bg)	-2.751	-168	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-2	-22.11	-180	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-3	6.234	139	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-7	5.303	102	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-8	36.82	106	87	Yes	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-2	-31.09	-148	-87	Yes	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-8	64.38	114	87	Yes	21	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:47 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-10 (bg)	0	46	87	No	21	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-11 (bg)	0	7	87	No	21	57.14	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-5 (bg)	0	0	87	No	21	80.95	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-6 (bg)	-0.01744	-146	-87	Yes	21	19.05	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-6A (bg)	0	-15	-34	No	11	63.64	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-1	0.1222	86	87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-2	-0.2577	-157	-87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-3	-0.05072	-47	-87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-7	0.1234	161	87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-8	0.5334	94	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-10 (bg)	-0.3721	-120	-87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-11 (bg)	0.1578	20	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-5 (bg)	-0.1849	-41	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-6 (bg)	0	52	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-6A (bg)	2.58	22	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWC-3	2.033	83	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWC-8	12.82	162	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-10 (bg)	0	15	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-11 (bg)	-0.05994	-35	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-5 (bg)	-0.1829	-118	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6 (bg)	-1.104	-180	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6A (bg)	-0.3253	-41	-34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-1	0	-63	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-2	-1.414	-177	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-3	0	18	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-7	-0.5069	-131	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-8	0.4189	113	87	Yes	21	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-10 (bg)	0	-32	-92	No	22	68.18	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-11 (bg)	-0.003001	-22	-92	No	22	9.091	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-5 (bg)	-0.003922	-64	-92	No	22	18.18	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6 (bg)	-0.004687	-62	-92	No	22	27.27	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6A (bg)	0.001044	3	34	No	11	18.18	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-12	-0.01043	-62	-92	No	22	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-7	-0.03419	-138	-92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-10 (bg)	-0.1441	-110	-87	Yes	21	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-11 (bg)	0.115	46	87	No	21	28.57	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-5 (bg)	-0.655	-144	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6 (bg)	-2.751	-168	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6A (bg)	0.1028	4	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-1	2.229	51	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-2	-22.11	-180	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-3	6.234	139	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-7	5.303	102	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-8	36.82	106	87	Yes	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-10 (bg)	-2.607	-41	-87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-11 (bg)	5.017	46	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-5 (bg)	1.841	26	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6 (bg)	0	-18	-87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6A (bg)	5.112	6	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-1	11.69	56	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-2	-31.09	-148	-87	Yes	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-3	6.863	70	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-7	11.6	85	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-8	64.38	114	87	Yes	21	0	n/a	n/a	0.01	NP

Upper Tolerance Limits

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/25/2023, 4:16 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.002	n/a	n/a	n/a	86	91.86	n/a	0.01214	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.014	n/a	n/a	n/a	96	36.46	n/a	0.007269	NP Inter(normality)
Barium (mg/L)	n/a	0.13	n/a	n/a	n/a	104	0	n/a	0.004822	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0025	n/a	n/a	n/a	94	94.68	n/a	0.008054	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	104	99.04	n/a	0.004822	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0063	n/a	n/a	n/a	94	72.34	n/a	0.008054	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.0025	n/a	n/a	n/a	103	72.82	n/a	0.005076	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	1.234	n/a	n/a	n/a	105	0	No	0.05	Inter
Fluoride (mg/L)	n/a	0.19	n/a	n/a	n/a	99	29.29	n/a	0.006232	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	86	94.19	n/a	0.01214	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	104	30.77	n/a	0.004822	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	94	96.81	n/a	0.008054	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.015	n/a	n/a	n/a	94	63.83	n/a	0.008054	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	74	91.89	n/a	0.02247	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	94	84.04	n/a	0.008054	NP Inter(NDs)

PLANT MCINTOSH AP 1 GWPS				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
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		1.23	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 Summary Table - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	MGWC-7	0.009643	0.006722	0.006	Yes 23	0.008183	0.002793	0	None	No	0.01	Param.
Cobalt (mg/L)	MGWC-8	0.01517	0.006917	0.006	Yes 23	0.01104	0.007889	0	None	No	0.01	Param.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes 23	0.1227	0.01927	0	None	No	0.01	NP (normality)

Confidence Intervals Summary Table - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	MGWC-12	0.002	0.0015	0.006	No	19	0.001889	0.0003784	89.47	None	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-3	0.002	0.0003	0.006	No	19	0.001911	0.00039	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-7	0.002	0.00197	0.006	No	19	0.00192	0.0003415	89.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-1	0.002733	0.001872	0.014	No	23	0.002303	0.0008228	0	None	No	0.01	Param.
Arsenic (mg/L)	MGWC-12	0.001061	0.0006636	0.014	No	23	0.001003	0.0003575	30.43	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MGWC-2	0.001	0.00068	0.014	No	23	0.000917	0.0001949	82.61	Kaplan-Meier	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-3	0.0017	0.00143	0.014	No	23	0.001584	0.0003356	4.348	None	No	0.01	NP (normality)
Arsenic (mg/L)	MGWC-7	0.0008039	0.0005182	0.014	No	23	0.0008265	0.0002772	39.13	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MGWC-8	0.001	0.00098	0.014	No	23	0.0009035	0.0001913	65.22	Kaplan-Meier	No	0.01	NP (NDs)
Barium (mg/L)	MGWC-1	0.11	0.096	2	No	23	0.1067	0.01576	0	None	No	0.01	NP (normality)
Barium (mg/L)	MGWC-12	0.06448	0.05038	2	No	23	0.05743	0.01347	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-2	0.0534	0.04759	2	No	23	0.0505	0.005561	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-3	0.1556	0.1421	2	No	23	0.1488	0.01295	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-7	0.015	0.01	2	No	23	0.01356	0.006621	4.348	None	No	0.01	NP (normality)
Barium (mg/L)	MGWC-8	0.04133	0.0341	2	No	23	0.03793	0.00727	0	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	MGWC-1	0.0025	0.00018	0.004	No	21	0.00239	0.0005063	95.24	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-3	0.0025	0.00031	0.004	No	21	0.002396	0.0004779	95.24	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-8	0.001302	0.000712	0.004	No	21	0.001007	0.0005351	14.29	None	No	0.01	Param.
Cadmium (mg/L)	MGWC-1	0.0025	0.0005	0.005	No	23	0.002	0.0009726	78.26	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-2	0.002854	0.001149	0.005	No	23	0.002239	0.001888	0	None	sqrt(x)	0.01	Param.
Cadmium (mg/L)	MGWC-7	0.0025	0.00041	0.005	No	23	0.002215	0.0007523	86.96	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-8	0.001482	0.000647	0.005	No	23	0.001597	0.001153	26.09	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	MGWC-1	0.0036	0.0014	0.1	No	21	0.002048	0.000379	90.48	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-12	0.0032	0.0012	0.1	No	21	0.003305	0.005896	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-2	0.0033	0.002	0.1	No	21	0.002062	0.0002837	95.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-3	0.003	0.002	0.1	No	21	0.002048	0.0002182	95.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-7	0.0034	0.0015	0.1	No	21	0.00201	0.0003673	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-8	0.0031	0.0013	0.1	No	21	0.002019	0.0002909	90.48	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-1	0.0025	0.00047	0.006	No	23	0.001788	0.001014	65.22	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-12	0.0025	0.0015	0.006	No	23	0.002355	0.0005218	91.3	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-2	0.003172	0.002257	0.006	No	23	0.002715	0.0008745	0	None	No	0.01	Param.
Cobalt (mg/L)	MGWC-3	0.00068	0.00051	0.006	No	23	0.0007574	0.0004694	13.04	None	No	0.01	NP (normality)
Cobalt (mg/L)	MGWC-7	0.009643	0.006722	0.006	Yes	23	0.008183	0.002793	0	None	No	0.01	Param.
Cobalt (mg/L)	MGWC-8	0.01517	0.006917	0.006	Yes	23	0.01104	0.007889	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-1	1.706	1.315	5	No	24	1.51	0.3825	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-12	0.7489	0.4601	5	No	23	0.6045	0.2761	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-2	0.7573	0.4849	5	No	23	0.6211	0.2604	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-3	1.766	1.39	5	No	24	1.578	0.3681	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-7	1.335	0.9723	5	No	23	1.154	0.3472	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-8	1.917	1.354	5	No	23	1.636	0.5383	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-1	0.226	0.1411	4	No	22	0.1835	0.07909	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-12	0.251	0.1993	4	No	22	0.2194	0.058	0	None	x^2	0.01	Param.
Fluoride (mg/L)	MGWC-2	0.2	0.075	4	No	22	0.1266	0.05876	31.82	None	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-3	0.2	0.082	4	No	22	0.125	0.05834	27.27	None	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-7	0.3231	0.2136	4	No	22	0.2684	0.102	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-8	0.1075	0.07238	4	No	22	0.08995	0.03274	13.64	None	No	0.01	Param.
Lead (mg/L)	MGWC-12	0.001	0.0001	0.015	No	19	0.0009526	0.0002065	94.74	None	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-7	0.001	0.0003	0.015	No	19	0.0008789	0.0002879	84.21	None	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-8	0.001	0.00022	0.015	No	19	0.0009589	0.0001789	94.74	None	No	0.01	NP (NDs)
Lithium (mg/L)	MGWC-1	0.01212	0.01011	0.04	No	23	0.01112	0.001925	4.348	None	No	0.01	Param.
Lithium (mg/L)	MGWC-12	0.022	0.01664	0.04	No	23	0.01932	0.00512	0	None	No	0.01	Param.
Lithium (mg/L)	MGWC-2	0.0066	0.0051	0.04	No	23	0.006533	0.004171	4.348	None	No	0.01	NP (normality)
Lithium (mg/L)	MGWC-3	0.01334	0.01146	0.04	No	23	0.0124	0.001792	0	None	No	0.01	Param.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes	23	0.1227	0.01927	0	None	No	0.01	NP (normality)
Lithium (mg/L)	MGWC-8	0.03648	0.02458	0.04	No	23	0.03053	0.01138	0	None	No	0.01	Param.

Confidence Intervals Summary Table - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	MGWC-12	0.0002	0.000086	0.015	No	21	0.0001886	0.00003614	90.48	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-2	0.0002	0.0001	0.015	No	21	0.0001894	0.00003357	90.48	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-3	0.0002	0.00007	0.015	No	21	0.0001938	0.00002837	95.24	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-7	0.0002	0.00008	0.015	No	21	0.0001943	0.00002619	95.24	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-8	0.00021	0.00014	0.015	No	22	0.0004062	0.0008409	36.36	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-1	0.0029	0.0012	0.1	No	21	0.01549	0.02958	19.05	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-12	0.015	0.002	0.1	No	21	0.01112	0.006291	71.43	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-7	0.015	0.00351	0.1	No	21	0.01445	0.002507	95.24	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-8	0.015	0.0037	0.1	No	21	0.01446	0.002466	95.24	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-1	0.005	0.0005	0.05	No	17	0.004735	0.001091	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-12	0.005	0.00027	0.05	No	17	0.004722	0.001147	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-2	0.005	0.00045	0.05	No	17	0.004732	0.001104	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-3	0.005	0.00044	0.05	No	17	0.004732	0.001106	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-7	0.005	0.00026	0.05	No	17	0.004721	0.00115	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-8	0.005	0.0024	0.05	No	17	0.004022	0.001871	76.47	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-1	0.001	0.00032	0.002	No	21	0.0008002	0.0003686	76.19	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-12	0.001	0.00027	0.002	No	21	0.0009248	0.0002384	90.48	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-2	0.001	0.00021	0.002	No	21	0.0009624	0.0001724	95.24	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-3	0.001	0.00037	0.002	No	21	0.00093	0.0002236	90.48	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-8	0.0002416	0.0001397	0.002	No	21	0.0004852	0.0003818	33.33	Kaplan-Meier	ln(x)	0.01	Param.

Appendix IV Trend Tests - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:51 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWC-7	-0.0007131	-101	-76	Yes	23	0	n/a	n/a	0.05	NP

Appendix IV Trend Tests - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:51 PM

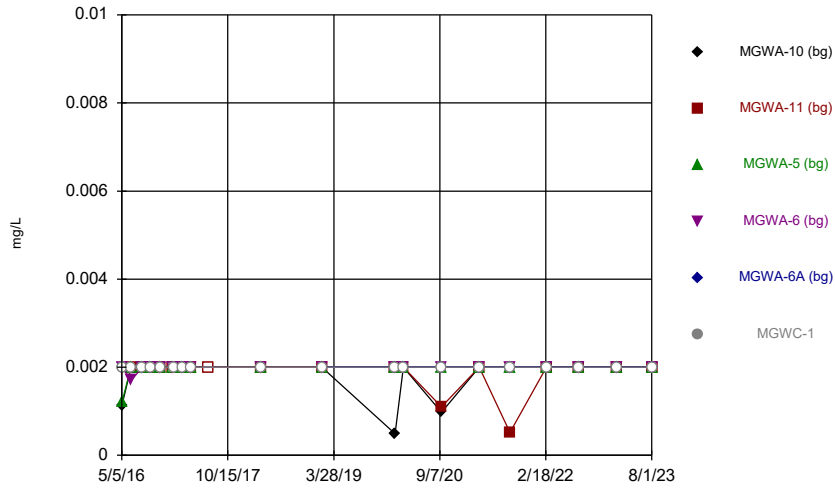
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWA-10 (bg)	0	3	76	No	23	86.96	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-11 (bg)	0	22	76	No	23	95.65	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-5 (bg)	0	19	71	No	22	95.45	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-6 (bg)	0	-21	-76	No	23	43.48	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-6A (bg)	0.00003125	5	30	No	12	16.67	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWC-7	-0.0007131	-101	-76	Yes	23	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWC-8	0.00206	66	76	No	23	0	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-10 (bg)	-0.00002307	-8	-76	No	23	4.348	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-11 (bg)	0.0008063	50	76	No	23	0	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-5 (bg)	0.0002355	43	76	No	23	4.348	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-6 (bg)	0	4	76	No	23	95.65	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-6A (bg)	-0.00004875	-30	-30	No	12	66.67	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWC-7	0	36	76	No	23	0	n/a	n/a	0.05	NP

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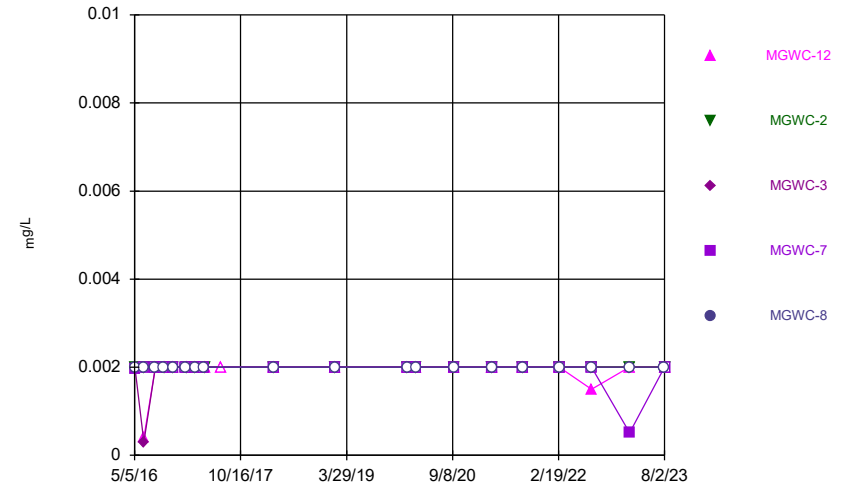
FIGURE A.

Time Series



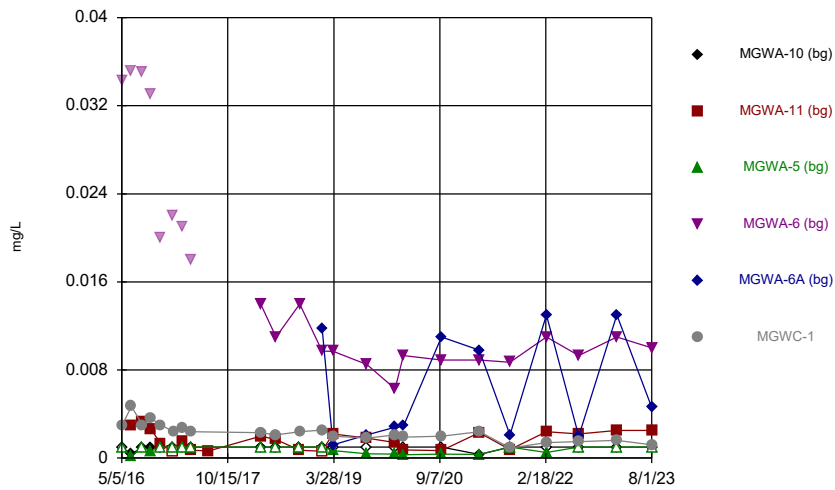
Constituent: Antimony Analysis Run 9/27/2023 11:04 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



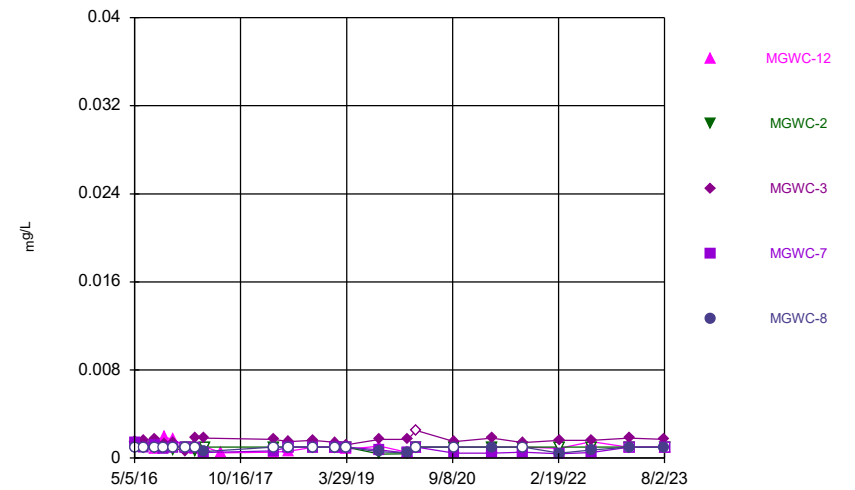
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



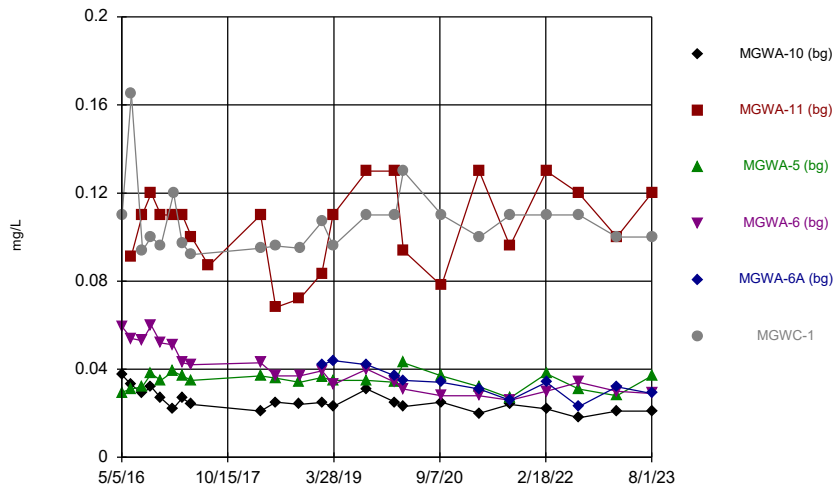
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



Constituent: Arsenic Analysis Run 9/27/2023 11:04 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

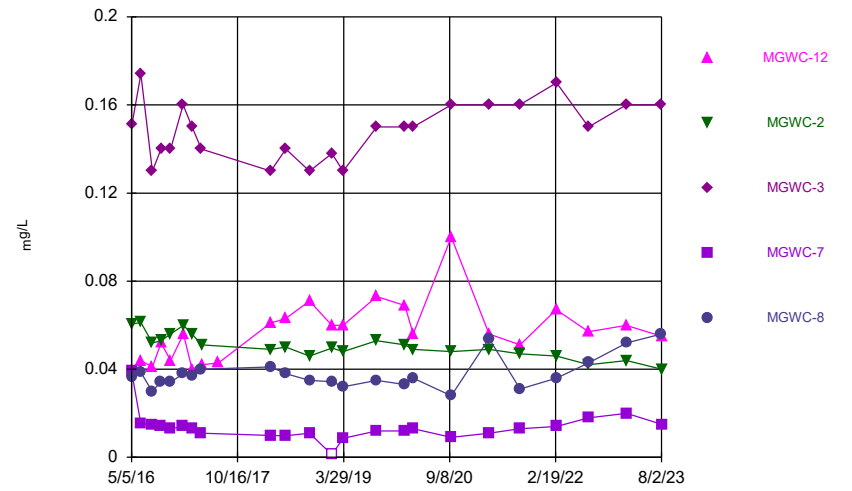
Time Series



Constituent: Barium Analysis Run 9/27/2023 11:04 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Hollow symbols indicate censored values.

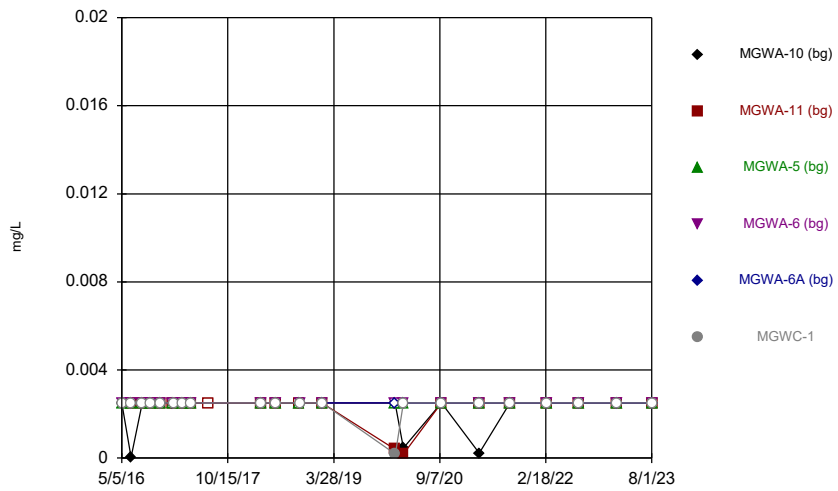
Time Series



Constituent: Barium Analysis Run 9/27/2023 11:04 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Hollow symbols indicate censored values.

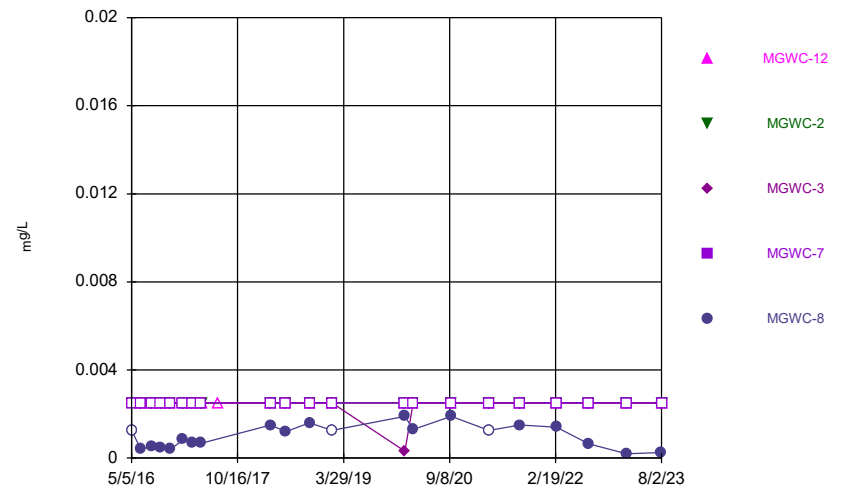
Time Series



Constituent: Beryllium Analysis Run 9/27/2023 11:04 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

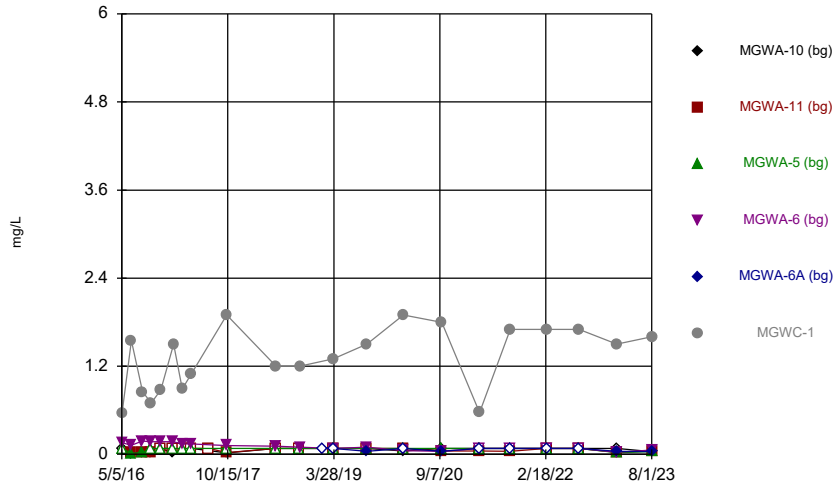
Hollow symbols indicate censored values.

Time Series



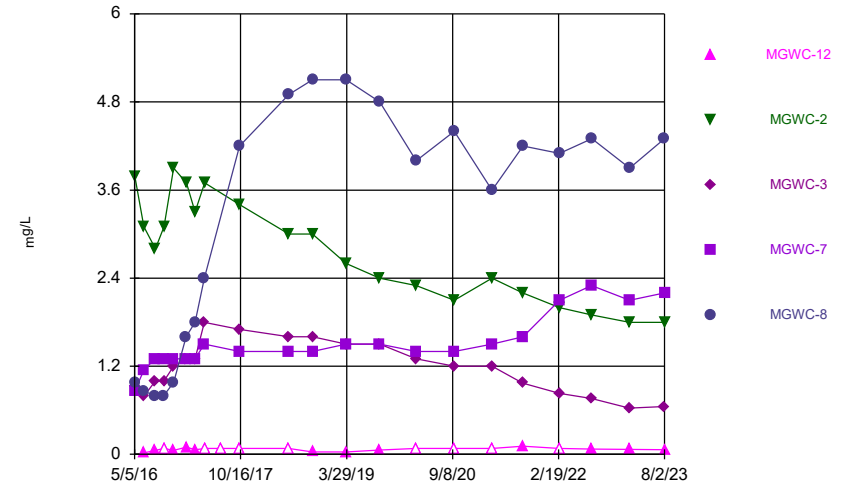
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



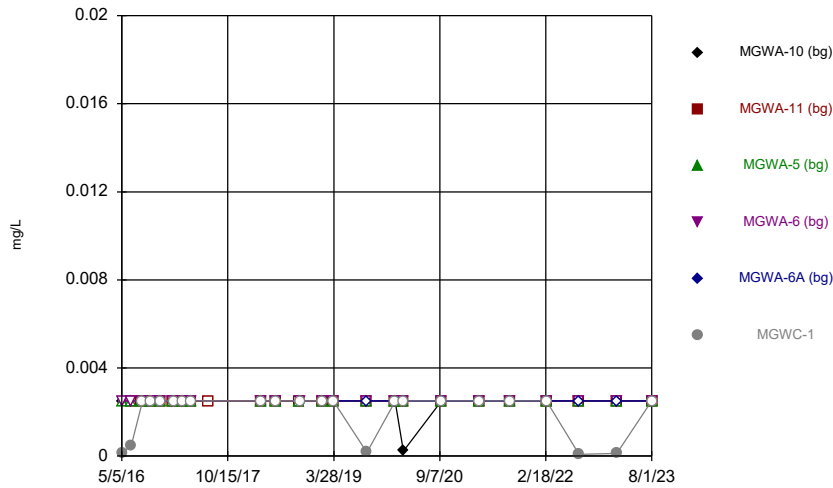
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



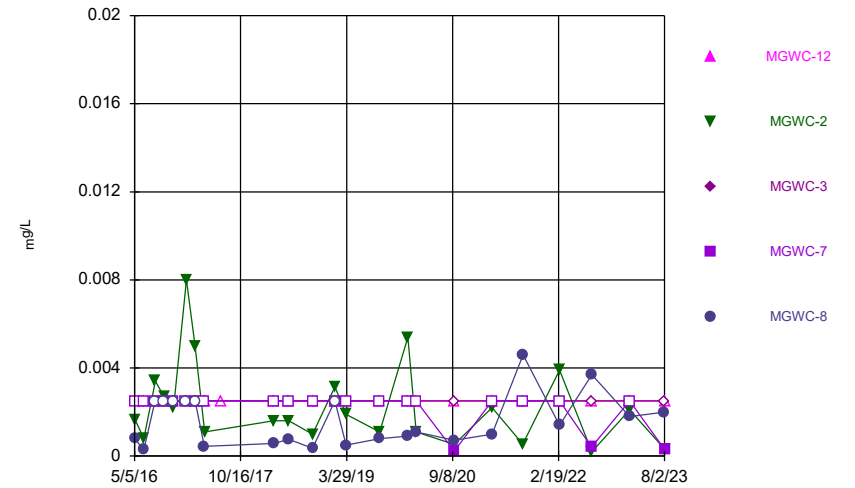
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



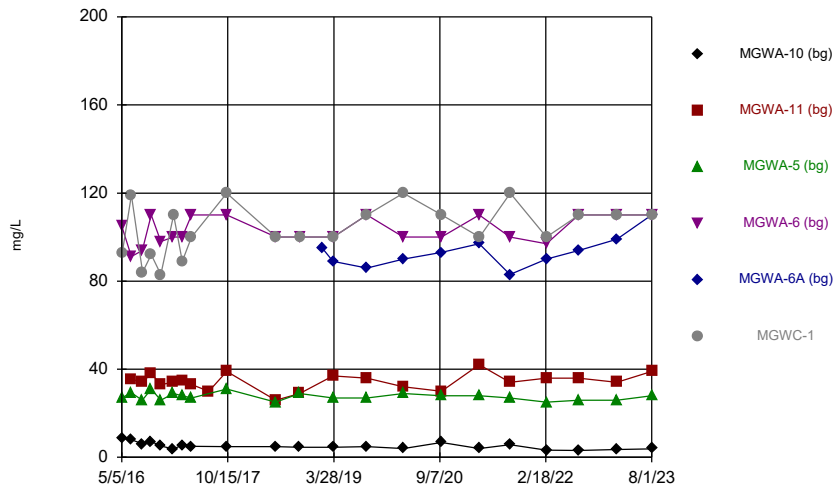
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



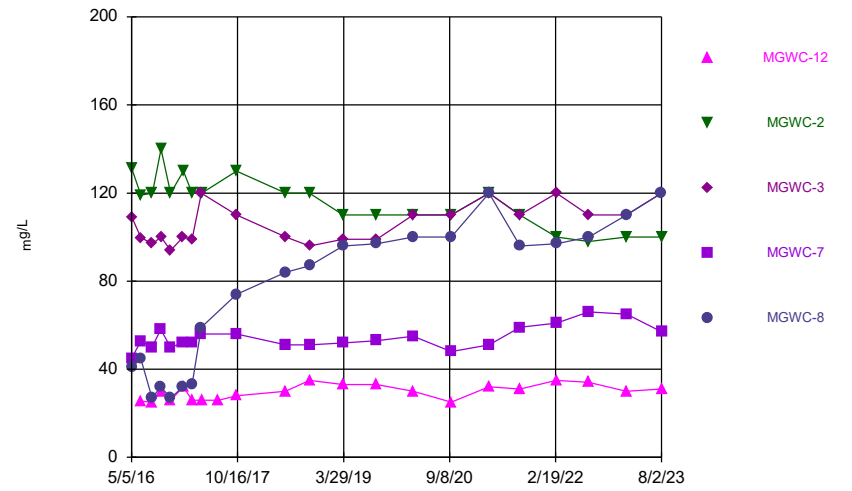
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



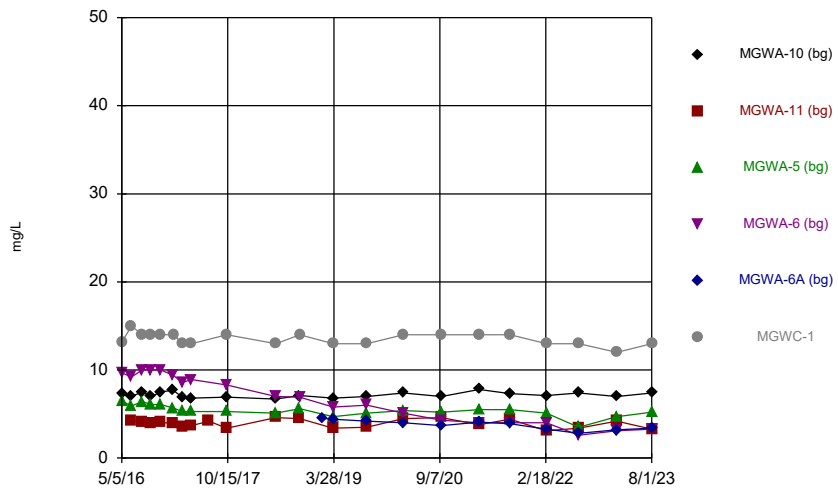
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



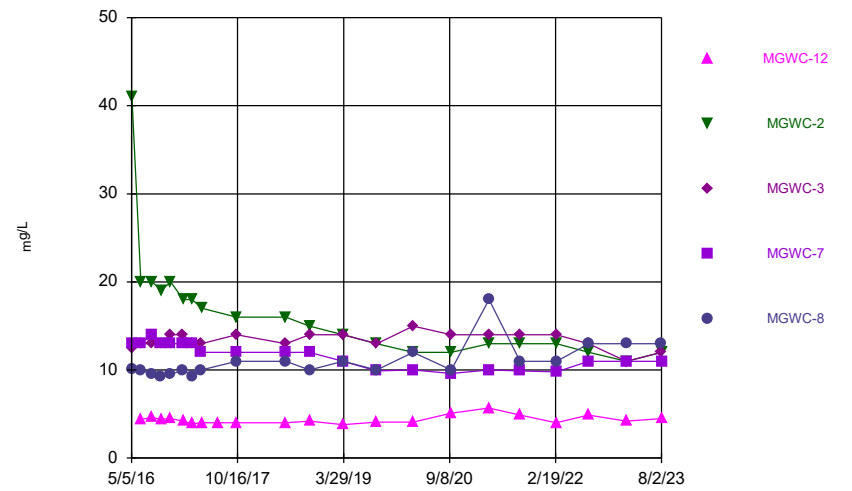
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



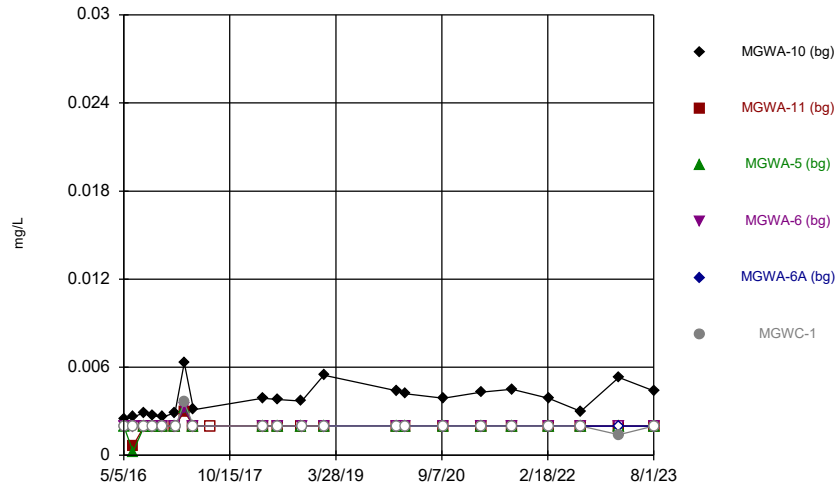
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



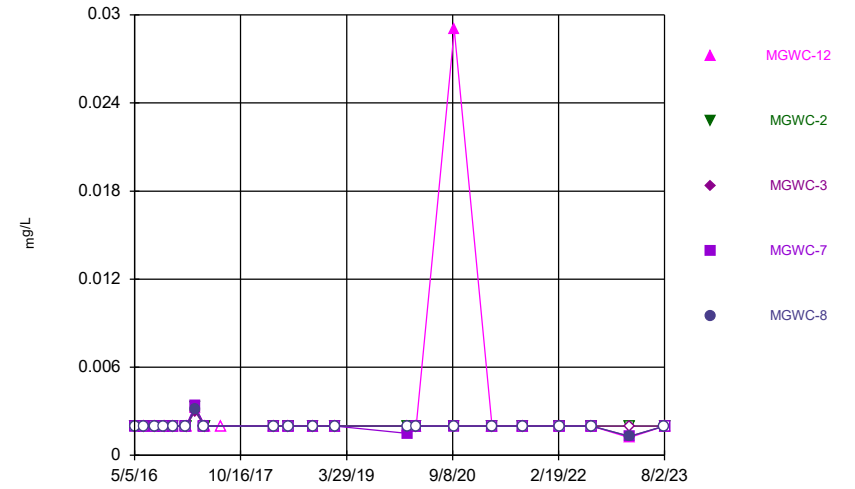
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



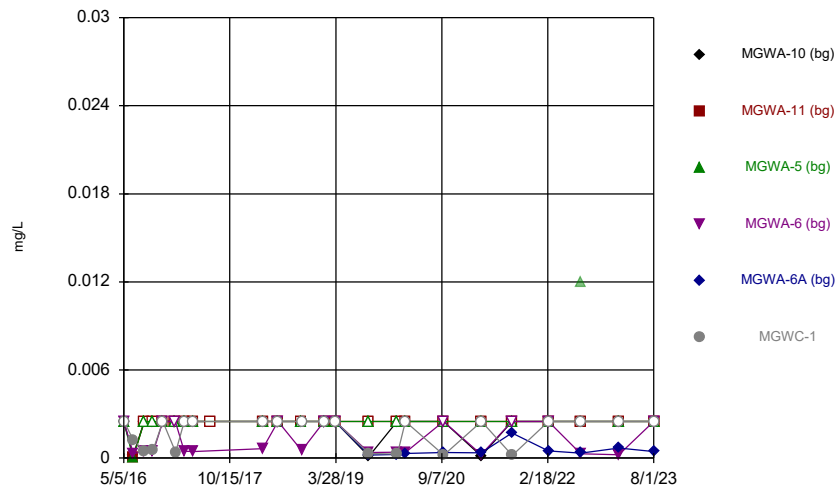
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



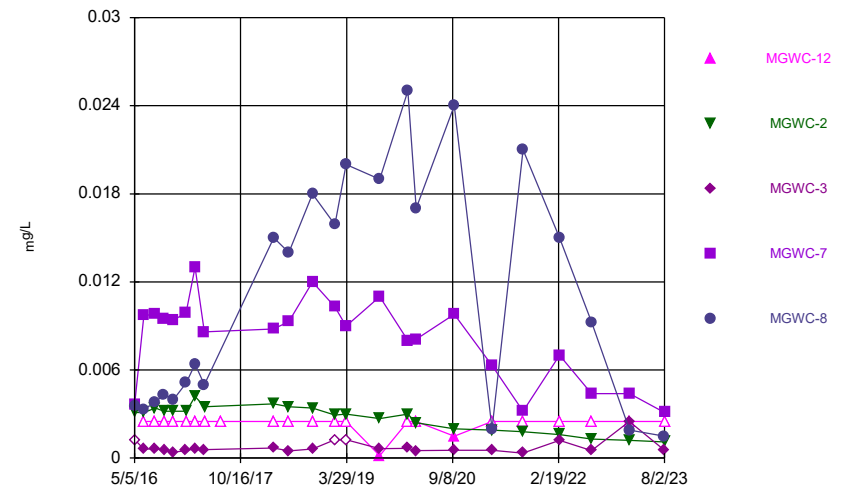
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



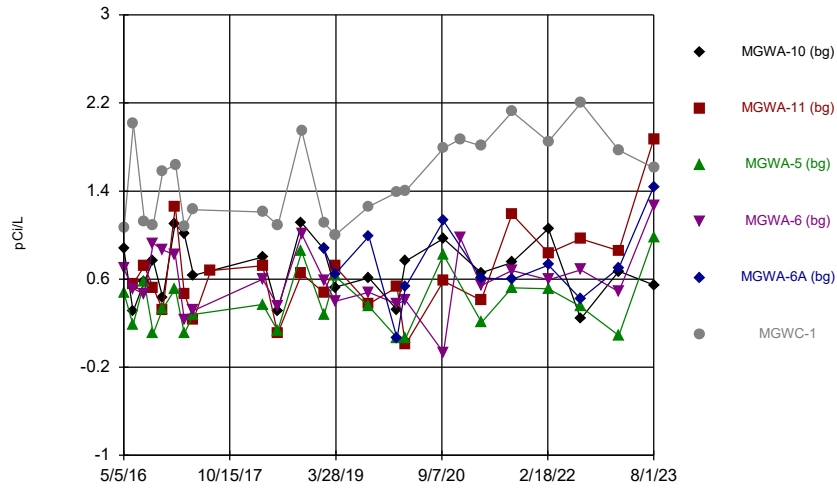
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



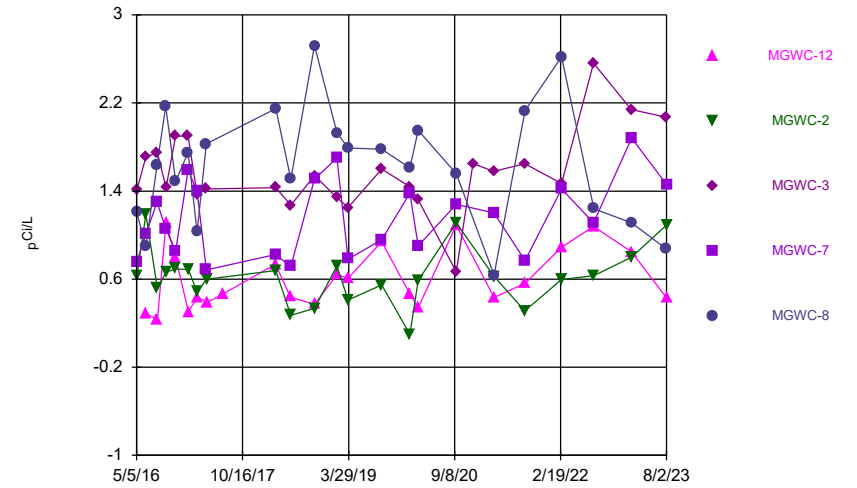
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



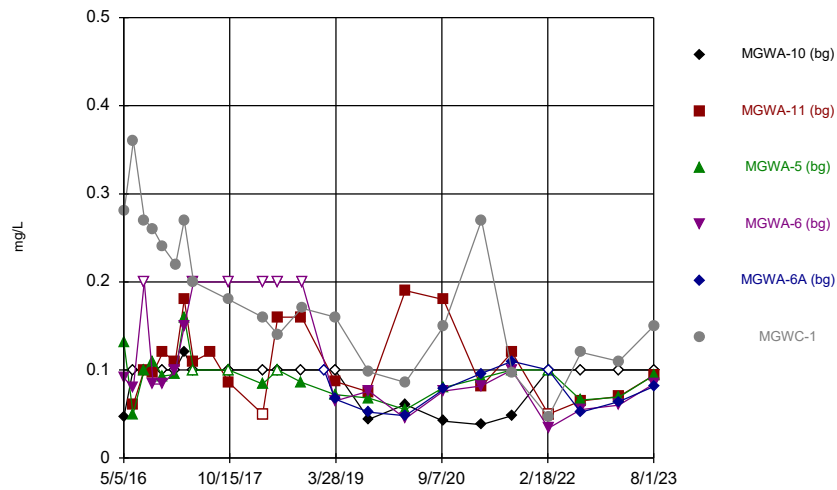
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



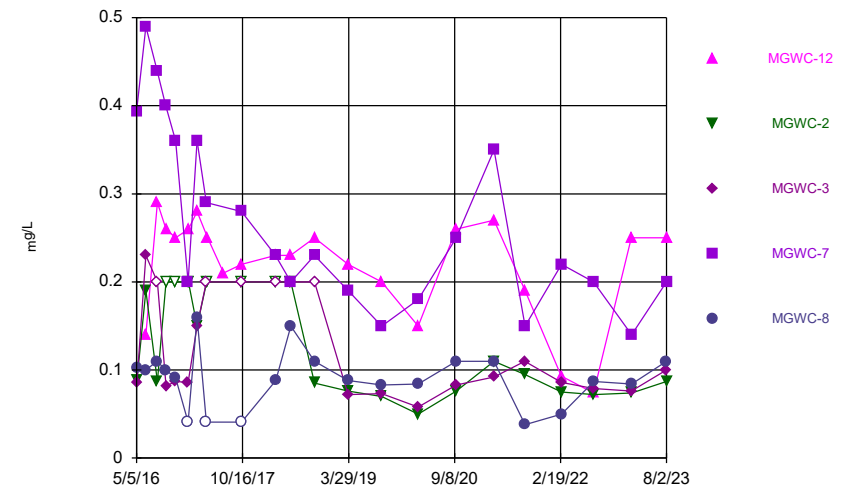
Constituent: Combined Radium 226 + 228 Analysis Run 9/27/2023 11:05 AM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



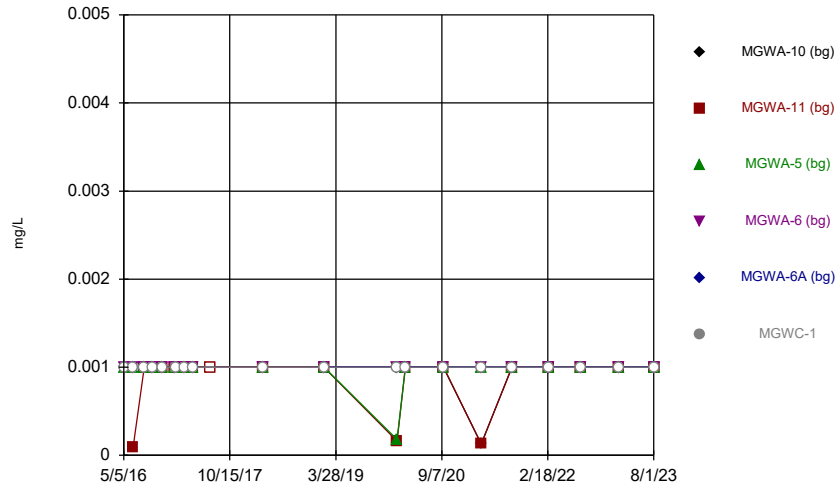
Constituent: Fluoride Analysis Run 9/27/2023 11:05 AM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



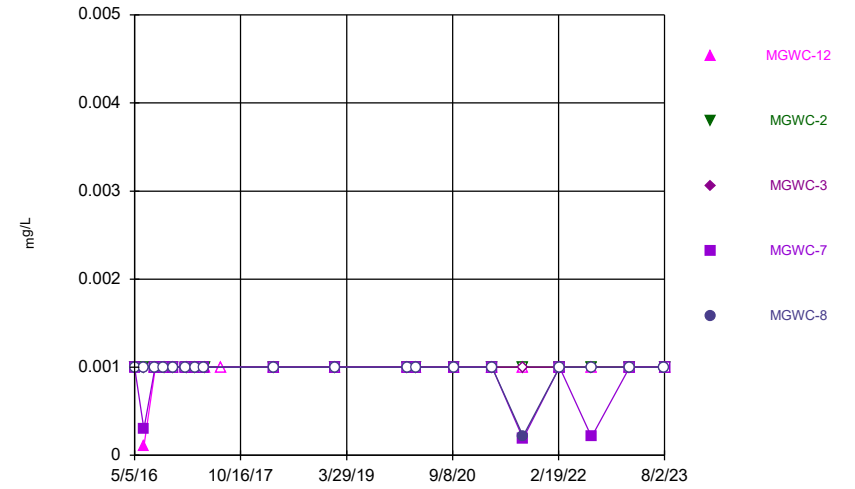
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



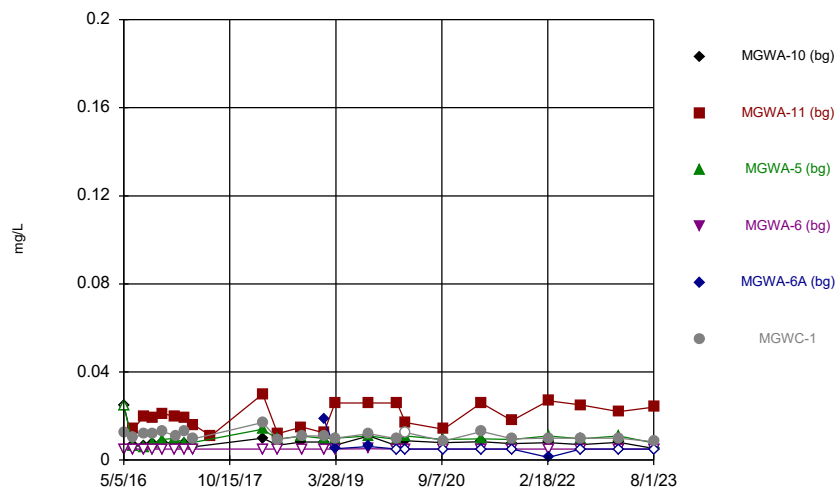
Constituent: Lead Analysis Run 9/27/2023 11:05 AM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



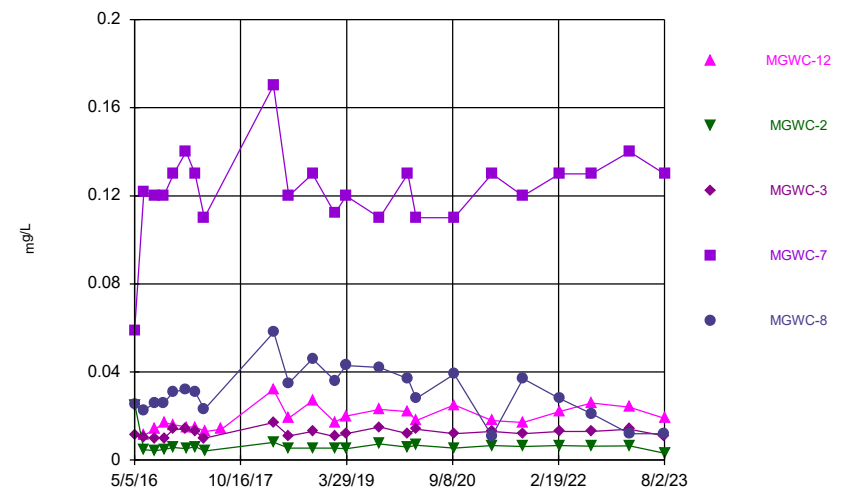
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



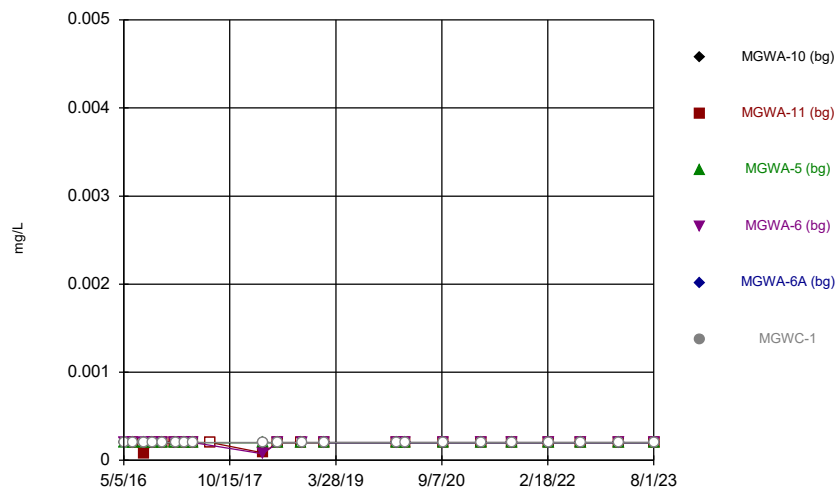
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Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



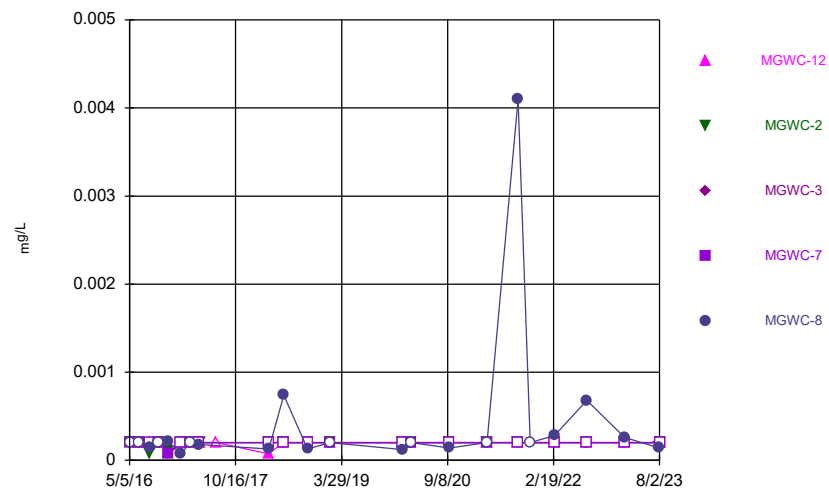
Constituent: Lithium Analysis Run 9/27/2023 11:05 AM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



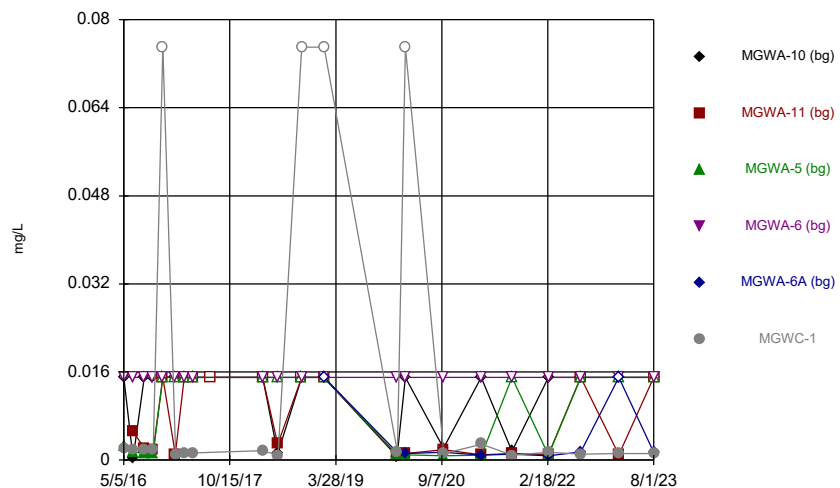
Constituent: Mercury Analysis Run 9/27/2023 11:05 AM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



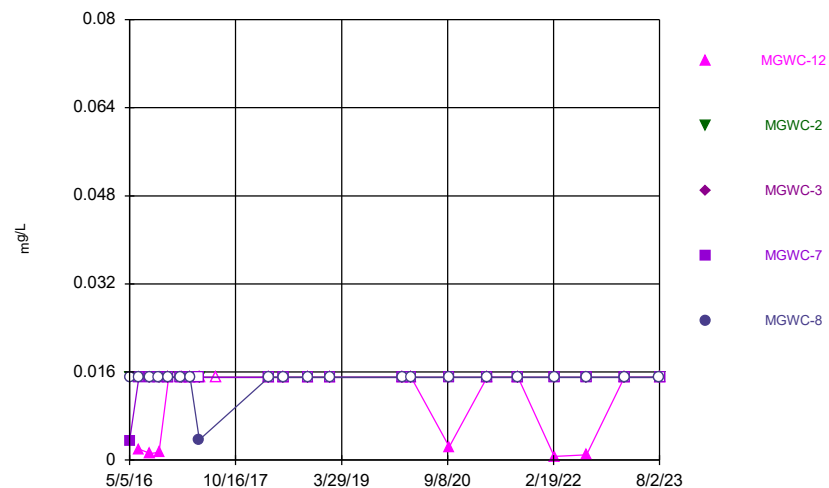
Constituent: Mercury Analysis Run 9/27/2023 11:05 AM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



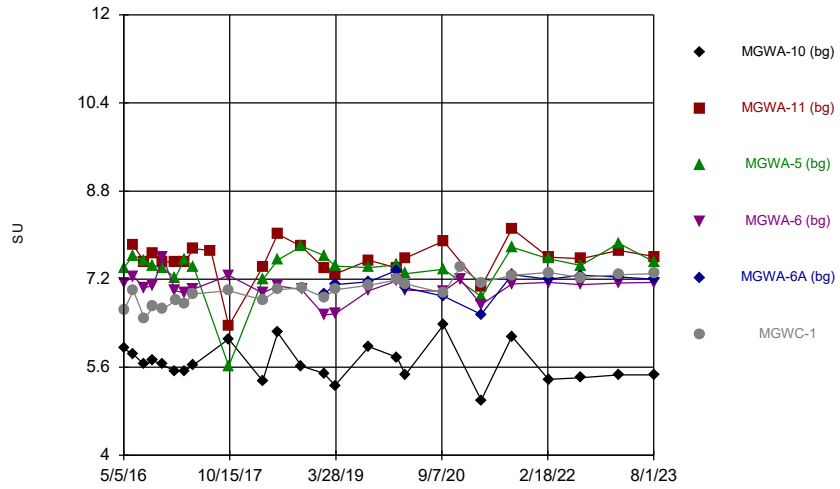
Constituent: Molybdenum Analysis Run 9/27/2023 11:05 AM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



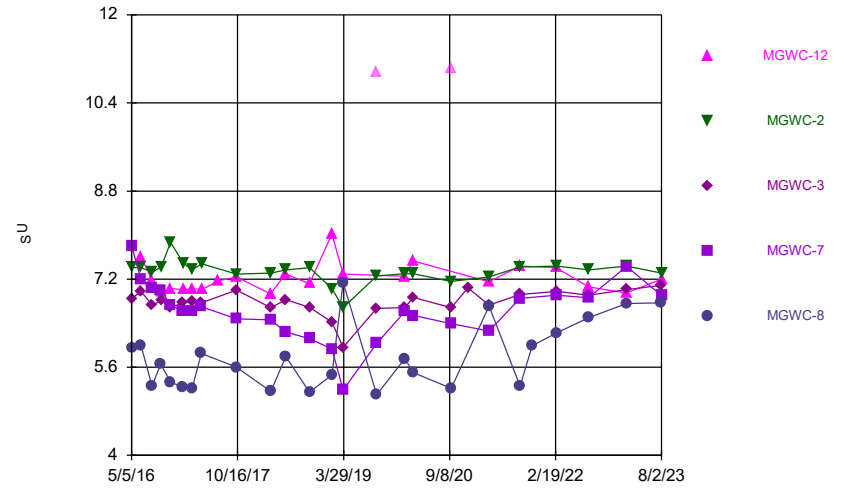
Constituent: Molybdenum Analysis Run 9/27/2023 11:05 AM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



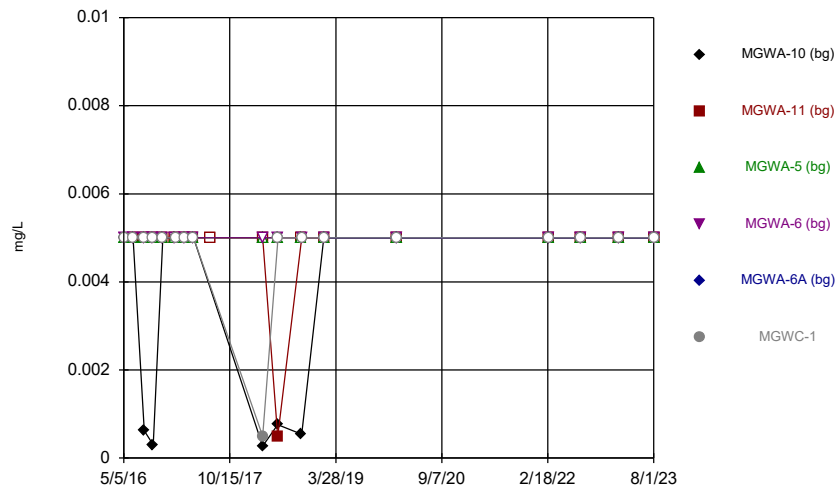
Constituent: pH Analysis Run 9/27/2023 11:05 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



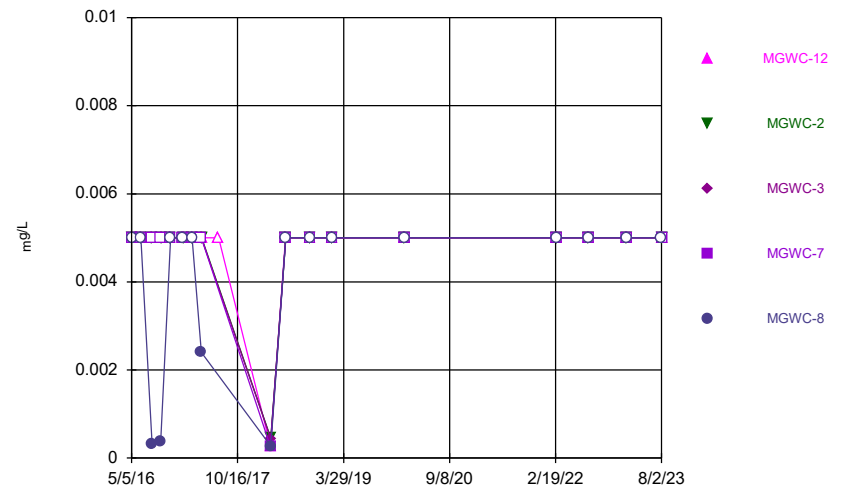
Constituent: pH Analysis Run 9/27/2023 11:05 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



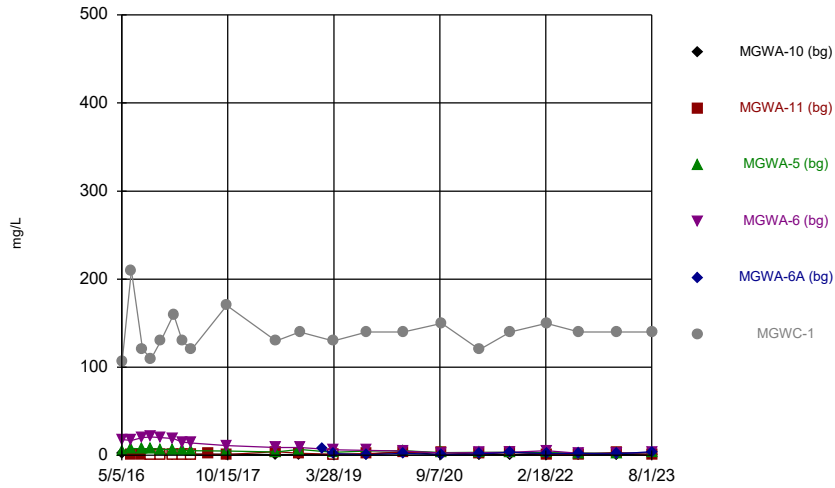
Constituent: Selenium Analysis Run 9/27/2023 11:05 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



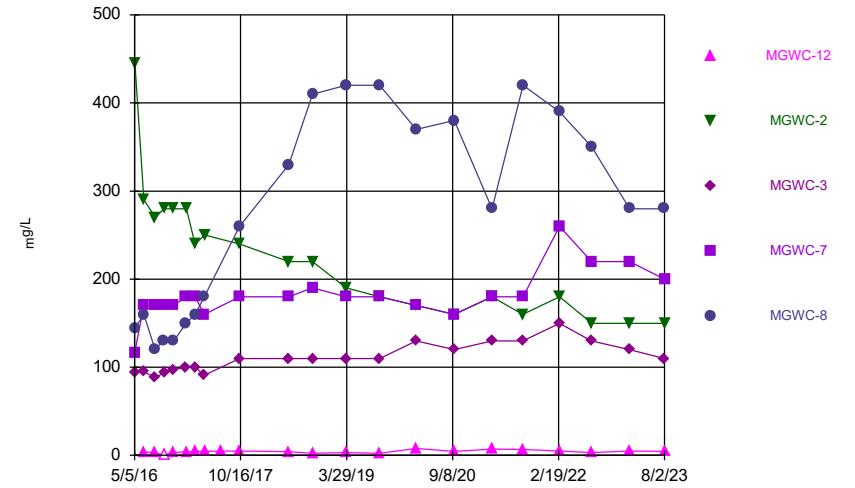
Constituent: Selenium Analysis Run 9/27/2023 11:05 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



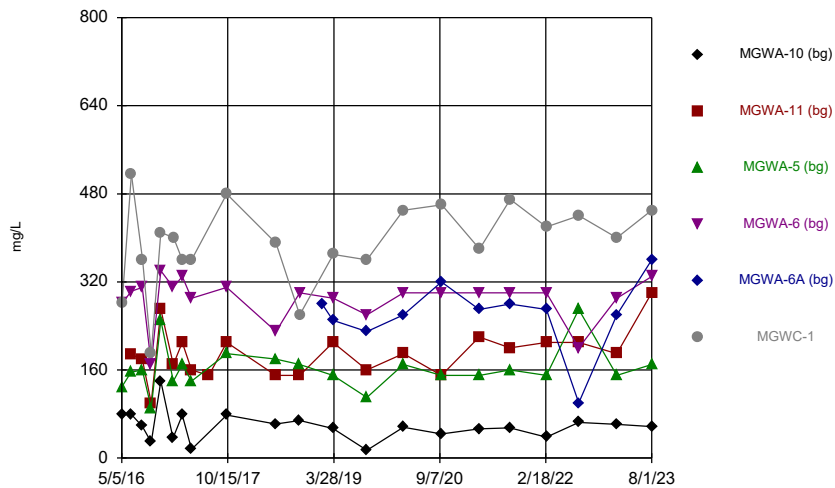
Constituent: Sulfate Analysis Run 9/27/2023 11:05 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



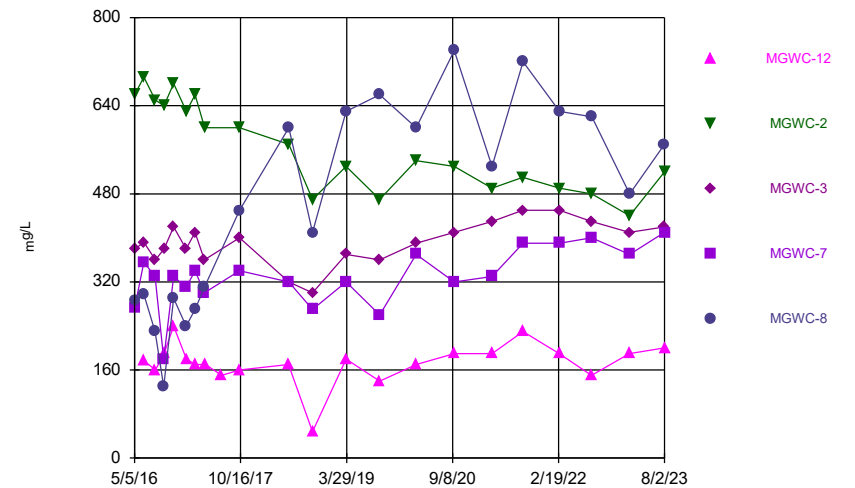
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 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



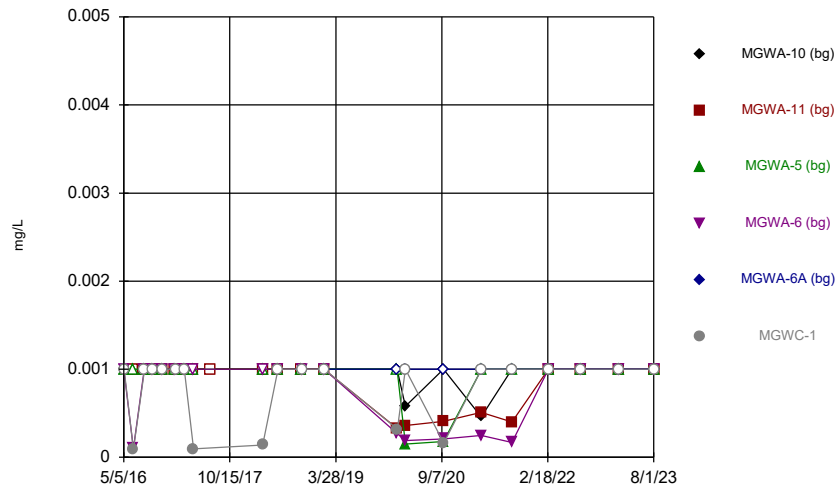
Constituent: TDS Analysis Run 9/27/2023 11:05 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



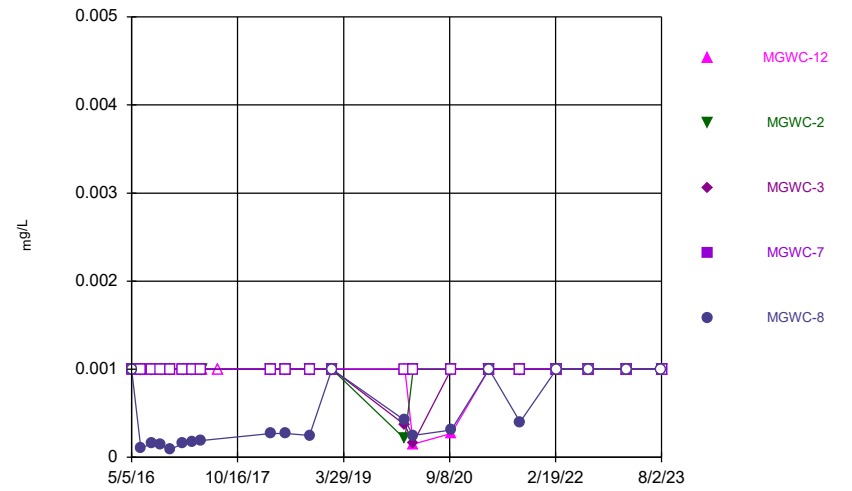
Constituent: TDS Analysis Run 9/27/2023 11:05 AM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



Constituent: Thallium Analysis Run 9/27/2023 11:05 AM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series



Constituent: Thallium Analysis Run 9/27/2023 11:05 AM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Time Series

Constituent: Antimony (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Time Series

Constituent: Antimony (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			<0.002		<0.002
8/2/2023	<0.002	<0.002		<0.002	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	<0.001	0.0025	<0.001	0.01	0.0046	0.0012

Time Series

Constituent: Arsenic (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			0.0017		0.00098 (J)
8/2/2023	<0.001	<0.001		<0.001	

Time Series

Constituent: Barium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	0.021	0.12	0.037	0.029	0.029	0.1

Time Series

Constituent: Barium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			0.16		0.056
8/2/2023	0.055	0.04		0.015	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025

Time Series

Constituent: Beryllium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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)
8/1/2023			<0.0025		0.00025 (J)
8/2/2023	<0.0025	<0.0025		<0.0025	

Time Series

Constituent: Boron (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	0.035 (J)	0.045 (J)	0.037 (J)	0.057 (J)	0.038 (J)	1.6

Time Series

Constituent: Boron (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			0.65		4.3
8/2/2023	0.062 (J)	1.8		2.2	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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)
8/1/2023	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025

Time Series

Constituent: Cadmium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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)
8/1/2023			<0.0025		0.002 (J)
8/2/2023	<0.0025	0.00032 (J)		0.00031 (J)	

Time Series

Constituent: Calcium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	3.9	39	28	110	110	110

Time Series

Constituent: Calcium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			120		120
8/2/2023	31	100		57	

Time Series

Constituent: Chloride (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	7.4	3.3	5.2	3.3	3.4	13

Time Series

Constituent: Chloride (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			12		13
8/2/2023	4.5	12		11	

Time Series

Constituent: Chromium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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)
8/1/2023	0.0044	<0.002	<0.002	<0.002	<0.002	<0.002

Time Series

Constituent: Chromium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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)
8/1/2023			<0.002		<0.002
8/2/2023	<0.002	<0.002		<0.002	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	<0.0025	<0.0025	<0.0025	<0.0025	0.00045 (J)	<0.0025

Time Series

Constituent: Cobalt (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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)
8/1/2023			0.00054 (J)		0.0015 (J)
8/2/2023	<0.0025	0.0011 (J)		0.0031	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	0.546 (U)	1.87	0.982	1.27	1.44	1.61

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			2.07		0.872
8/2/2023	0.432 (U)	1.09		1.46	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	<0.1	0.094 (J)	0.094 (J)	0.084 (J)	0.081 (J)	0.15

Time Series

Constituent: Fluoride (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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)
8/1/2023			0.1		0.11
8/2/2023	0.25	0.087 (J)		0.2	

Time Series

Constituent: Lead (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			<0.001		<0.001
8/2/2023	<0.001	<0.001		<0.001	

Time Series

Constituent: Lithium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	0.0053	0.024	0.0077	<0.005	<0.005	0.0084

Time Series

Constituent: Lithium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			0.011		0.012
8/2/2023	0.019	0.0031 (J)		0.13	

Time Series

Constituent: Mercury (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			<0.0002		0.00014 (J)
8/2/2023	<0.0002	<0.0002		<0.0002	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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)
8/1/2023	<0.015	<0.015	<0.015	<0.015	0.0014 (J)	0.0012 (J)

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			<0.015		<0.015
8/2/2023	<0.015	<0.015		<0.015	

Time Series

Constituent: pH (SU) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	5.46	7.61	7.52	7.14	7.2	7.3

Time Series

Constituent: pH (SU) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			7.09		6.77
8/2/2023	7.2	7.31		6.9	

Time Series

Constituent: Selenium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			<0.005		<0.005
8/2/2023	<0.005	<0.005		<0.005	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	0.56 (J)	1	2.9	3.2	4	140

Time Series

Constituent: Sulfate (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			110		280
8/2/2023	4.6	150		200	

Time Series

Constituent: TDS (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	57	300	170	330	360	450

Time Series

Constituent: TDS (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			420		570
8/2/2023	200	520		410	

Time Series

Constituent: Thallium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Time Series

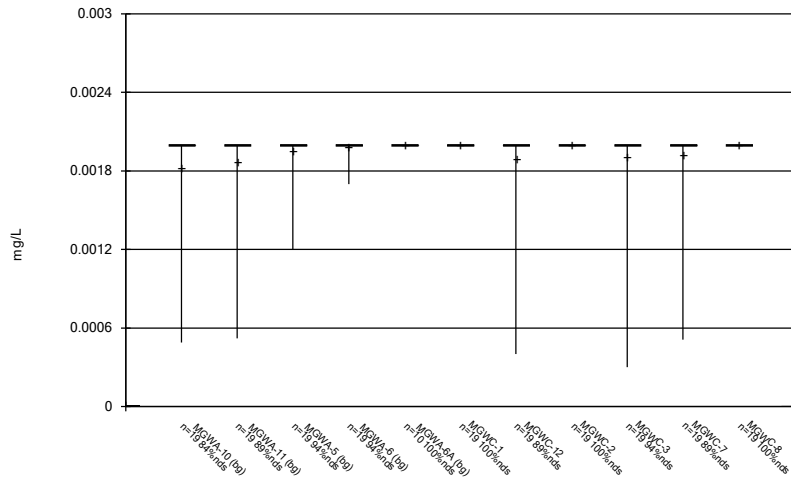
Constituent: Thallium (mg/L) Analysis Run 9/27/2023 11:07 AM View: Descriptive

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
8/1/2023			<0.001		<0.001
8/2/2023	<0.001	<0.001		<0.001	

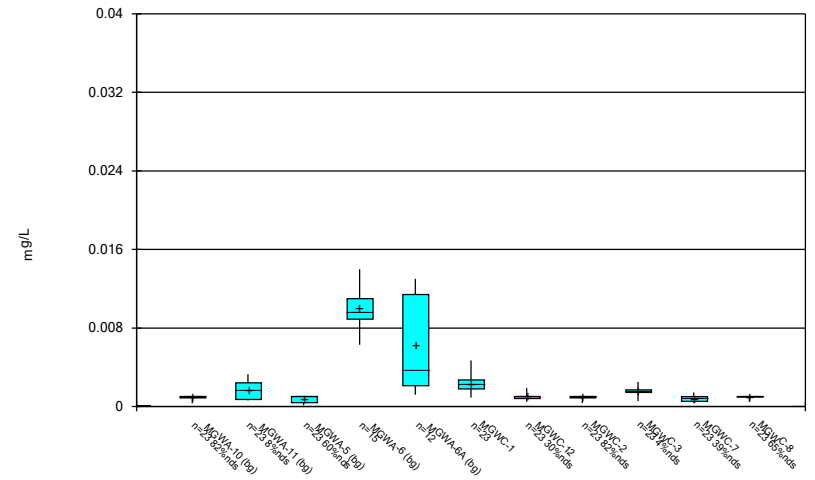
FIGURE B.

Box & Whiskers Plot



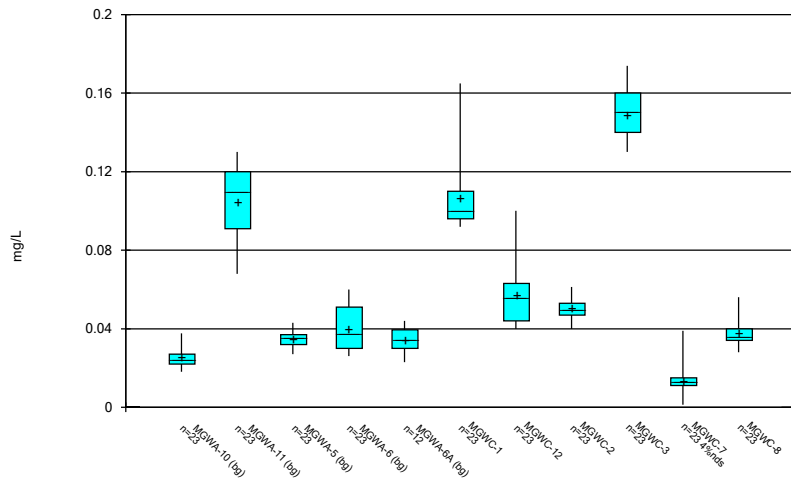
Constituent: Antimony Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



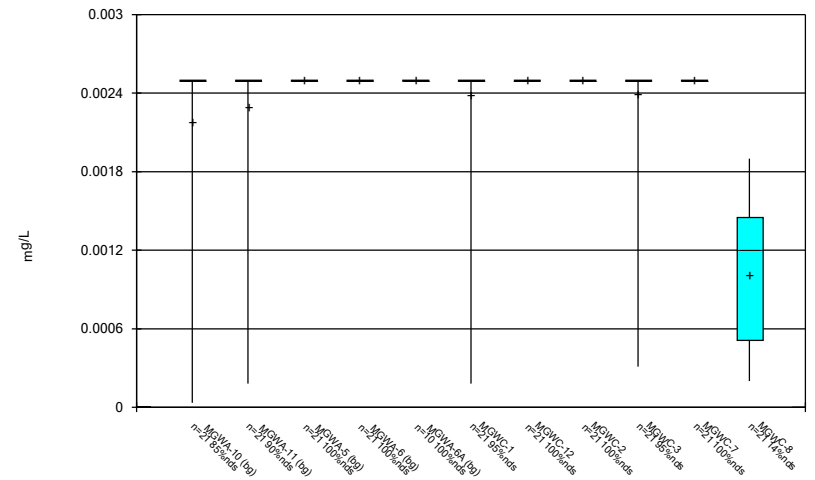
Constituent: Arsenic Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



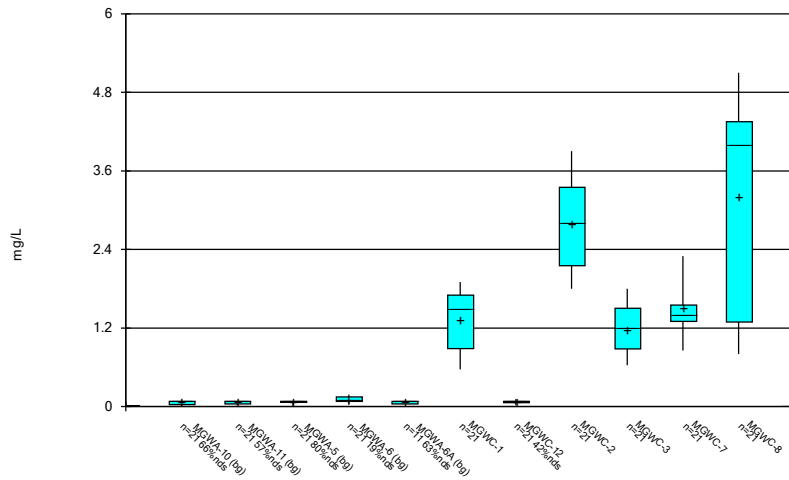
Constituent: Barium Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



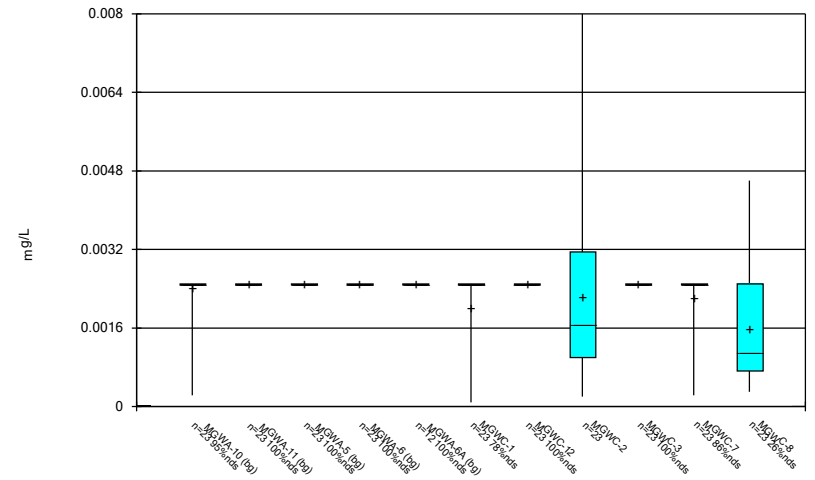
Constituent: Beryllium Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



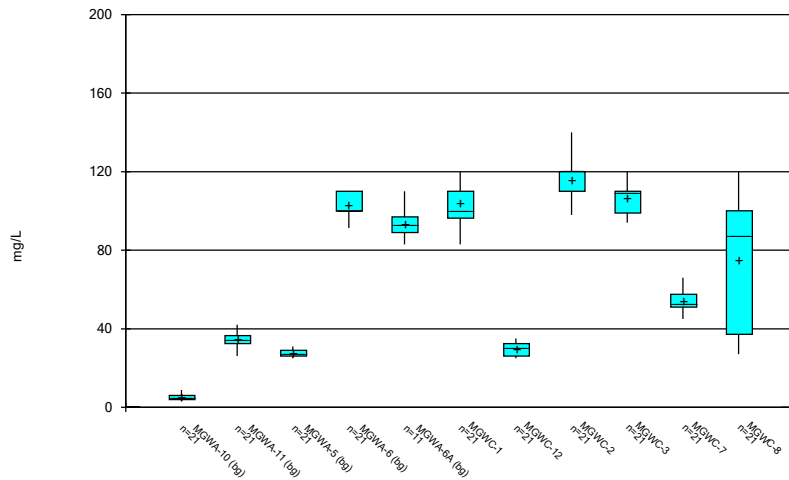
Constituent: Boron Analysis Run 9/26/2023 12:30 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



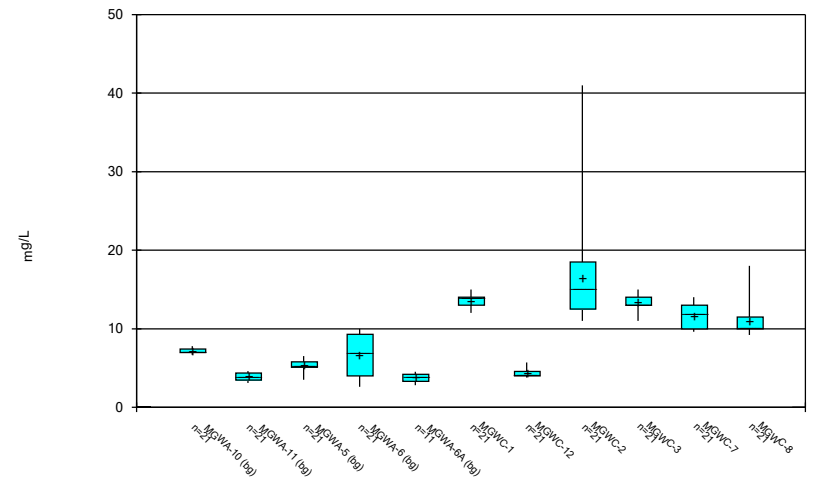
Constituent: Cadmium Analysis Run 9/26/2023 12:30 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



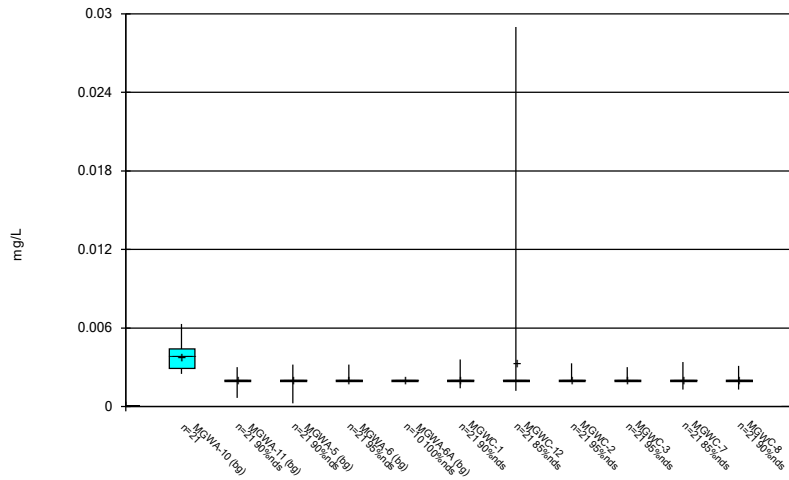
Constituent: Calcium Analysis Run 9/26/2023 12:30 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



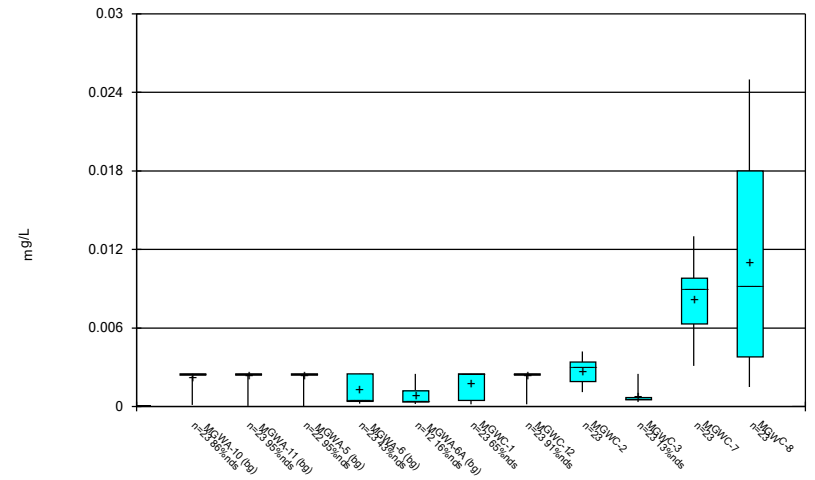
Constituent: Chloride Analysis Run 9/26/2023 12:30 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



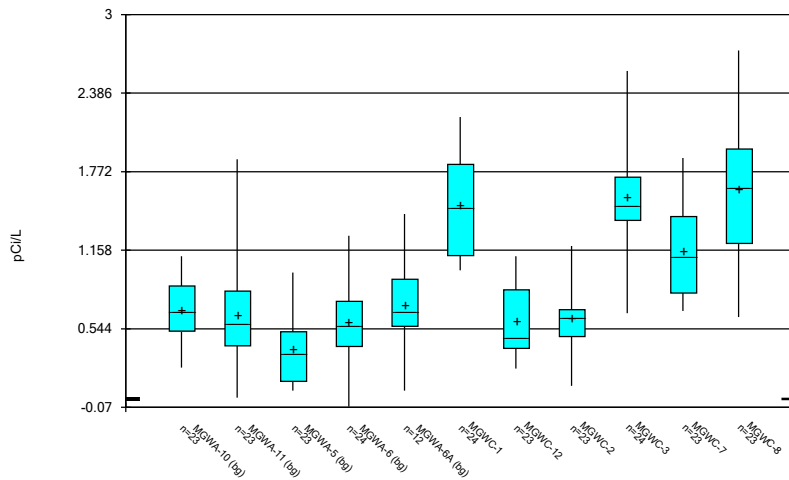
Constituent: Chromium Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



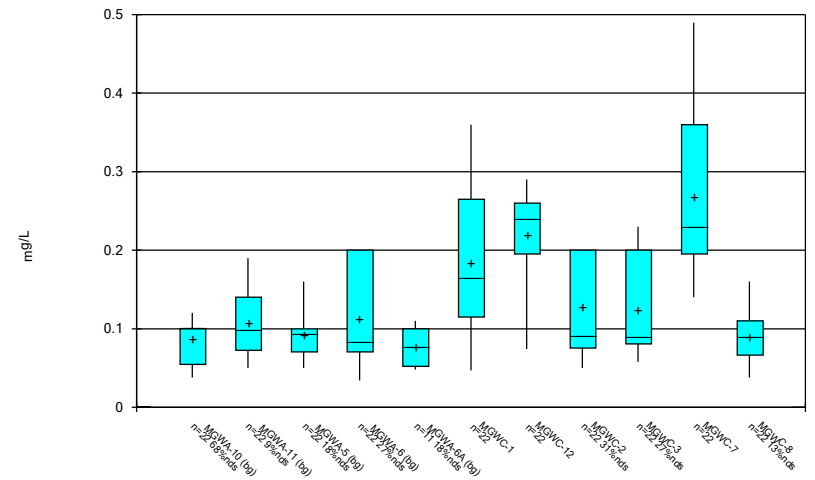
Constituent: Cobalt Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



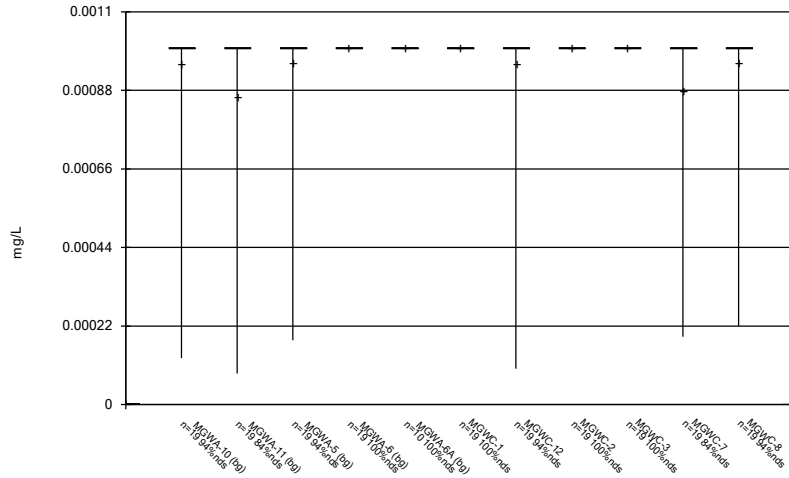
Constituent: Combined Radium 226 + 228 Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



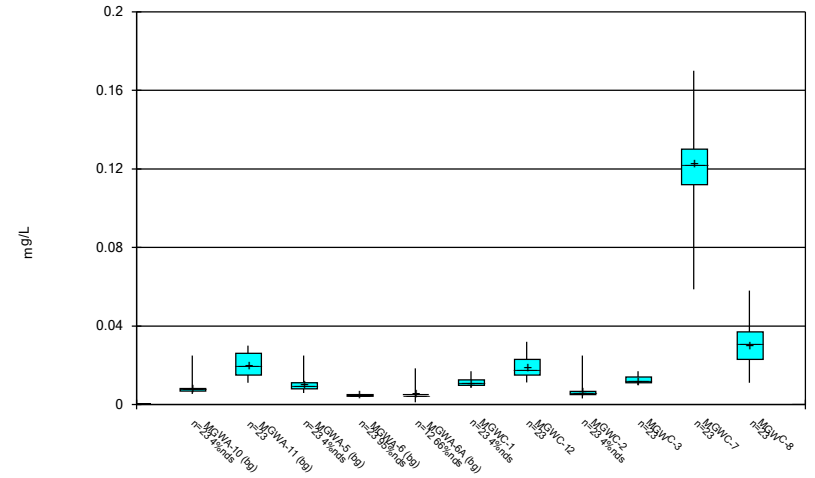
Constituent: Fluoride Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



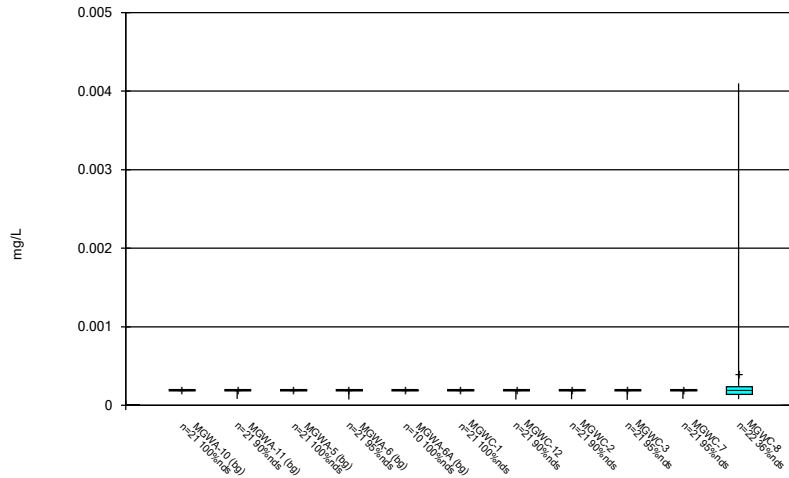
Constituent: Lead Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



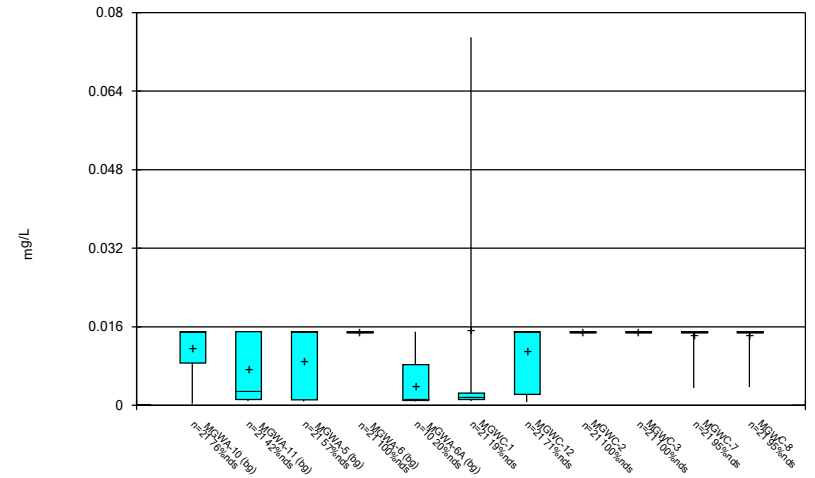
Constituent: Lithium Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



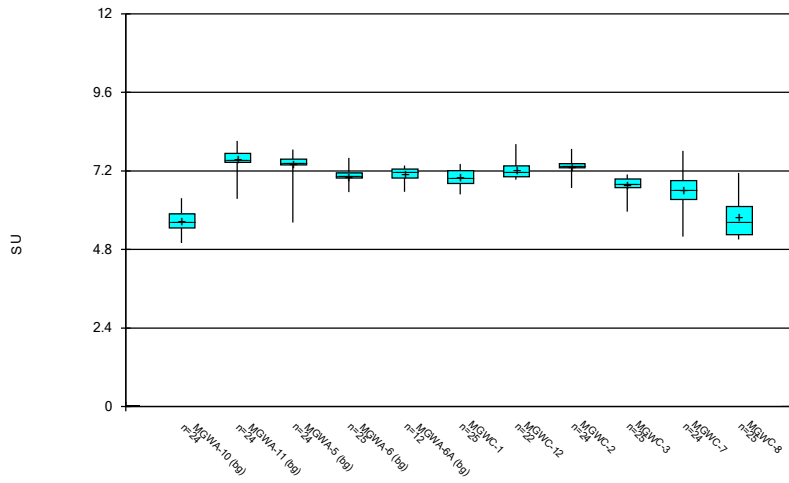
Constituent: Mercury Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



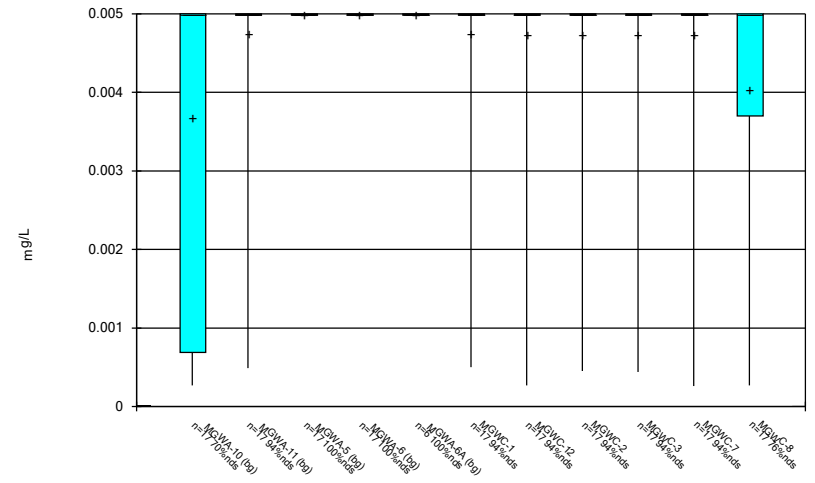
Constituent: Molybdenum Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



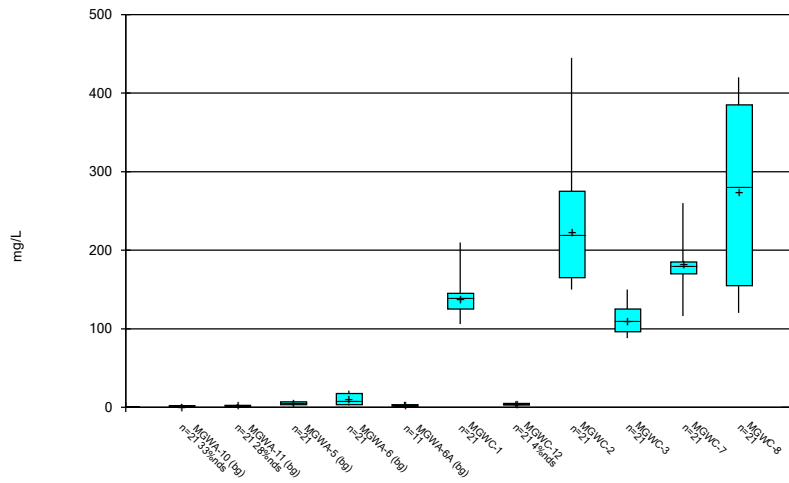
Constituent: pH Analysis Run 9/26/2023 12:30 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



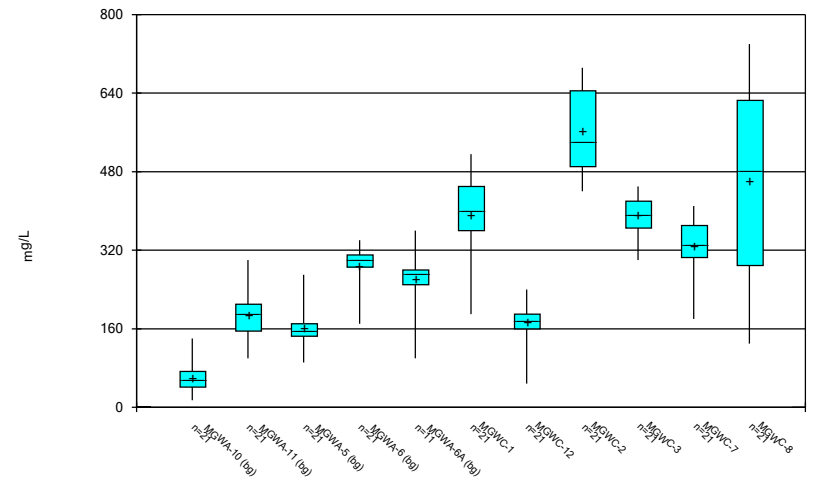
Constituent: Selenium Analysis Run 9/26/2023 12:31 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



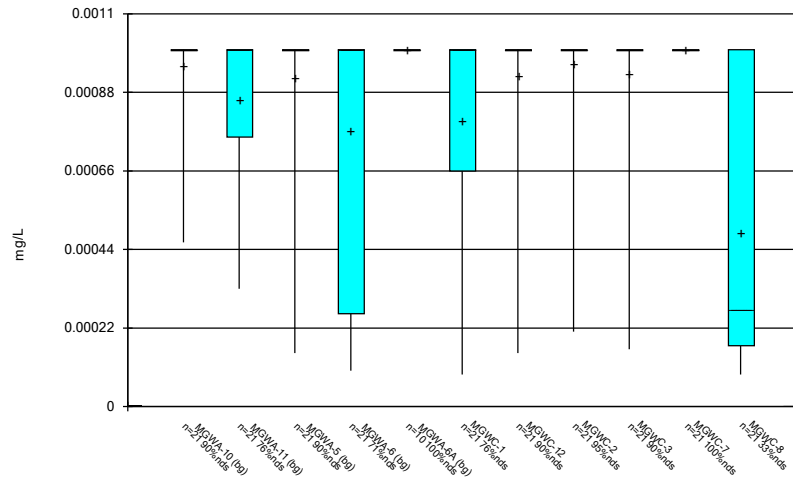
Constituent: Sulfate Analysis Run 9/26/2023 12:31 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



Constituent: TDS Analysis Run 9/26/2023 12:31 PM View: Descriptive
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Box & Whiskers Plot



Constituent: Thallium Analysis Run 9/26/2023 12:31 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

FIGURE C.

Outlier Summary

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/25/2023, 4:03 PM

MGWA-5 Cobalt (mg/L)
MGWC-12 pH (SU)

9/10/2019	10.96 (o)
9/16/2020	11.03 (o)
8/2/2022	0.012 (o)

FIGURE D.

Interwell Prediction Limits - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:42 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MGWC-1	0.18	n/a	8/1/2023	1.6	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-2	0.18	n/a	8/2/2023	1.8	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-3	0.18	n/a	8/1/2023	0.65	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-7	0.18	n/a	8/2/2023	2.2	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-8	0.18	n/a	8/1/2023	4.3	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Calcium (mg/L)	MGWC-3	110	n/a	8/1/2023	120	Yes	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-8	110	n/a	8/1/2023	120	Yes	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Chloride (mg/L)	MGWC-1	9.28	n/a	8/1/2023	13	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-2	9.28	n/a	8/2/2023	12	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-3	9.28	n/a	8/1/2023	12	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-7	9.28	n/a	8/2/2023	11	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-8	9.28	n/a	8/1/2023	13	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Fluoride (mg/L)	MGWC-12	0.19	n/a	8/2/2023	0.25	Yes	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-7	0.19	n/a	8/2/2023	0.2	Yes	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MGWC-1	17.27	n/a	8/1/2023	140	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-2	17.27	n/a	8/2/2023	150	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-3	17.27	n/a	8/1/2023	110	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-7	17.27	n/a	8/2/2023	200	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-8	17.27	n/a	8/1/2023	280	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-1	354.4	n/a	8/1/2023	450	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-2	354.4	n/a	8/2/2023	520	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-3	354.4	n/a	8/1/2023	420	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-7	354.4	n/a	8/2/2023	410	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-8	354.4	n/a	8/1/2023	570	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2

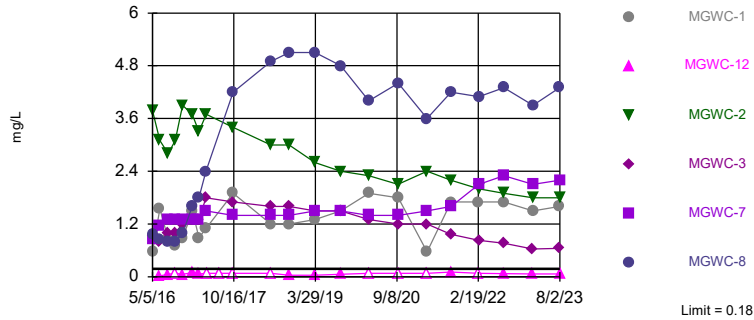
Interwell Prediction Limits - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:42 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	MGWC-1	0.18	n/a	8/1/2023	1.6	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-12	0.18	n/a	8/2/2023	0.062J	No	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-2	0.18	n/a	8/2/2023	1.8	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-3	0.18	n/a	8/1/2023	0.65	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-7	0.18	n/a	8/2/2023	2.2	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Boron (mg/L)	MGWC-8	0.18	n/a	8/1/2023	4.3	Yes	95	n/a	n/a	56.84	n/a	n/a	0.0002153	NP Inter (NDs) 1 of 2
Calcium (mg/L)	MGWC-1	110	n/a	8/1/2023	110	No	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-12	110	n/a	8/2/2023	31	No	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-2	110	n/a	8/2/2023	100	No	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-3	110	n/a	8/1/2023	120	Yes	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-7	110	n/a	8/2/2023	57	No	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Calcium (mg/L)	MGWC-8	110	n/a	8/1/2023	120	Yes	95	n/a	n/a	0	n/a	n/a	0.0002153	NP Inter (normality) 1 of 2
Chloride (mg/L)	MGWC-1	9.28	n/a	8/1/2023	13	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-12	9.28	n/a	8/2/2023	4.5	No	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-2	9.28	n/a	8/2/2023	12	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-3	9.28	n/a	8/1/2023	12	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-7	9.28	n/a	8/2/2023	11	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Chloride (mg/L)	MGWC-8	9.28	n/a	8/1/2023	13	Yes	95	2.325	0.3907	0	None	sqrt(x)	0.001254	Param Inter 1 of 2
Fluoride (mg/L)	MGWC-1	0.19	n/a	8/1/2023	0.15	No	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-12	0.19	n/a	8/2/2023	0.25	Yes	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-2	0.19	n/a	8/2/2023	0.087J	No	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-3	0.19	n/a	8/1/2023	0.1	No	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-7	0.19	n/a	8/2/2023	0.2	Yes	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
Fluoride (mg/L)	MGWC-8	0.19	n/a	8/1/2023	0.11	No	99	n/a	n/a	29.29	n/a	n/a	0.0001975	NP Inter (normality) 1 of 2
pH (SU)	MGWC-1	8.12	5	8/1/2023	7.3	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
pH (SU)	MGWC-12	8.12	5	8/2/2023	7.2	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
pH (SU)	MGWC-2	8.12	5	8/2/2023	7.31	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
pH (SU)	MGWC-3	8.12	5	8/1/2023	7.09	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
pH (SU)	MGWC-7	8.12	5	8/2/2023	6.9	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
pH (SU)	MGWC-8	8.12	5	8/1/2023	6.77	No	109	n/a	n/a	0	n/a	n/a	0.0003339	NP Inter (normality) 1 of 2
Sulfate (mg/L)	MGWC-1	17.27	n/a	8/1/2023	140	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-12	17.27	n/a	8/2/2023	4.6	No	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-2	17.27	n/a	8/2/2023	150	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-3	17.27	n/a	8/1/2023	110	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-7	17.27	n/a	8/2/2023	200	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
Sulfate (mg/L)	MGWC-8	17.27	n/a	8/1/2023	280	Yes	95	0.9031	1.054	13.68	None	ln(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-1	354.4	n/a	8/1/2023	450	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-12	354.4	n/a	8/2/2023	200	No	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-2	354.4	n/a	8/2/2023	520	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-3	354.4	n/a	8/1/2023	420	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-7	354.4	n/a	8/2/2023	410	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2
TDS (mg/L)	MGWC-8	354.4	n/a	8/1/2023	570	Yes	95	184.5	92.03	0	None	No	0.001254	Param Inter 1 of 2

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit
Interwell Non-parametric

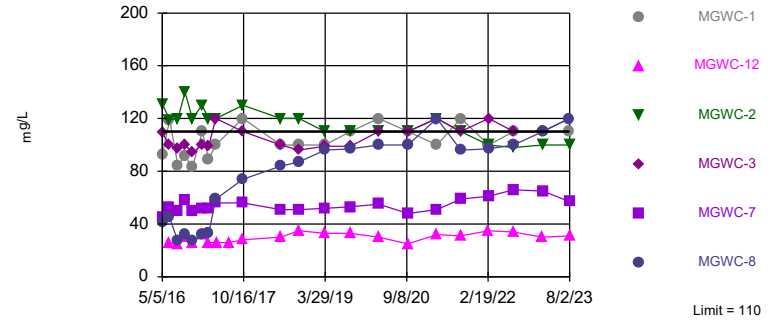


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 95 background values. 56.84% NDs. Annual per-constituent alpha = 0.00258. Individual comparison alpha = 0.0002153 (1 of 2). Comparing 6 points to limit.

Constituent: Boron Analysis Run 9/26/2023 12:38 PM View: PLs
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Exceeds Limit: MGWC-3, MGWC-8

Prediction Limit
Interwell Non-parametric

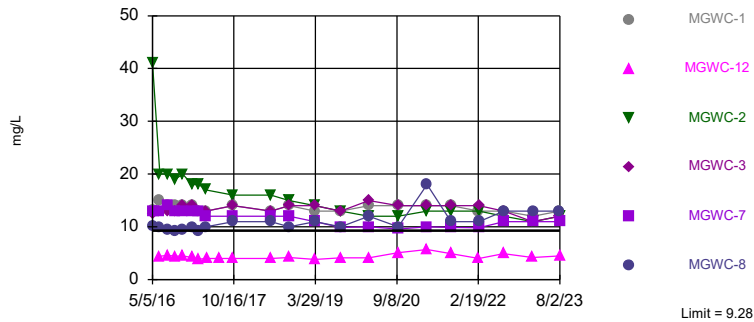


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 95 background values. Annual per-constituent alpha = 0.00258. Individual comparison alpha = 0.0002153 (1 of 2). Comparing 6 points to limit.

Constituent: Calcium Analysis Run 9/26/2023 12:38 PM View: PLs
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit
Interwell Parametric

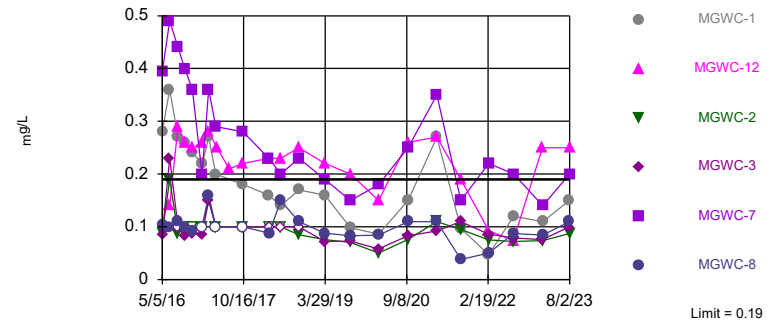


Background Data Summary (based on square root transformation): Mean=2.325, Std. Dev.=0.3907, n=95. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9694, critical = 0.965. Kappa = 1.846 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: Chloride Analysis Run 9/26/2023 12:38 PM View: PLs
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Exceeds Limit: MGWC-12, MGWC-7

Prediction Limit
Interwell Non-parametric

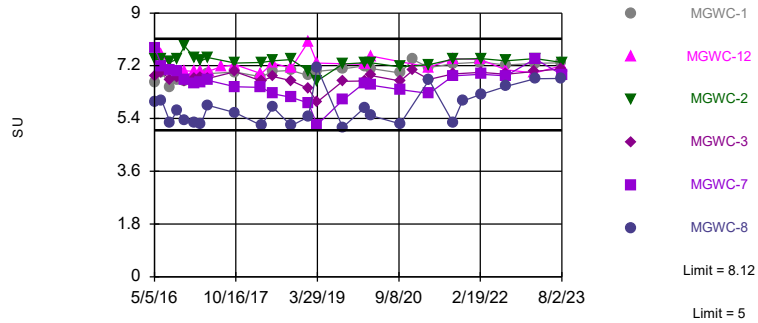


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 99 background values. 29.29% NDs. Annual per-constituent alpha = 0.002368. Individual comparison alpha = 0.0001975 (1 of 2). Comparing 6 points to limit.

Constituent: Fluoride Analysis Run 9/26/2023 12:38 PM View: PLs
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Within Limits

Prediction Limit
Interwell Non-parametric

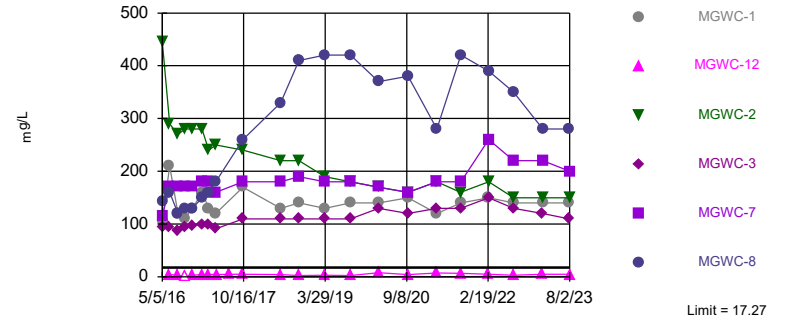


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 109 background values. Annual per-constituent alpha = 0.004004. Individual comparison alpha = 0.0003339 (1 of 2). Comparing 6 points to limit.

Constituent: pH Analysis Run 9/26/2023 12:38 PM View: PLS
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Exceeds Limit: MGWC-1, MGWC-2, MGWC-3, MGWC-7, MGWC-8

Prediction Limit
Interwell Parametric

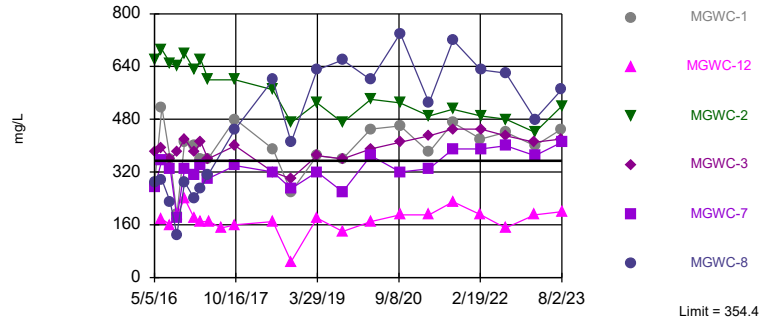


Background Data Summary (based on natural log transformation): Mean=0.9031, Std. Dev.=1.054, n=95, 13.68% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9697, critical = 0.965. Kappa = 1.846 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: Sulfate Analysis Run 9/26/2023 12:38 PM View: PLS
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=184.5, Std. Dev.=92.03, n=95. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9668, critical = 0.965. Kappa = 1.846 (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 9/26/2023 12:38 PM View: PLS
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs

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-2	MGWC-1	MGWA-11 (bg)
5/5/2016	<0.08	0.976	0.157	0.855	<0.08				
5/6/2016						0.926	3.78	0.567	
6/20/2016	0.011 (J)				0.013 (J)				0.017 (J)
6/21/2016		0.862	0.124	1.15		0.792	3.1	1.55	
8/15/2016	0.022 (J)	0.8	0.18	1.3	0.023 (J)				0.032 (J)
8/16/2016						1	2.8	0.85	
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	3.9	0.88	<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	3.3	0.89	<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	3.4	1.9	0.025 (J)
6/12/2018	<0.08				<0.08				<0.08
6/13/2018		4.9	0.11	1.4		1.6	3	1.2	
10/9/2018	<0.08				<0.08				<0.08
10/10/2018		5.1	0.096 (J)	1.4		1.6	3	1.2	
1/29/2019									
3/25/2019	<0.08				<0.08				<0.08
3/26/2019		5.1	0.079 (J)	1.5		1.5	2.6	1.3	
9/10/2019	<0.08	4.8	0.097	1.5	<0.08	1.5	2.4	1.5	<0.08
3/9/2020	0.045 (J)								<0.08
3/10/2020		4	0.051 (J)	1.4	<0.08	1.3	2.3	1.9	
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	2.4	0.57	
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			1.8	1.5	
8/1/2023	0.035 (J)	4.3	0.057 (J)		0.037 (J)	0.65		1.6	0.045 (J)
8/2/2023				2.2			1.8		

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs
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		
8/1/2023		0.038 (J)
8/2/2023	0.062 (J)	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs

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-2	MGWC-1	MGWA-11 (bg)
5/5/2016	8.83	41.2	105	45	27				
5/6/2016						109	131	92.5	
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	120	84	
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	120	83	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	120	89	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	130	120	39
6/12/2018	4.8				25				26
6/13/2018		84	100	51		100	120	100	
10/9/2018	4.5				29				29
10/10/2018		87	100	51		96	120	100	
1/29/2019									
3/25/2019	4.6				27				37
3/26/2019		96	100	52		99	110	100	
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	110	120	
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	120	100	
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			100	110	
8/1/2023	3.9	120	110		28	120		110	39
8/2/2023				57			100		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs
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		
8/1/2023		110
8/2/2023	31	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs

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-2	MGWC-1	MGWA-11 (bg)
5/5/2016	7.35	10.1	9.67	13	6.51				
5/6/2016						12.5	41	13.2	
6/20/2016	7				5.9				4.3
6/21/2016		10	9.2	13		13	20	15	
8/15/2016	7.5	9.5	10	14	6.4				4.1
8/16/2016						13	20	14	
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	20	14	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	18	13	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	16	14	3.4
6/12/2018	6.7				5.1				4.6
6/13/2018		11	7	12		13	16	13	
10/9/2018	7.1				5.6				4.5
10/10/2018		10	6.9	12		14	15	14	
1/29/2019									
3/25/2019	6.8				4.7				3.4
3/26/2019		11	5.8	11		14	14	13	
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	12	14	
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	13	14	
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			11	12	
8/1/2023	7.4	13	3.3		5.2	12		13	3.3
8/2/2023				11			12		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs
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		
8/1/2023		3.4
8/2/2023	4.5	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWC-7	MGWA-6 (bg)	MGWA-5 (bg)	MGWC-8	MGWC-2	MGWC-1	MGWC-3	MGWA-11 (bg)
5/5/2016	0.046 (J)	0.394	0.091 (J)	0.132 (J)	0.103 (J)				
5/6/2016						0.088 (J)	0.28 (J)	0.086 (J)	
6/20/2016	<0.1			0.05 (J)					0.06 (J)
6/21/2016		0.49	0.08 (J)		0.1 (J)	0.19 (J)	0.36	0.23 (J)	
8/15/2016	<0.1	0.44	<0.1	0.1 (J)	0.11 (J)				0.1 (J)
8/16/2016						0.087 (J)	0.27	<0.1	
9/28/2016	<0.1	0.4	0.084 (J)	0.11 (J)	0.1 (J)		0.26		0.097 (J)
9/29/2016						<0.1		0.082 (J)	
11/16/2016	<0.1	0.36	0.084 (J)	0.093 (J)	0.091 (J)	<0.1	0.24	0.087 (J)	0.12 (J)
1/16/2017	<0.1								
1/17/2017		0.2	0.099 (J)	0.095 (J)	<0.1			0.086 (J)	0.11 (J)
1/18/2017						<0.1			
1/19/2017							0.22		
3/2/2017	0.12 (J)	0.36	0.15 (J)	0.16 (J)	0.16 (J)	0.15 (J)	0.27	0.15 (J)	0.18 (J)
4/18/2017	<0.1	0.29	<0.1	<0.1	<0.1		0.2	<0.1	0.11 (J)
4/19/2017						<0.1			
4/25/2017									
7/13/2017									0.12 (J)
10/10/2017	<0.1	0.28	<0.1	<0.1	<0.1	<0.1	0.18 (J)	<0.1	0.086 (J)
3/29/2018	<0.1	0.23	<0.1	0.084 (J)			0.16 (J)		<0.1
3/30/2018					0.088 (J)	<0.1		<0.1	
6/12/2018	<0.1			<0.1					0.16 (J)
6/13/2018		0.2	<0.1		0.15 (J)	<0.1	0.14 (J)	<0.1	
10/9/2018	<0.1			0.086 (J)					0.16 (J)
10/10/2018		0.23	<0.1		0.11 (J)	0.085 (J)	0.17 (J)	<0.1	
1/29/2019									
3/25/2019	<0.1			0.072 (J)					0.087 (J)
3/26/2019		0.19 (J)	0.065 (J)		0.088 (J)	0.076 (J)	0.16	0.072 (J)	
9/10/2019	0.044 (J)	0.15	0.076 (J)	0.068 (J)	0.083 (J)	0.07 (J)	0.098 (J)	0.073 (J)	0.075 (J)
3/9/2020	0.061 (J)								0.19
3/10/2020		0.18	0.045 (J)	0.055 (J)	0.084 (J)	0.05 (J)	0.086 (J)	0.058 (J)	
9/16/2020	0.042 (J)		0.076 (J)	0.08 (J)		0.076 (J)			0.18
9/17/2020		0.25			0.11		0.15	0.083 (J)	
3/23/2021	0.038 (J)		0.082 (J)						0.081 (J)
3/24/2021		0.35		0.091 (J)	0.11	0.11	0.27	0.092 (J)	
8/23/2021	0.048 (J)								0.12
8/24/2021			0.1	0.1		0.095 (J)		0.11	
8/25/2021		0.15			0.038 (J)		0.097 (J)		
2/22/2022	<0.1		0.034 (J)	<0.1			0.047 (J)		<0.1
2/23/2022		0.22			0.05 (J)	0.075 (J)		0.086 (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		0.14			0.084 (J)	0.074 (J)	0.11		
8/1/2023	<0.1		0.084 (J)	0.094 (J)	0.11		0.15	0.1	0.094 (J)
8/2/2023		0.2				0.087 (J)			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs
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		
8/1/2023		0.081 (J)
8/2/2023	0.25	

Prediction Limit

Constituent: pH (SU) Analysis Run 9/26/2023 12:42 PM View: PLs
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWC-8	MGWA-6 (bg)	MGWC-7	MGWA-5 (bg)	MGWC-2	MGWC-3	MGWC-1	MGWA-11 (bg)
5/5/2016	5.94	5.96	7.13	7.81	7.4				
5/6/2016						7.41	6.85	6.64	
6/20/2016	5.84 (D)				7.63				7.82
6/21/2016		6	7.25	7.2		7.41	6.98	6.99	
8/15/2016	5.65	5.26	7.04	7.04	7.54				7.52
8/16/2016						7.33	6.73	6.48	
9/28/2016	5.72	5.66	7.09	7	7.45			6.7	7.66
9/29/2016						7.42	6.81		
11/16/2016	5.65	5.33	7.6	6.73	7.39	7.87	6.69	6.66	7.51
1/16/2017	5.52								
1/17/2017		5.24	6.99	6.61	7.23		6.77		7.52
1/18/2017						7.49			
1/19/2017								6.81	
3/2/2017	5.53	5.21	6.95	6.62	7.55	7.37	6.79	6.75	7.5
4/18/2017	5.64	5.85	7.02	6.7	7.43		6.77	6.93	7.75
4/19/2017						7.48			
4/25/2017									
7/13/2017									7.72
10/10/2017		5.6	7.27	6.48	5.62	7.29	7	6.99	
10/11/2017	6.11								6.35
3/29/2018	5.35		6.95	6.46	7.19			6.82	7.42
3/30/2018		5.16				7.31	6.68		
6/12/2018	6.23				7.55				8.02
6/13/2018		5.79	7.08	6.24		7.37	6.83	7.01	
10/9/2018	5.62 (D)				7.8 (D)				7.79 (D)
10/10/2018		5.15 (D)	7.01 (D)	6.12 (D)		7.41 (D)	6.69 (D)	7.04 (D)	
1/28/2019	5.49 (D)								7.4 (D)
1/29/2019		5.46 (D)	6.55 (D)	5.93 (D)	7.63 (D)	7.03 (D)	6.42 (D)	6.87 (D)	
3/25/2019	5.27 (D)				7.44 (D)				7.29 (D)
3/26/2019		7.14 (D)	6.57 (D)	5.19 (D)		6.68 (D)	5.96 (D)	7.01 (D)	
9/10/2019	5.97	5.1	6.99	6.03	7.41	7.26	6.67	7.09	7.54
1/28/2020	5.78		7.17	6.61	7.46				7.4
1/29/2020		5.76				7.3	6.68	7.19	
3/9/2020	5.46								7.58
3/10/2020		5.5	7	6.54	7.3	7.3	6.87	7.11	
9/16/2020	6.37		6.98		7.38	7.16			7.89
9/17/2020		5.22		6.39			6.68	6.95	
12/7/2020			7.2						
12/8/2020							7.04	7.41	
3/23/2021	5		6.74						7.06
3/24/2021		6.71		6.26	6.88	7.24	6.73	7.14	
8/23/2021	6.16								8.12
8/24/2021			7.11		7.78	7.42	6.92		
8/25/2021		5.26		6.85				7.27	
10/26/2021		5.99							
2/22/2022	5.38		7.14		7.57			7.32	7.6
2/23/2022		6.22		6.91		7.44	6.98		
8/2/2022	5.41		7.1		7.45				7.57
8/3/2022				6.86			6.91	7.23	
8/4/2022		6.5				7.37			
2/7/2023	5.46		7.13		7.85		7.01		7.72
2/8/2023		6.76		7.43		7.44		7.28	

Prediction Limit

Constituent: pH (SU) Analysis Run 9/26/2023 12:42 PM View: PLs
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWA-10 (bg)	MGWC-8	MGWA-6 (bg)	MGWC-7	MGWA-5 (bg)	MGWC-2	MGWC-3	MGWC-1	MGWA-11 (bg)
8/1/2023	5.46	6.77	7.14		7.52		7.09	7.3	7.61
8/2/2023				6.9		7.31			

Prediction Limit

Constituent: pH (SU) Analysis Run 9/26/2023 12:42 PM View: PLs
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: pH (SU) Analysis Run 9/26/2023 12:42 PM View: PLs
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWA-6A (bg)
8/1/2023		7.2
8/2/2023	7.2	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs

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-2	MGWC-1	MGWA-11 (bg)
5/5/2016	2.46	144	17.8	116	4.47				
5/6/2016						94.2	445	106	
6/20/2016	2.5				7.7				1
6/21/2016		160	17	170		95	290	210	
8/15/2016	1.9	120	20	170	7.5				0.73 (J)
8/16/2016						88	270	120	
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	280	130	<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	240	130	<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	240	170	0.87 (J)
6/12/2018	0.82 (J)				3.8				4.1
6/13/2018		330	8.7	180		110	220	130	
10/9/2018	0.82 (J)				6.7				2.2
10/10/2018		410	8.7	190		110	220	140	
1/29/2019									
3/25/2019	<1				3.4 (J)				<1
3/26/2019		420	6.3 (J)	180		110	190	130	
9/10/2019	1.1	420	5.6	180	4.7	110	180	140	1.8
3/9/2020	4.2								3.4
3/10/2020		370	5	170	5.2	130	170	140	
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	180	120	
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			150	140	
8/1/2023	0.56 (J)	280	3.2		2.9	110		140	1
8/2/2023				200			150		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs
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		
8/1/2023		4
8/2/2023	4.6	

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs

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-2	MGWC-1	MGWA-11 (bg)
5/5/2016	78	287	281	272	129				
5/6/2016						380	661	282	
6/20/2016	80				156				188
6/21/2016		297	303	356		392	692	516	
8/15/2016	58	230	310	330	160				180
8/16/2016						360	650	360	
9/28/2016	29	130	170	180	91			190	100
9/29/2016						380	640		
11/16/2016	140	290	340	330	250	420	680	410	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	660	360	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	600	480	210
6/12/2018	62				180				150
6/13/2018		600	230	320		320	570	390	
10/9/2018	68				170				150
10/10/2018		410	300	270		300	470	260	
1/29/2019									
3/25/2019	54				150				210
3/26/2019		630	290	320		370	530	370	
9/10/2019	14	660	260	260	110	360	470	360	160
3/9/2020	56								190
3/10/2020		600	300	370	170	390	540	450	
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	490	380	
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			440	400	
8/1/2023	57	570	330		170	420		450	300
8/2/2023				410			520		

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 9/26/2023 12:42 PM View: PLs
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		
8/1/2023		360
8/2/2023	200	

FIGURE E.

Appendix III Trend Tests - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:47 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)	-0.01744	-146	-87	Yes	21	19.05	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-2	-0.2577	-157	-87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-7	0.1234	161	87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-8	0.5334	94	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-10 (bg)	-0.3721	-120	-87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWC-8	12.82	162	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-5 (bg)	-0.1829	-118	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6 (bg)	-1.104	-180	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6A (bg)	-0.3253	-41	-34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-2	-1.414	-177	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-7	-0.5069	-131	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-8	0.4189	113	87	Yes	21	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-7	-0.03419	-138	-92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-10 (bg)	-0.1441	-110	-87	Yes	21	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-5 (bg)	-0.655	-144	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6 (bg)	-2.751	-168	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-2	-22.11	-180	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-3	6.234	139	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-7	5.303	102	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-8	36.82	106	87	Yes	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-2	-31.09	-148	-87	Yes	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-8	64.38	114	87	Yes	21	0	n/a	n/a	0.01	NP

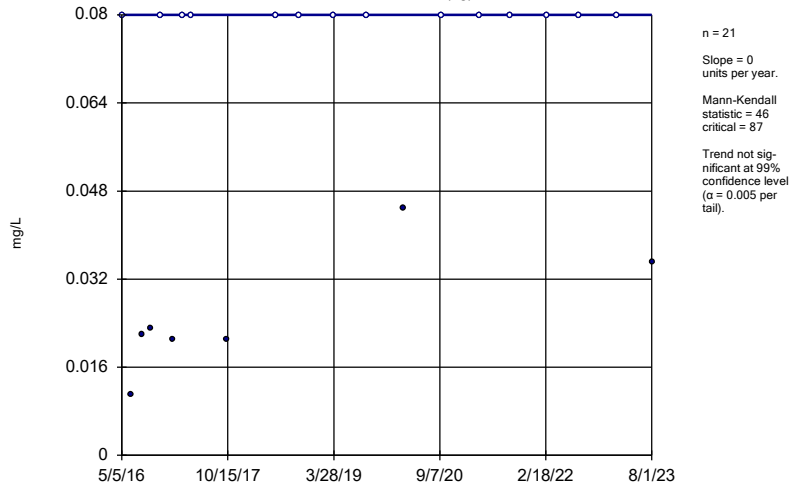
Appendix III Trend Tests - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:47 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-10 (bg)	0	46	87	No	21	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-11 (bg)	0	7	87	No	21	57.14	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-5 (bg)	0	0	87	No	21	80.95	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-6 (bg)	-0.01744	-146	-87	Yes	21	19.05	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-6A (bg)	0	-15	-34	No	11	63.64	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-1	0.1222	86	87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-2	-0.2577	-157	-87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-3	-0.05072	-47	-87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-7	0.1234	161	87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-8	0.5334	94	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-10 (bg)	-0.3721	-120	-87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-11 (bg)	0.1578	20	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-5 (bg)	-0.1849	-41	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-6 (bg)	0	52	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-6A (bg)	2.58	22	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWC-3	2.033	83	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWC-8	12.82	162	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-10 (bg)	0	15	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-11 (bg)	-0.05994	-35	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-5 (bg)	-0.1829	-118	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6 (bg)	-1.104	-180	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6A (bg)	-0.3253	-41	-34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-1	0	-63	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-2	-1.414	-177	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-3	0	18	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-7	-0.5069	-131	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-8	0.4189	113	87	Yes	21	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-10 (bg)	0	-32	-92	No	22	68.18	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-11 (bg)	-0.003001	-22	-92	No	22	9.091	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-5 (bg)	-0.003922	-64	-92	No	22	18.18	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6 (bg)	-0.004687	-62	-92	No	22	27.27	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6A (bg)	0.001044	3	34	No	11	18.18	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-12	-0.01043	-62	-92	No	22	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-7	-0.03419	-138	-92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-10 (bg)	-0.1441	-110	-87	Yes	21	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-11 (bg)	0.115	46	87	No	21	28.57	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-5 (bg)	-0.655	-144	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6 (bg)	-2.751	-168	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6A (bg)	0.1028	4	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-1	2.229	51	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-2	-22.11	-180	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-3	6.234	139	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-7	5.303	102	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-8	36.82	106	87	Yes	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-10 (bg)	-2.607	-41	-87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-11 (bg)	5.017	46	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-5 (bg)	1.841	26	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6 (bg)	0	-18	-87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6A (bg)	5.112	6	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-1	11.69	56	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-2	-31.09	-148	-87	Yes	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-3	6.863	70	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-7	11.6	85	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-8	64.38	114	87	Yes	21	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

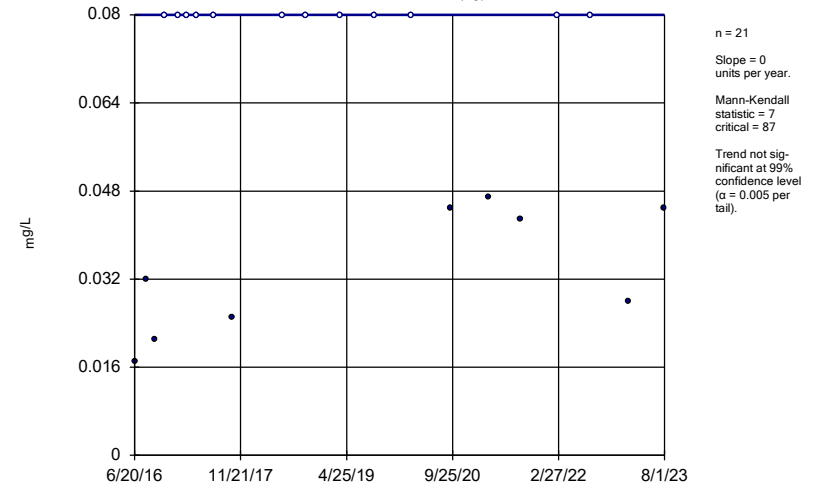
MGWA-10 (bg)



Constituent: Boron Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

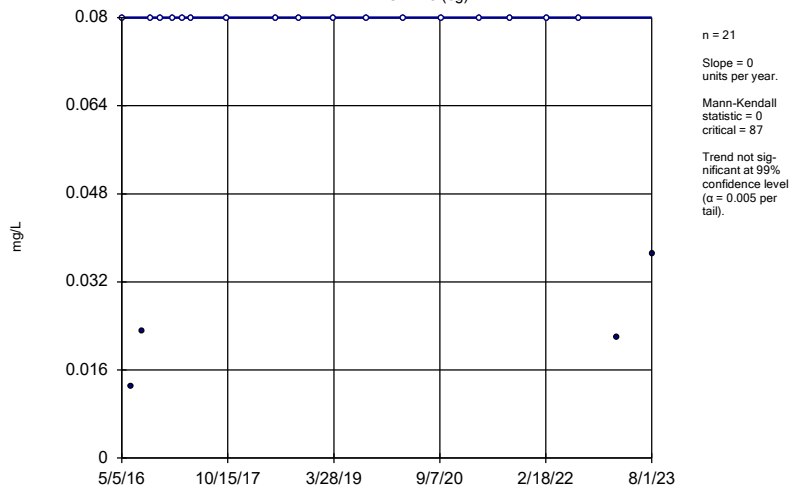
MGWA-11 (bg)



Constituent: Boron Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

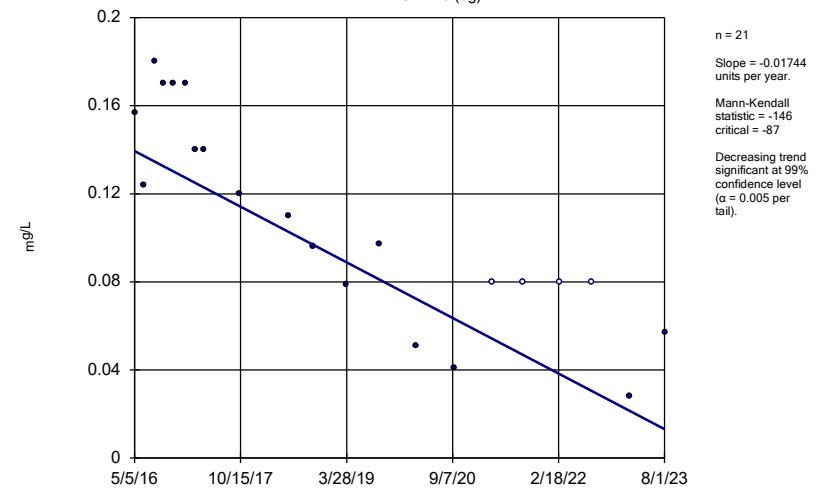
MGWA-5 (bg)



Constituent: Boron Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

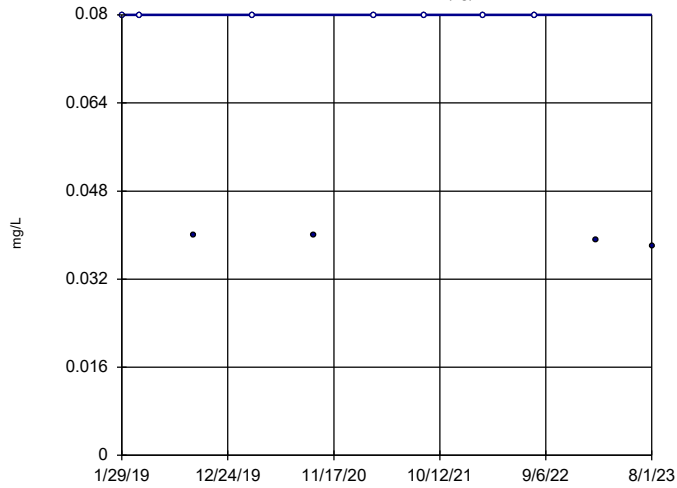
MGWA-6 (bg)



Constituent: Boron Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-6A (bg)

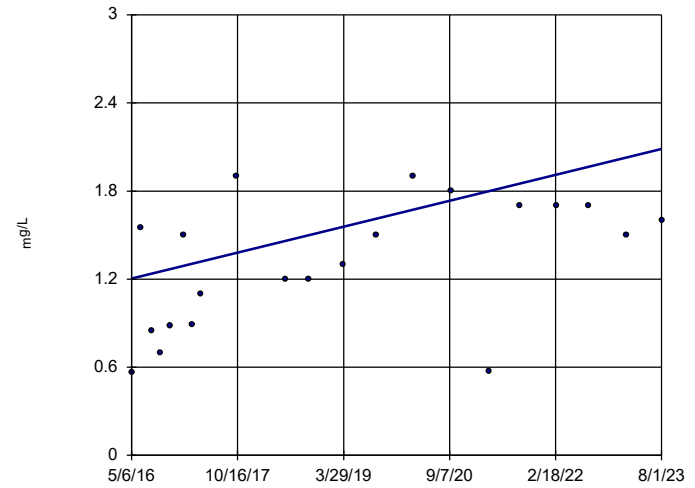


n = 11
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = -15
 critical = -34
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-1

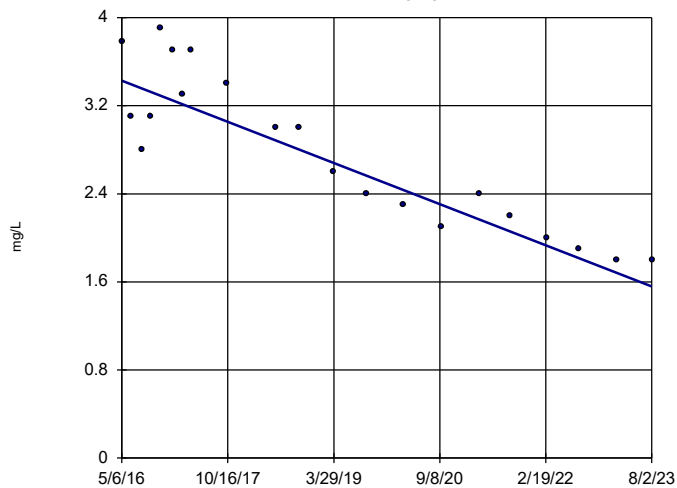


n = 21
 Slope = 0.1222
 units per year.
 Mann-Kendall
 statistic = 86
 critical = 87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-2

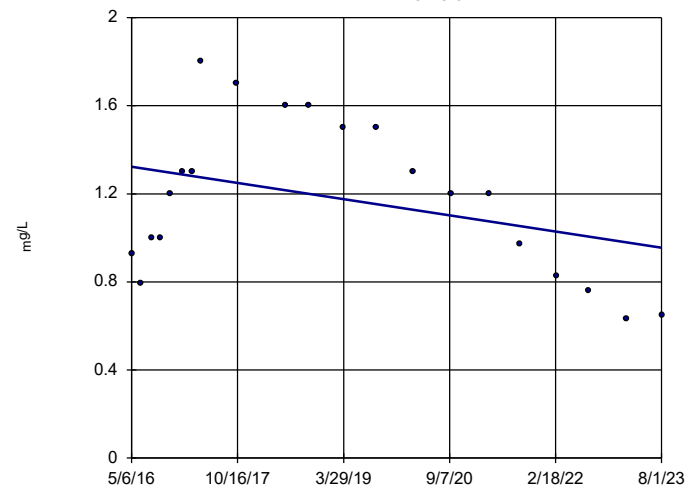


n = 21
 Slope = -0.2577
 units per year.
 Mann-Kendall
 statistic = -157
 critical = -87
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-3

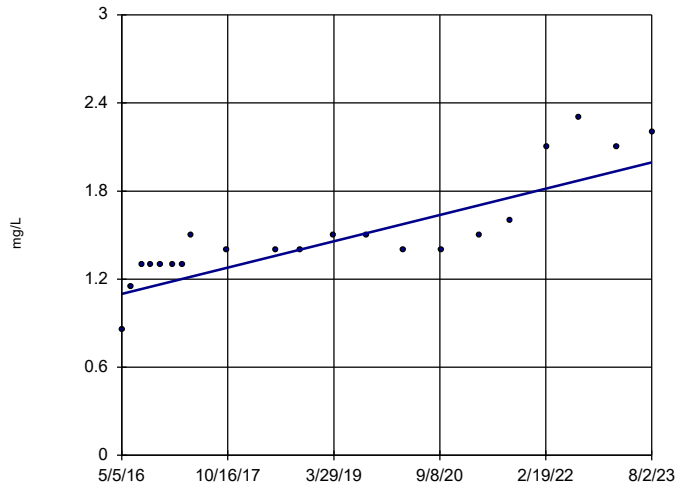


n = 21
 Slope = -0.05072
 units per year.
 Mann-Kendall
 statistic = -47
 critical = -87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-7

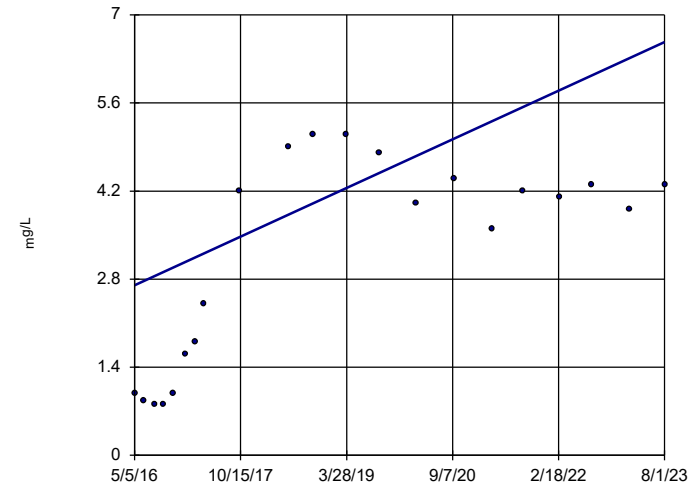


n = 21
 Slope = 0.1234
 units per year.
 Mann-Kendall
 statistic = 161
 critical = 87
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-8

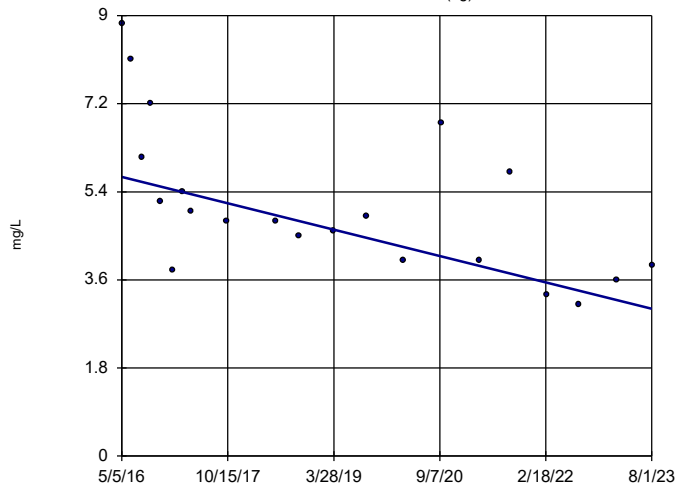


n = 21
 Slope = 0.5334
 units per year.
 Mann-Kendall
 statistic = 94
 critical = 87
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-10 (bg)

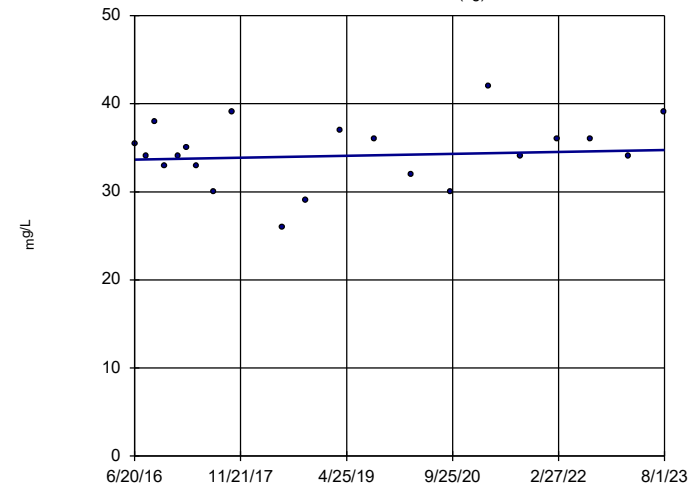


n = 21
 Slope = -0.3721
 units per year.
 Mann-Kendall
 statistic = -120
 critical = -87
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-11 (bg)

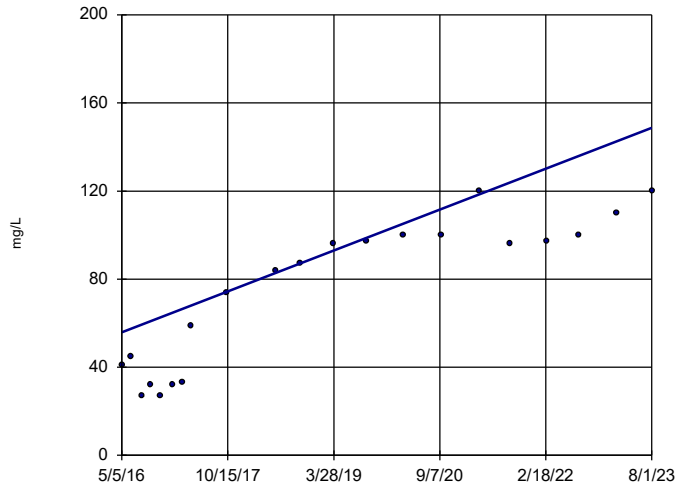


n = 21
 Slope = 0.1578
 units per year.
 Mann-Kendall
 statistic = 20
 critical = 87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-8

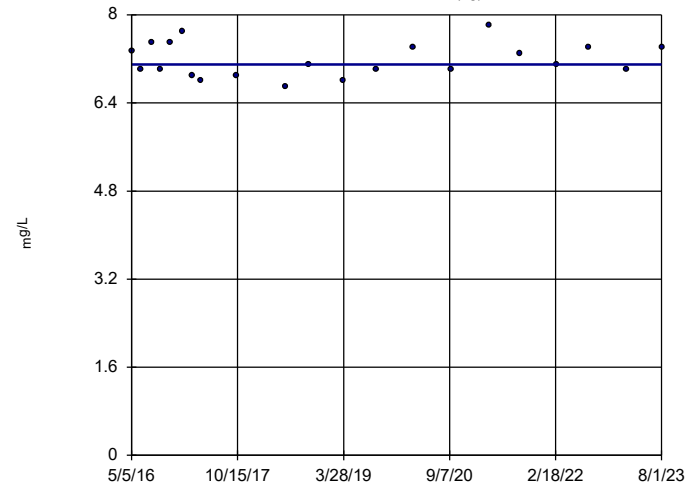


n = 21
 Slope = 12.82
 units per year.
 Mann-Kendall
 statistic = 162
 critical = 87
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-10 (bg)

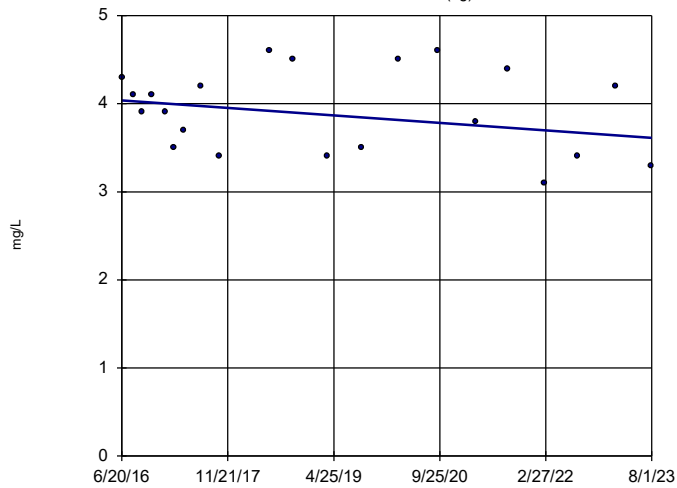


n = 21
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 15
 critical = 87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-11 (bg)

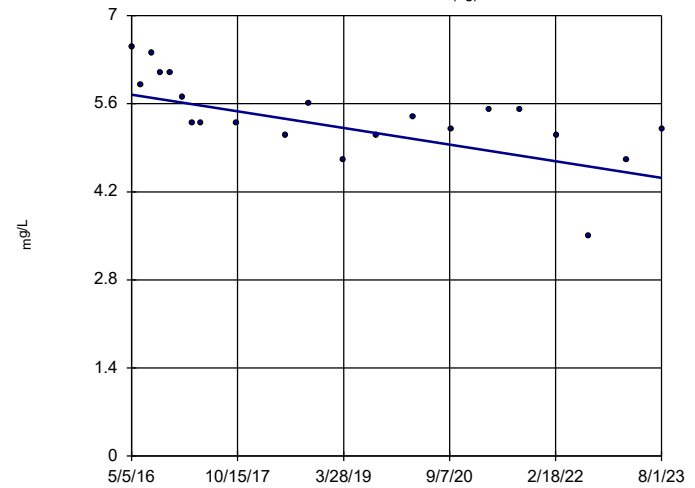


n = 21
 Slope = -0.05994
 units per year.
 Mann-Kendall
 statistic = -35
 critical = -87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-5 (bg)

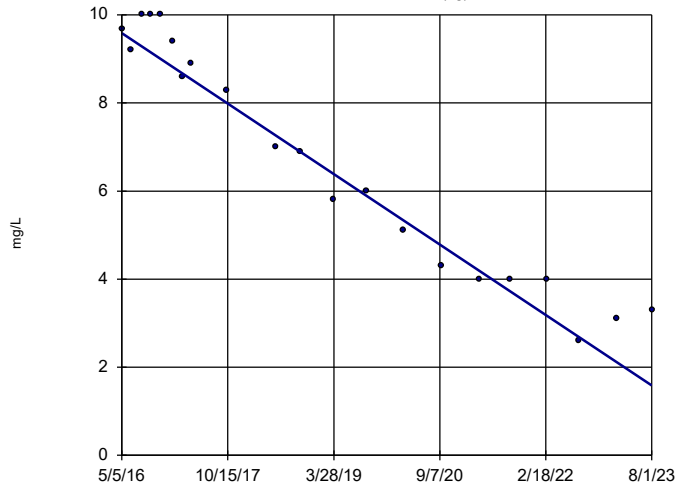


n = 21
 Slope = -0.1829
 units per year.
 Mann-Kendall
 statistic = -118
 critical = -87
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-6 (bg)

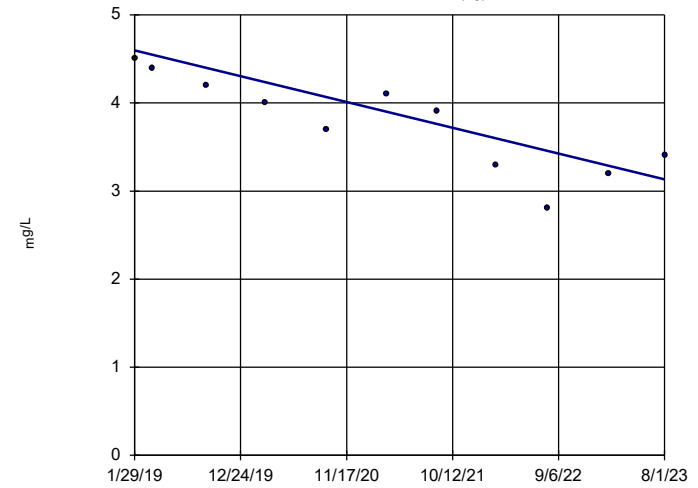


n = 21
 Slope = -1.104
 units per year.
 Mann-Kendall
 statistic = -180
 critical = -87
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-6A (bg)

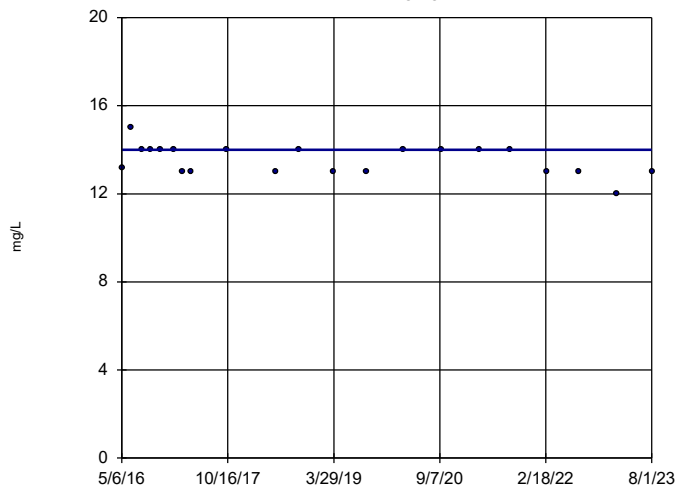


n = 11
 Slope = -0.3253
 units per year.
 Mann-Kendall
 statistic = -41
 critical = -34
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-1

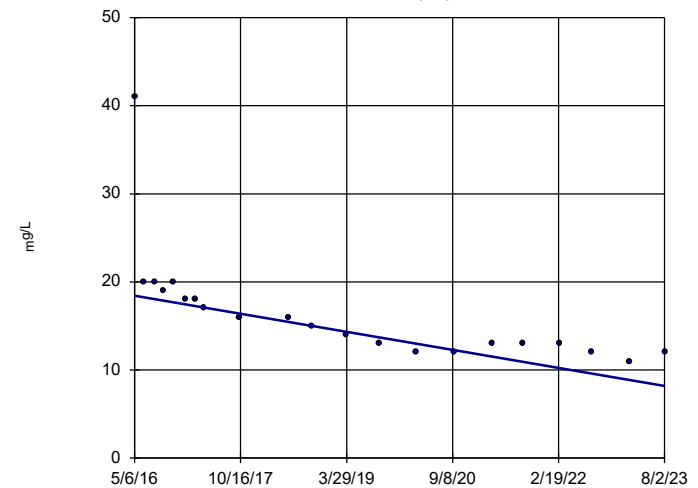


n = 21
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = -63
 critical = -87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-2

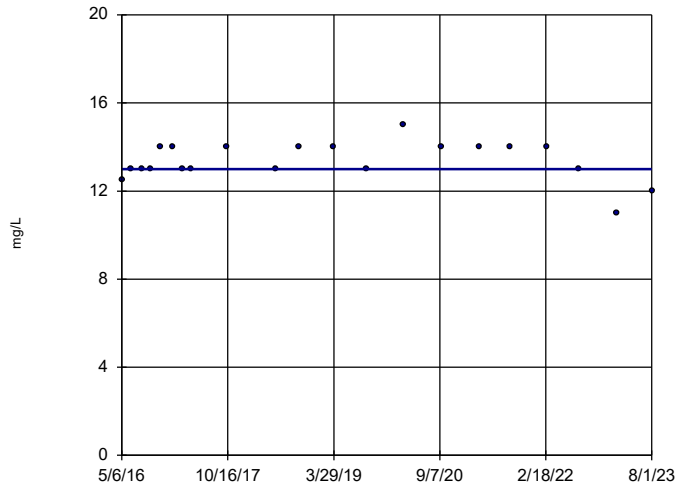


n = 21
 Slope = -1.414
 units per year.
 Mann-Kendall
 statistic = -177
 critical = -87
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

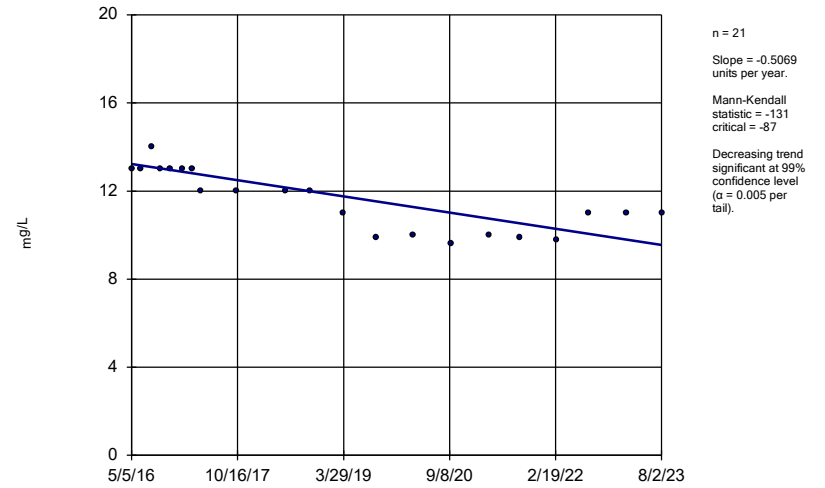
MGWC-3



Constituent: Chloride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

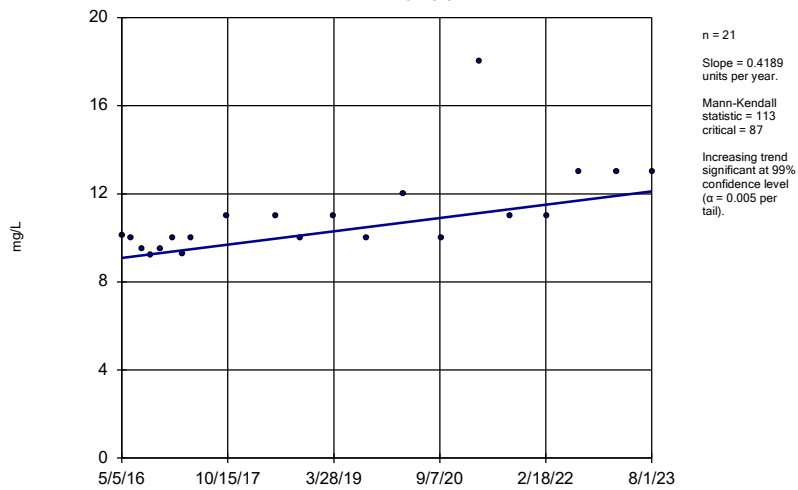
MGWC-7



Constituent: Chloride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

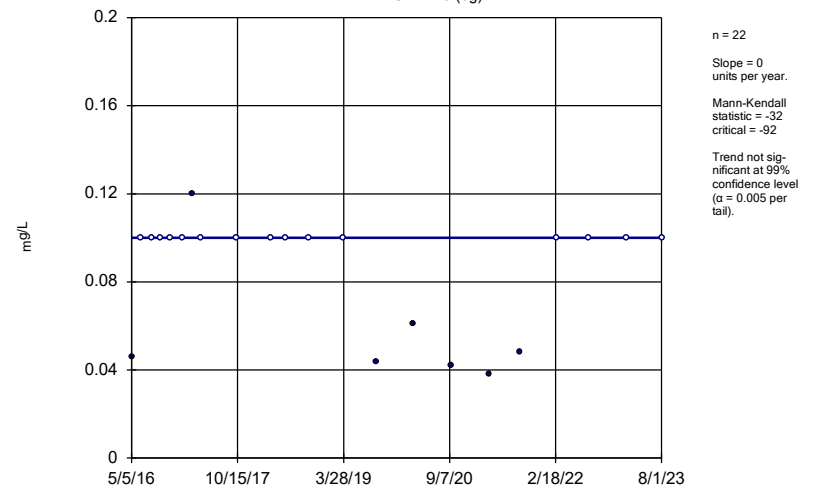
MGWC-8



Constituent: Chloride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

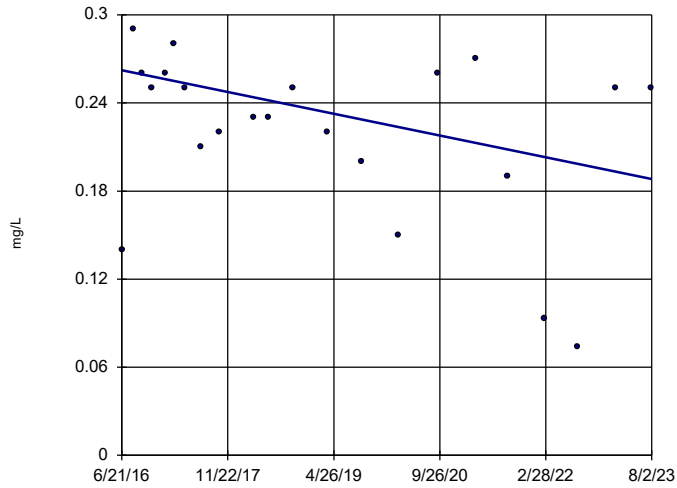
MGWA-10 (bg)



Constituent: Fluoride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-12

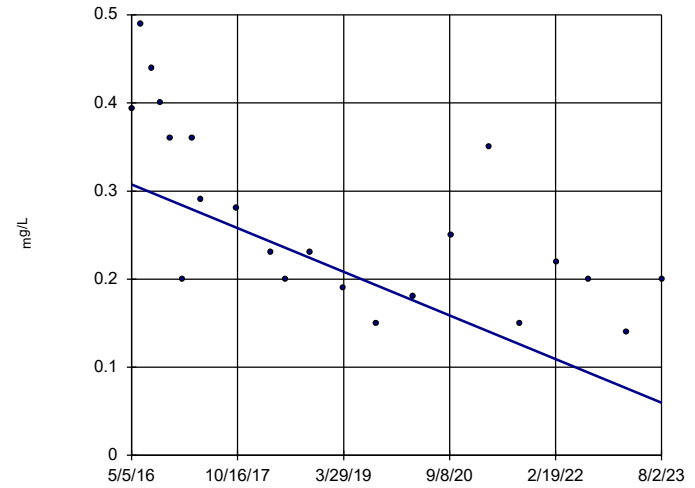


n = 22
 Slope = -0.01043
 units per year.
 Mann-Kendall
 statistic = -62
 critical = -92
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Fluoride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-7

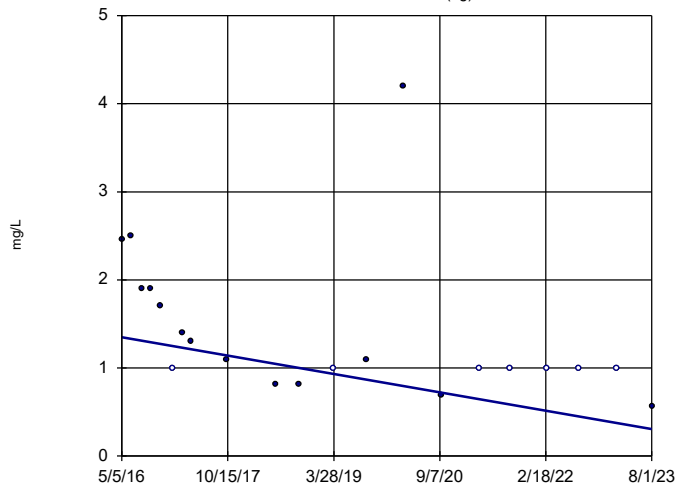


n = 22
 Slope = -0.03419
 units per year.
 Mann-Kendall
 statistic = -138
 critical = -92
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Fluoride Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-10 (bg)

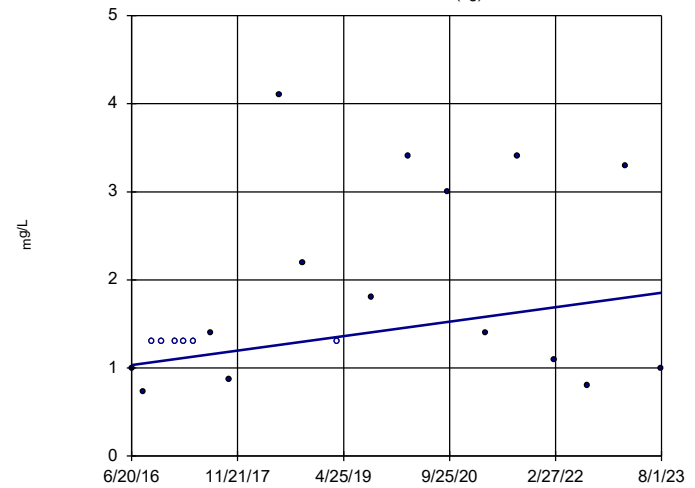


n = 21
 Slope = -0.1441
 units per year.
 Mann-Kendall
 statistic = -110
 critical = -87
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-11 (bg)

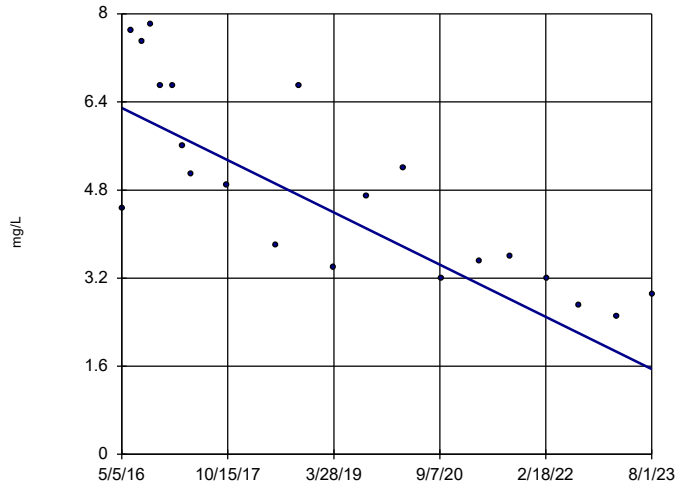


n = 21
 Slope = 0.115
 units per year.
 Mann-Kendall
 statistic = 46
 critical = 87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-5 (bg)

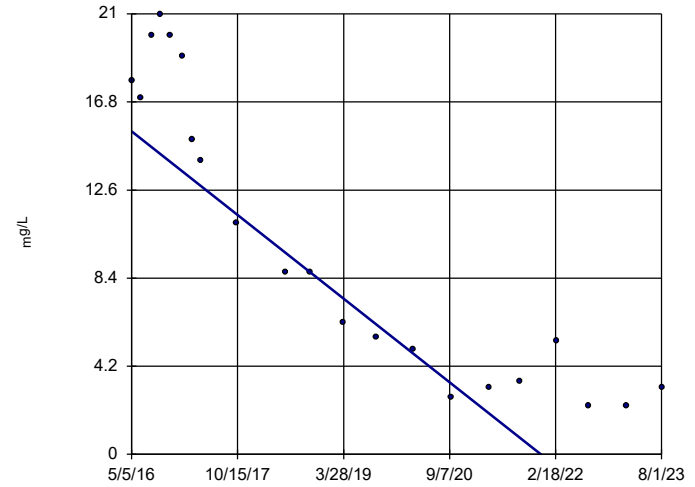


n = 21
 Slope = -0.655
 units per year.
 Mann-Kendall
 statistic = -144
 critical = -87
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-6 (bg)

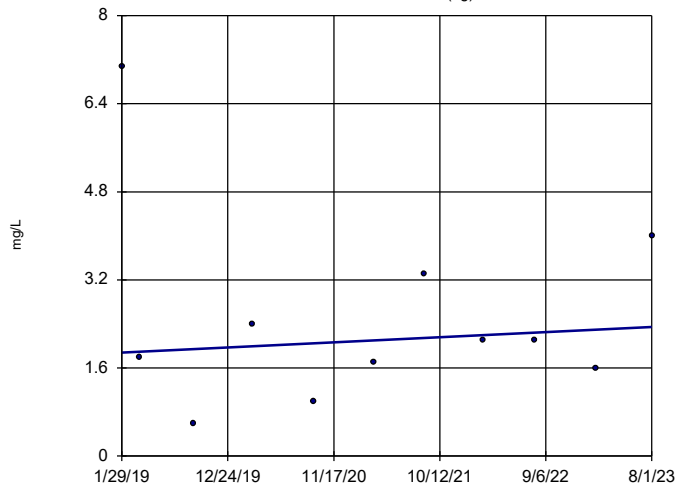


n = 21
 Slope = -2.751
 units per year.
 Mann-Kendall
 statistic = -168
 critical = -87
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

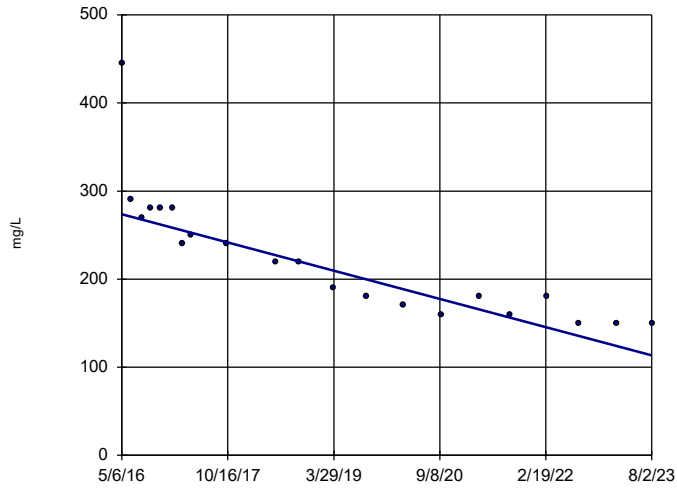
Sen's Slope Estimator

MGWA-6A (bg)



Sen's Slope Estimator

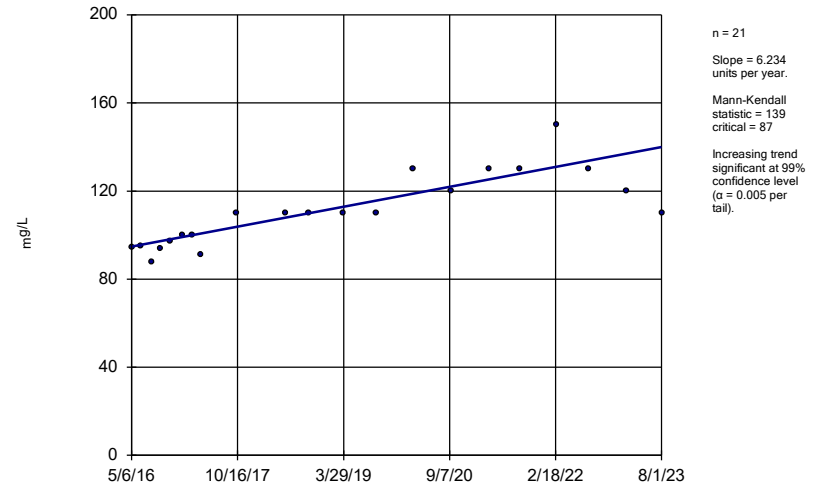
MGWC-2



Constituent: Sulfate Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

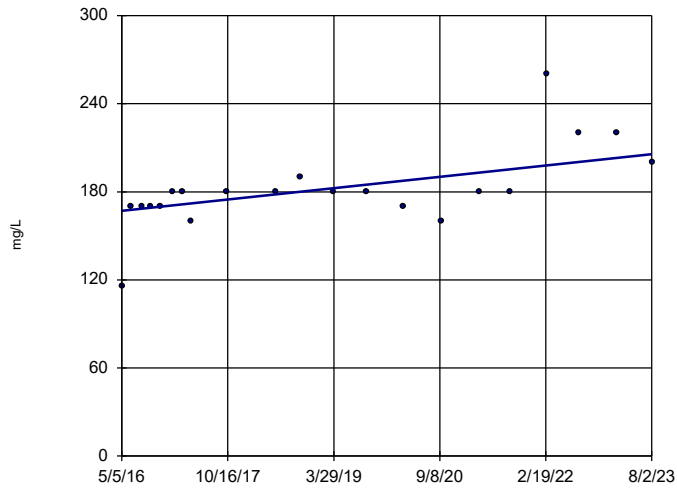
MGWC-3



Constituent: Sulfate Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

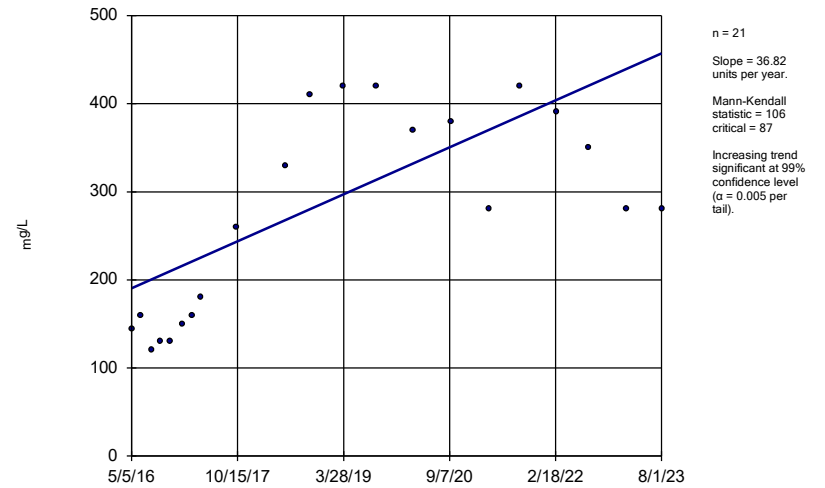
MGWC-7



Constituent: Sulfate Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

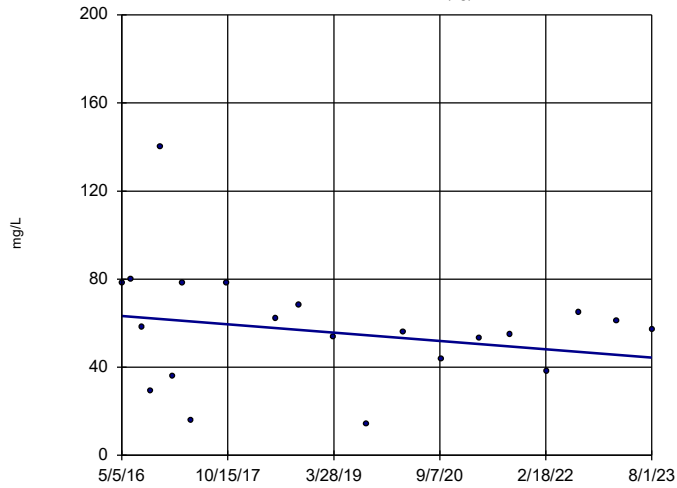
MGWC-8



Constituent: Sulfate Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

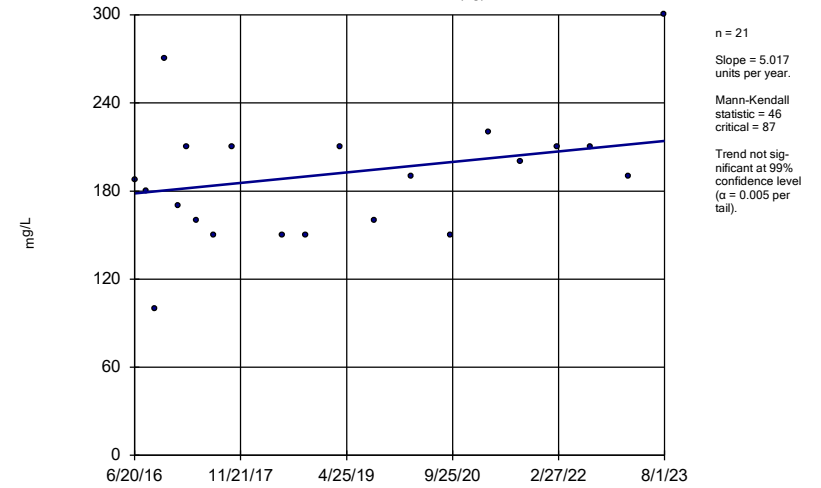
MGWA-10 (bg)



Constituent: TDS Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

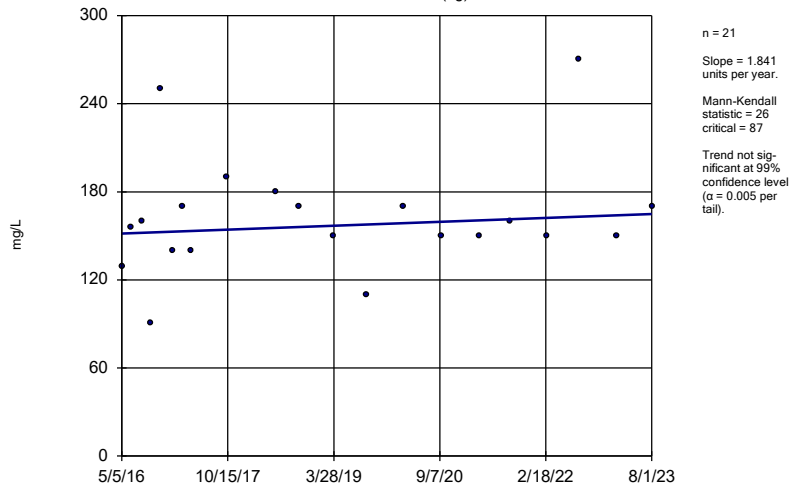
MGWA-11 (bg)



Constituent: TDS Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

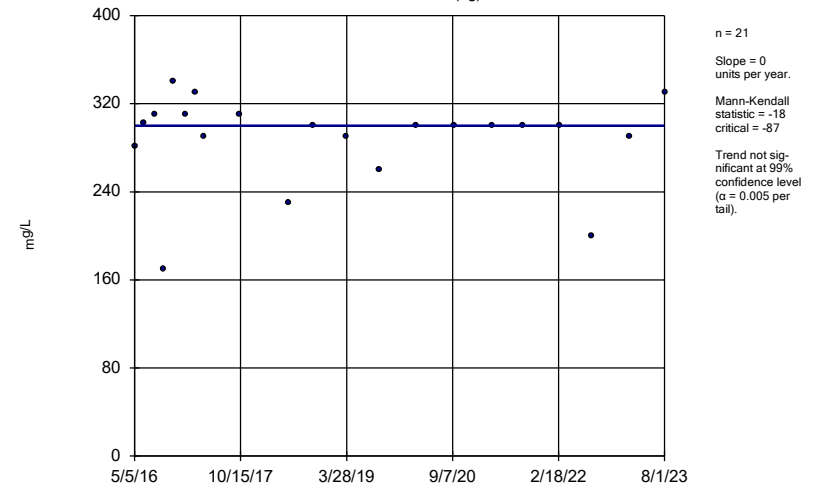
MGWA-5 (bg)



Constituent: TDS Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

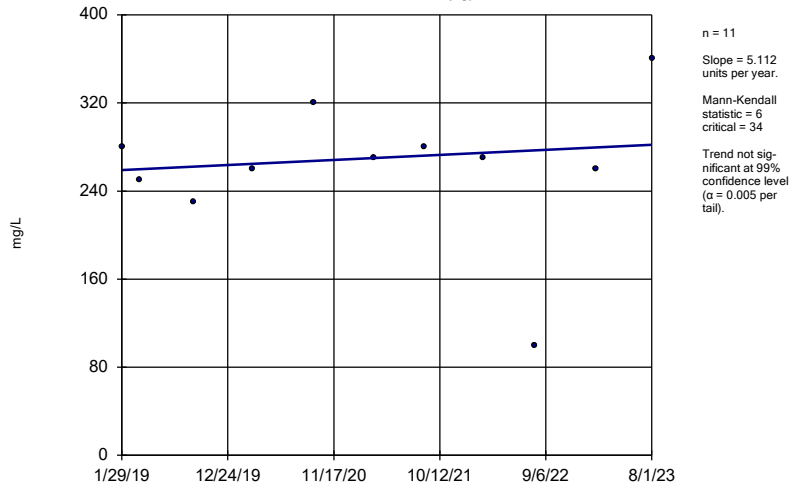
MGWA-6 (bg)



Constituent: TDS Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

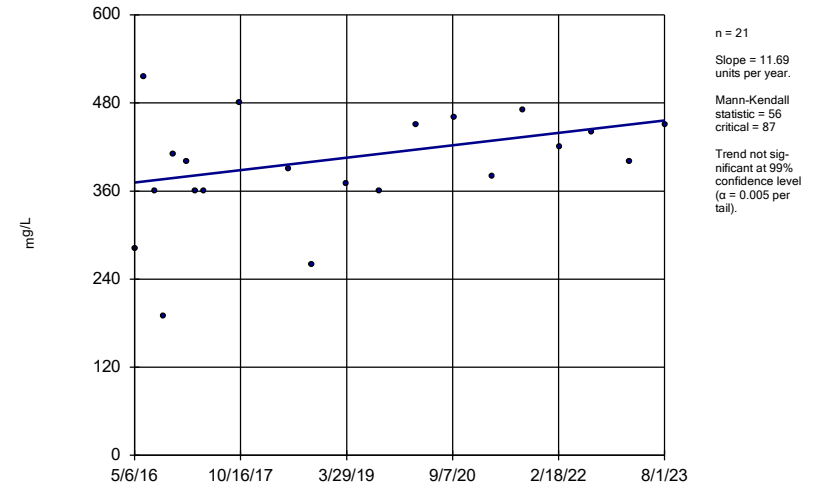
MGWA-6A (bg)



Constituent: TDS Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

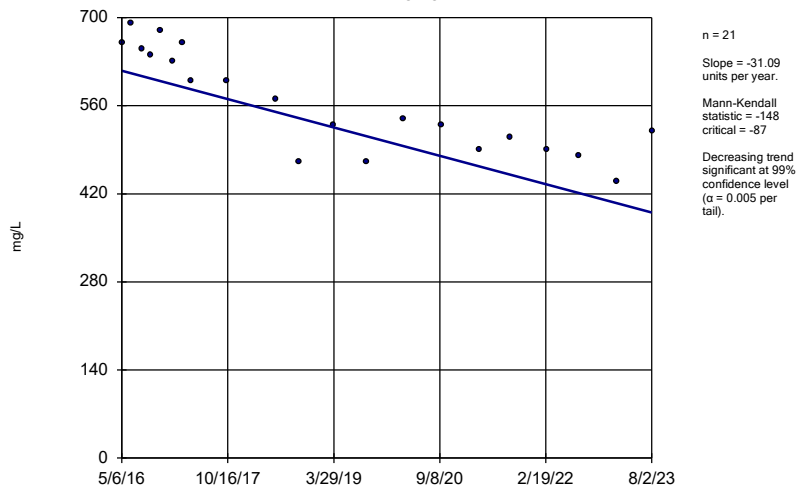
MGWC-1



Constituent: TDS Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

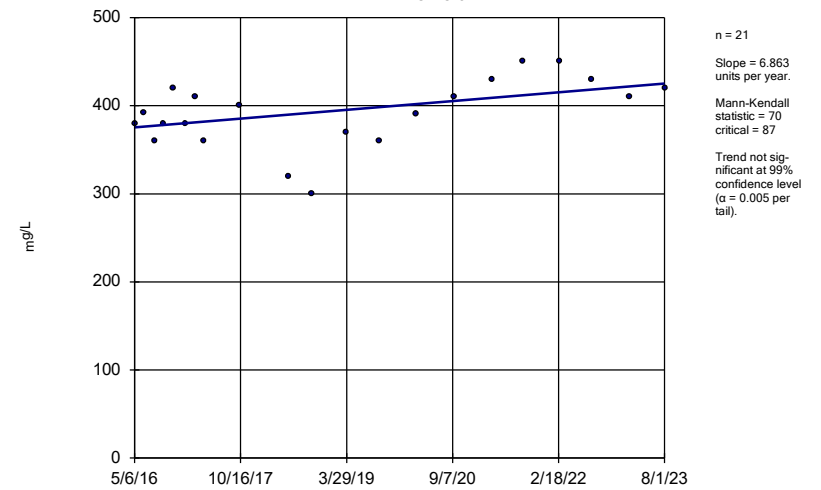
MGWC-2



Constituent: TDS Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

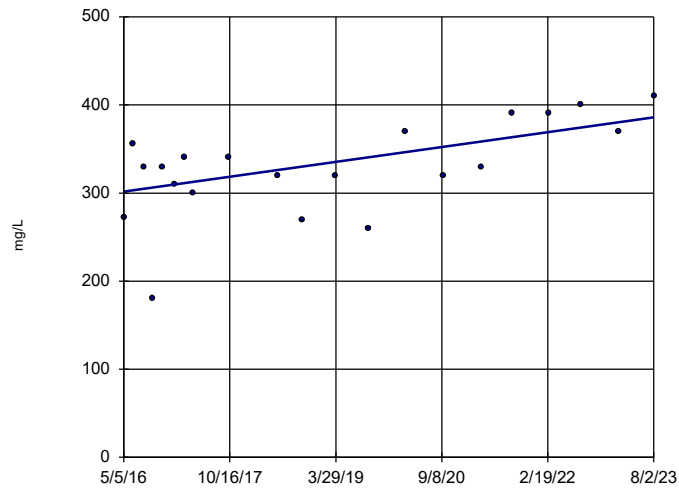
MGWC-3



Constituent: TDS Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-7

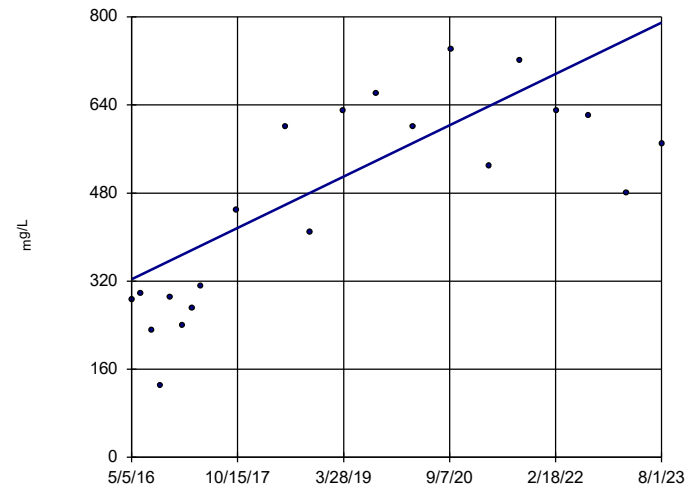


n = 21
Slope = 11.6
units per year.
Mann-Kendall
statistic = 85
critical = 87
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: TDS Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWC-8



n = 21
Slope = 64.38
units per year.
Mann-Kendall
statistic = 114
critical = 87
Increasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: TDS Analysis Run 9/26/2023 12:44 PM View: Trend Tests - App III
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Appendix III Trend Tests - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:47 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MGWA-10 (bg)	0	46	87	No	21	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-11 (bg)	0	7	87	No	21	57.14	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-5 (bg)	0	0	87	No	21	80.95	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-6 (bg)	-0.01744	-146	-87	Yes	21	19.05	n/a	n/a	0.01	NP
Boron (mg/L)	MGWA-6A (bg)	0	-15	-34	No	11	63.64	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-1	0.1222	86	87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-2	-0.2577	-157	-87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-3	-0.05072	-47	-87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-7	0.1234	161	87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	MGWC-8	0.5334	94	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-10 (bg)	-0.3721	-120	-87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-11 (bg)	0.1578	20	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-5 (bg)	-0.1849	-41	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-6 (bg)	0	52	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWA-6A (bg)	2.58	22	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWC-3	2.033	83	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MGWC-8	12.82	162	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-10 (bg)	0	15	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-11 (bg)	-0.05994	-35	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-5 (bg)	-0.1829	-118	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6 (bg)	-1.104	-180	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWA-6A (bg)	-0.3253	-41	-34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-1	0	-63	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-2	-1.414	-177	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-3	0	18	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-7	-0.5069	-131	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MGWC-8	0.4189	113	87	Yes	21	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-10 (bg)	0	-32	-92	No	22	68.18	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-11 (bg)	-0.003001	-22	-92	No	22	9.091	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-5 (bg)	-0.003922	-64	-92	No	22	18.18	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6 (bg)	-0.004687	-62	-92	No	22	27.27	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWA-6A (bg)	0.001044	3	34	No	11	18.18	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-12	-0.01043	-62	-92	No	22	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MGWC-7	-0.03419	-138	-92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-10 (bg)	-0.1441	-110	-87	Yes	21	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-11 (bg)	0.115	46	87	No	21	28.57	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-5 (bg)	-0.655	-144	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6 (bg)	-2.751	-168	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWA-6A (bg)	0.1028	4	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-1	2.229	51	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-2	-22.11	-180	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-3	6.234	139	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-7	5.303	102	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MGWC-8	36.82	106	87	Yes	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-10 (bg)	-2.607	-41	-87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-11 (bg)	5.017	46	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-5 (bg)	1.841	26	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6 (bg)	0	-18	-87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWA-6A (bg)	5.112	6	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-1	11.69	56	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-2	-31.09	-148	-87	Yes	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-3	6.863	70	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-7	11.6	85	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	MGWC-8	64.38	114	87	Yes	21	0	n/a	n/a	0.01	NP

FIGURE F.

Upper Tolerance Limits

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/25/2023, 4:16 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.002	n/a	n/a	n/a	86	91.86	n/a	0.01214	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.014	n/a	n/a	n/a	96	36.46	n/a	0.007269	NP Inter(normality)
Barium (mg/L)	n/a	0.13	n/a	n/a	n/a	104	0	n/a	0.004822	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0025	n/a	n/a	n/a	94	94.68	n/a	0.008054	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	104	99.04	n/a	0.004822	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0063	n/a	n/a	n/a	94	72.34	n/a	0.008054	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.0025	n/a	n/a	n/a	103	72.82	n/a	0.005076	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	1.234	n/a	n/a	n/a	105	0	No	0.05	Inter
Fluoride (mg/L)	n/a	0.19	n/a	n/a	n/a	99	29.29	n/a	0.006232	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	86	94.19	n/a	0.01214	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	104	30.77	n/a	0.004822	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	94	96.81	n/a	0.008054	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.015	n/a	n/a	n/a	94	63.83	n/a	0.008054	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	74	91.89	n/a	0.02247	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	94	84.04	n/a	0.008054	NP Inter(NDs)

FIGURE G.

PLANT MCINTOSH AP 1 GWPS				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
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		1.23	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 Summary Table - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	MGWC-7	0.009643	0.006722	0.006	Yes 23	0.008183	0.002793	0	None	No	0.01	Param.
Cobalt (mg/L)	MGWC-8	0.01517	0.006917	0.006	Yes 23	0.01104	0.007889	0	None	No	0.01	Param.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes 23	0.1227	0.01927	0	None	No	0.01	NP (normality)

Confidence Intervals Summary Table - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	MGWC-12	0.002	0.0015	0.006	No	19	0.001889	0.0003784	89.47	None	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-3	0.002	0.0003	0.006	No	19	0.001911	0.00039	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	MGWC-7	0.002	0.00197	0.006	No	19	0.00192	0.0003415	89.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-1	0.002733	0.001872	0.014	No	23	0.002303	0.0008228	0	None	No	0.01	Param.
Arsenic (mg/L)	MGWC-12	0.001061	0.0006636	0.014	No	23	0.001003	0.0003575	30.43	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MGWC-2	0.001	0.00068	0.014	No	23	0.000917	0.0001949	82.61	Kaplan-Meier	No	0.01	NP (NDs)
Arsenic (mg/L)	MGWC-3	0.0017	0.00143	0.014	No	23	0.001584	0.0003356	4.348	None	No	0.01	NP (normality)
Arsenic (mg/L)	MGWC-7	0.0008039	0.0005182	0.014	No	23	0.0008265	0.0002772	39.13	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MGWC-8	0.001	0.00098	0.014	No	23	0.0009035	0.0001913	65.22	Kaplan-Meier	No	0.01	NP (NDs)
Barium (mg/L)	MGWC-1	0.11	0.096	2	No	23	0.1067	0.01576	0	None	No	0.01	NP (normality)
Barium (mg/L)	MGWC-12	0.06448	0.05038	2	No	23	0.05743	0.01347	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-2	0.0534	0.04759	2	No	23	0.0505	0.005561	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-3	0.1556	0.1421	2	No	23	0.1488	0.01295	0	None	No	0.01	Param.
Barium (mg/L)	MGWC-7	0.015	0.01	2	No	23	0.01356	0.006621	4.348	None	No	0.01	NP (normality)
Barium (mg/L)	MGWC-8	0.04133	0.0341	2	No	23	0.03793	0.00727	0	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	MGWC-1	0.0025	0.00018	0.004	No	21	0.00239	0.0005063	95.24	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-3	0.0025	0.00031	0.004	No	21	0.002396	0.0004779	95.24	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MGWC-8	0.001302	0.000712	0.004	No	21	0.001007	0.0005351	14.29	None	No	0.01	Param.
Cadmium (mg/L)	MGWC-1	0.0025	0.0005	0.005	No	23	0.002	0.0009726	78.26	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-2	0.002854	0.001149	0.005	No	23	0.002239	0.001888	0	None	sqrt(x)	0.01	Param.
Cadmium (mg/L)	MGWC-7	0.0025	0.00041	0.005	No	23	0.002215	0.0007523	86.96	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MGWC-8	0.001482	0.000647	0.005	No	23	0.001597	0.001153	26.09	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	MGWC-1	0.0036	0.0014	0.1	No	21	0.002048	0.000379	90.48	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-12	0.0032	0.0012	0.1	No	21	0.003305	0.005896	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-2	0.0033	0.002	0.1	No	21	0.002062	0.0002837	95.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-3	0.003	0.002	0.1	No	21	0.002048	0.0002182	95.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-7	0.0034	0.0015	0.1	No	21	0.00201	0.0003673	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MGWC-8	0.0031	0.0013	0.1	No	21	0.002019	0.0002909	90.48	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-1	0.0025	0.00047	0.006	No	23	0.001788	0.001014	65.22	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-12	0.0025	0.0015	0.006	No	23	0.002355	0.0005218	91.3	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MGWC-2	0.003172	0.002257	0.006	No	23	0.002715	0.0008745	0	None	No	0.01	Param.
Cobalt (mg/L)	MGWC-3	0.00068	0.00051	0.006	No	23	0.0007574	0.0004694	13.04	None	No	0.01	NP (normality)
Cobalt (mg/L)	MGWC-7	0.009643	0.006722	0.006	Yes	23	0.008183	0.002793	0	None	No	0.01	Param.
Cobalt (mg/L)	MGWC-8	0.01517	0.006917	0.006	Yes	23	0.01104	0.007889	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-1	1.706	1.315	5	No	24	1.51	0.3825	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-12	0.7489	0.4601	5	No	23	0.6045	0.2761	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-2	0.7573	0.4849	5	No	23	0.6211	0.2604	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-3	1.766	1.39	5	No	24	1.578	0.3681	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-7	1.335	0.9723	5	No	23	1.154	0.3472	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MGWC-8	1.917	1.354	5	No	23	1.636	0.5383	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-1	0.226	0.1411	4	No	22	0.1835	0.07909	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-12	0.251	0.1993	4	No	22	0.2194	0.058	0	None	x^2	0.01	Param.
Fluoride (mg/L)	MGWC-2	0.2	0.075	4	No	22	0.1266	0.05876	31.82	None	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-3	0.2	0.082	4	No	22	0.125	0.05834	27.27	None	No	0.01	NP (normality)
Fluoride (mg/L)	MGWC-7	0.3231	0.2136	4	No	22	0.2684	0.102	0	None	No	0.01	Param.
Fluoride (mg/L)	MGWC-8	0.1075	0.07238	4	No	22	0.08995	0.03274	13.64	None	No	0.01	Param.
Lead (mg/L)	MGWC-12	0.001	0.0001	0.015	No	19	0.0009526	0.0002065	94.74	None	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-7	0.001	0.0003	0.015	No	19	0.0008789	0.0002879	84.21	None	No	0.01	NP (NDs)
Lead (mg/L)	MGWC-8	0.001	0.00022	0.015	No	19	0.0009589	0.0001789	94.74	None	No	0.01	NP (NDs)
Lithium (mg/L)	MGWC-1	0.01212	0.01011	0.04	No	23	0.01112	0.001925	4.348	None	No	0.01	Param.
Lithium (mg/L)	MGWC-12	0.022	0.01664	0.04	No	23	0.01932	0.00512	0	None	No	0.01	Param.
Lithium (mg/L)	MGWC-2	0.0066	0.0051	0.04	No	23	0.006533	0.004171	4.348	None	No	0.01	NP (normality)
Lithium (mg/L)	MGWC-3	0.01334	0.01146	0.04	No	23	0.0124	0.001792	0	None	No	0.01	Param.
Lithium (mg/L)	MGWC-7	0.13	0.112	0.04	Yes	23	0.1227	0.01927	0	None	No	0.01	NP (normality)
Lithium (mg/L)	MGWC-8	0.03648	0.02458	0.04	No	23	0.03053	0.01138	0	None	No	0.01	Param.

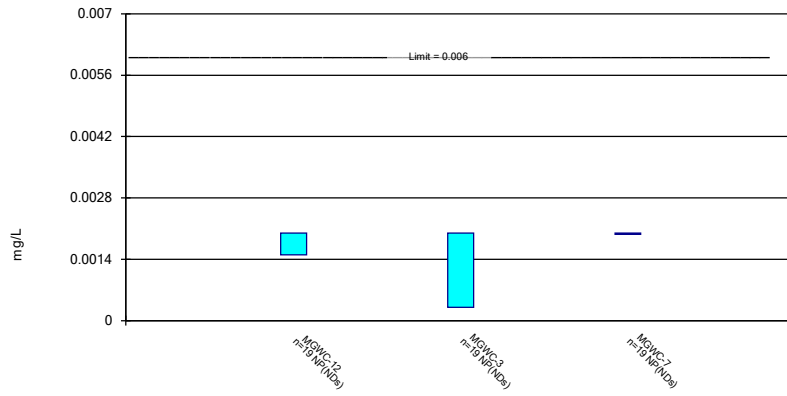
Confidence Intervals Summary Table - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	MGWC-12	0.0002	0.000086	0.015	No	21	0.0001886	0.00003614	90.48	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-2	0.0002	0.0001	0.015	No	21	0.0001894	0.00003357	90.48	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-3	0.0002	0.00007	0.015	No	21	0.0001938	0.00002837	95.24	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-7	0.0002	0.00008	0.015	No	21	0.0001943	0.00002619	95.24	None	No	0.01	NP (NDs)
Mercury (mg/L)	MGWC-8	0.00021	0.00014	0.015	No	22	0.0004062	0.0008409	36.36	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-1	0.0029	0.0012	0.1	No	21	0.01549	0.02958	19.05	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MGWC-12	0.015	0.002	0.1	No	21	0.01112	0.006291	71.43	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-7	0.015	0.00351	0.1	No	21	0.01445	0.002507	95.24	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MGWC-8	0.015	0.0037	0.1	No	21	0.01446	0.002466	95.24	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-1	0.005	0.0005	0.05	No	17	0.004735	0.001091	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-12	0.005	0.00027	0.05	No	17	0.004722	0.001147	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-2	0.005	0.00045	0.05	No	17	0.004732	0.001104	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-3	0.005	0.00044	0.05	No	17	0.004732	0.001106	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-7	0.005	0.00026	0.05	No	17	0.004721	0.00115	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	MGWC-8	0.005	0.0024	0.05	No	17	0.004022	0.001871	76.47	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-1	0.001	0.00032	0.002	No	21	0.0008002	0.0003686	76.19	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-12	0.001	0.00027	0.002	No	21	0.0009248	0.0002384	90.48	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-2	0.001	0.00021	0.002	No	21	0.0009624	0.0001724	95.24	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-3	0.001	0.00037	0.002	No	21	0.00093	0.0002236	90.48	None	No	0.01	NP (NDs)
Thallium (mg/L)	MGWC-8	0.0002416	0.0001397	0.002	No	21	0.0004852	0.0003818	33.33	Kaplan-Meier	ln(x)	0.01	Param.

Non-Parametric Confidence Interval

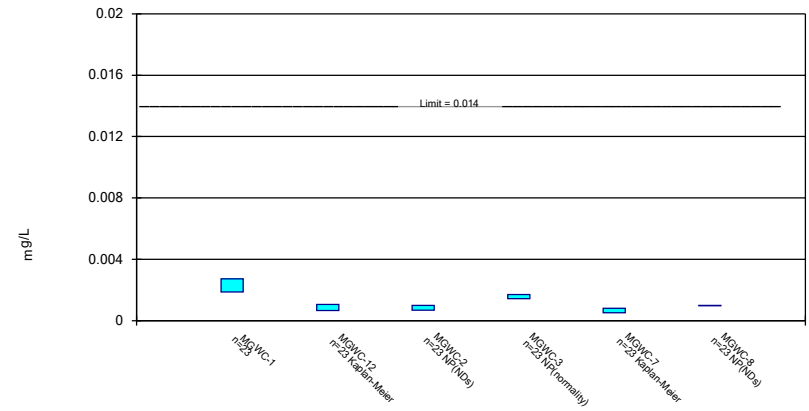
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

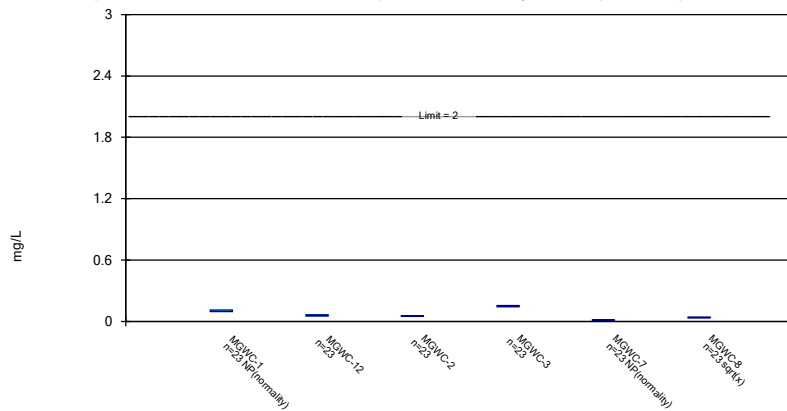
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

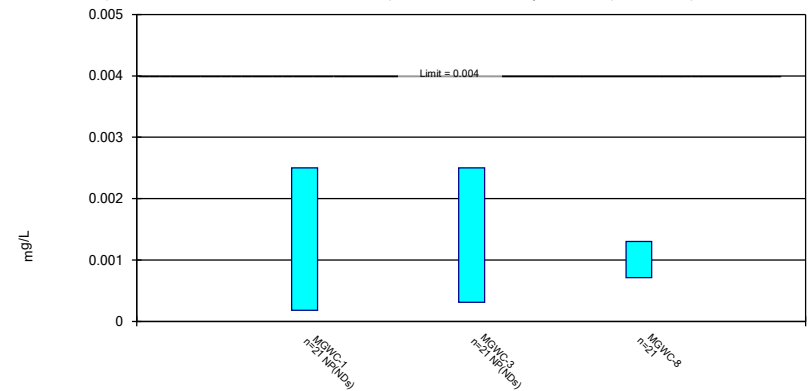
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Constituent: Barium Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

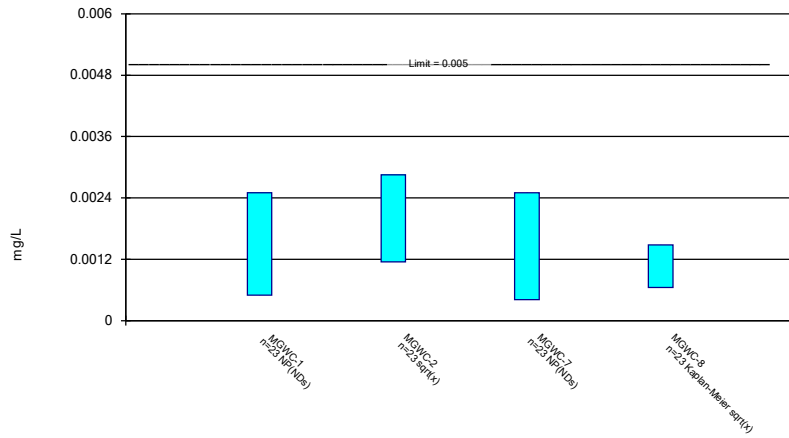
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

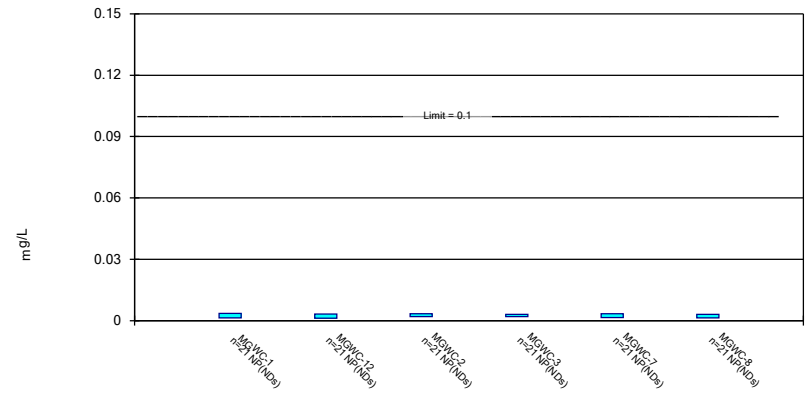
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Non-Parametric Confidence Interval

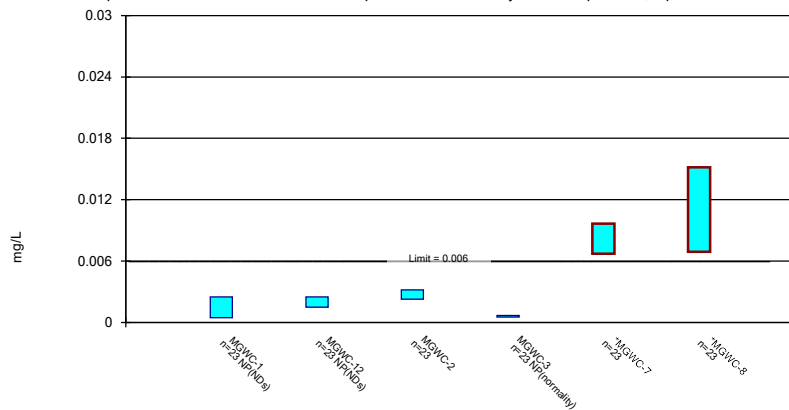
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

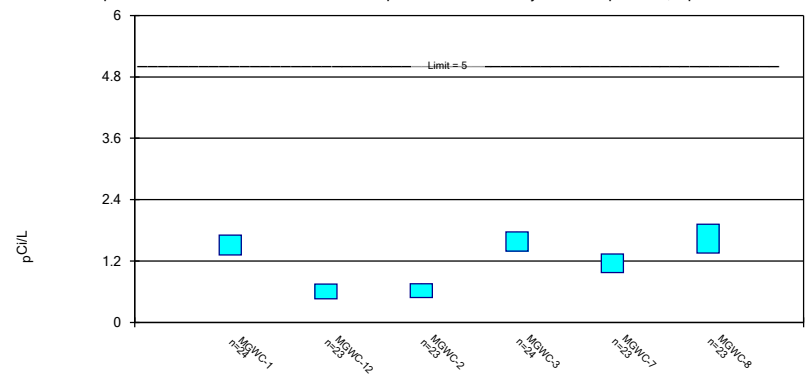
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric Confidence Interval

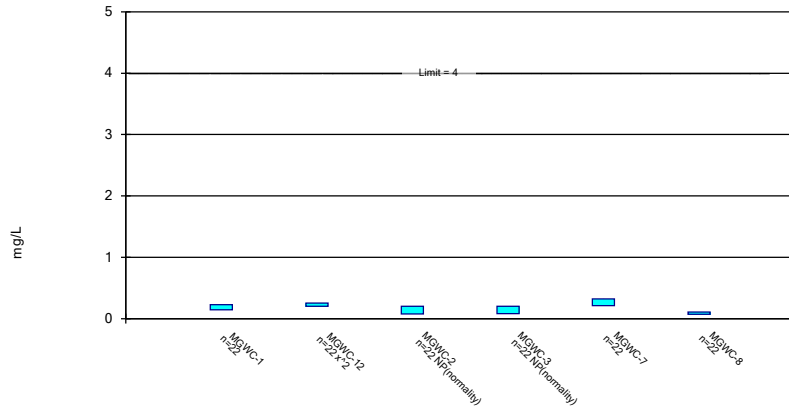
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

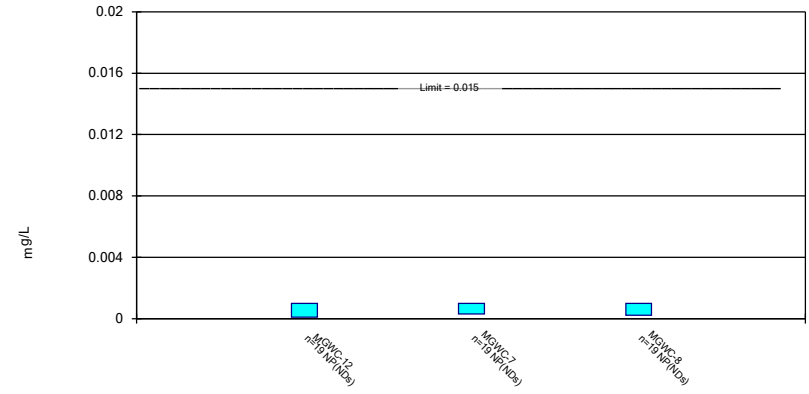
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Non-Parametric Confidence Interval

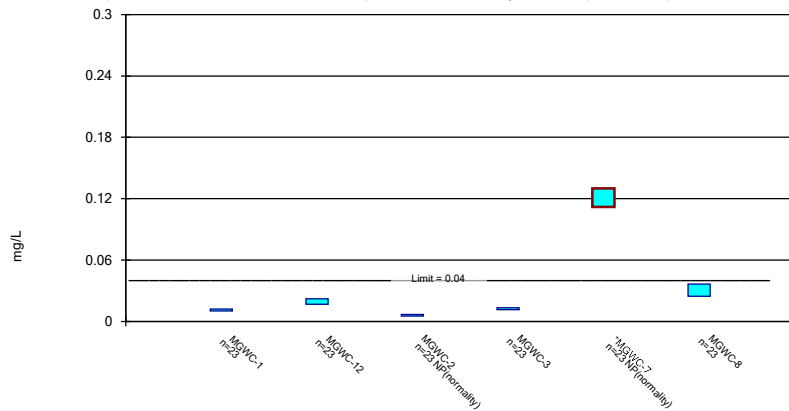
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

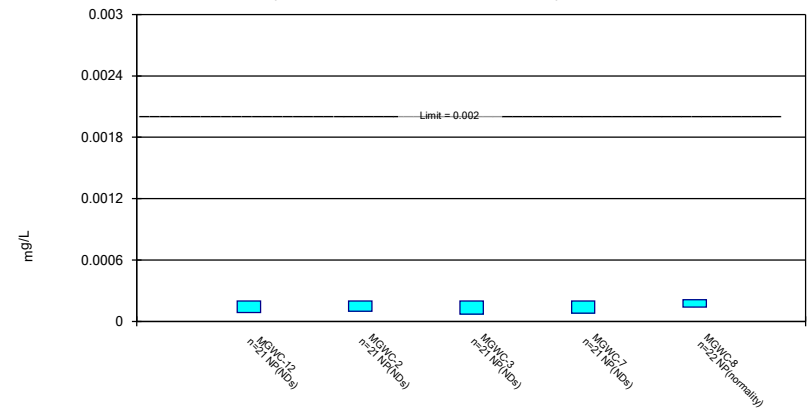
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Non-Parametric Confidence Interval

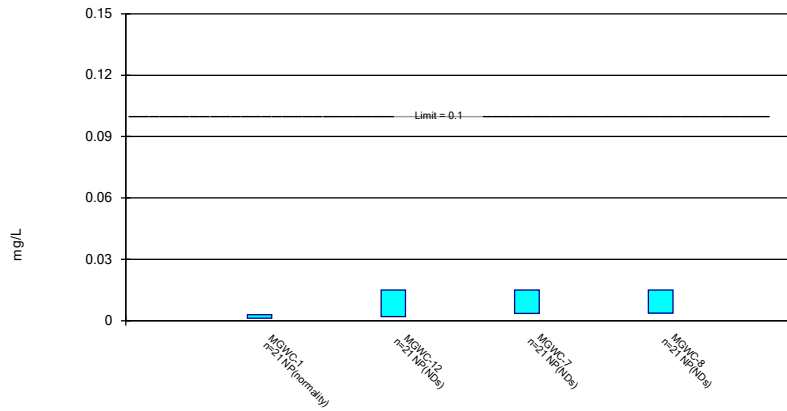
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Non-Parametric Confidence Interval

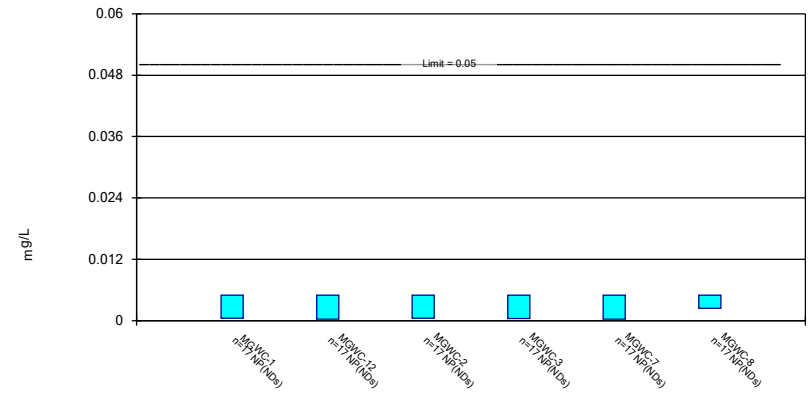
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Molybdenum Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Non-Parametric Confidence Interval

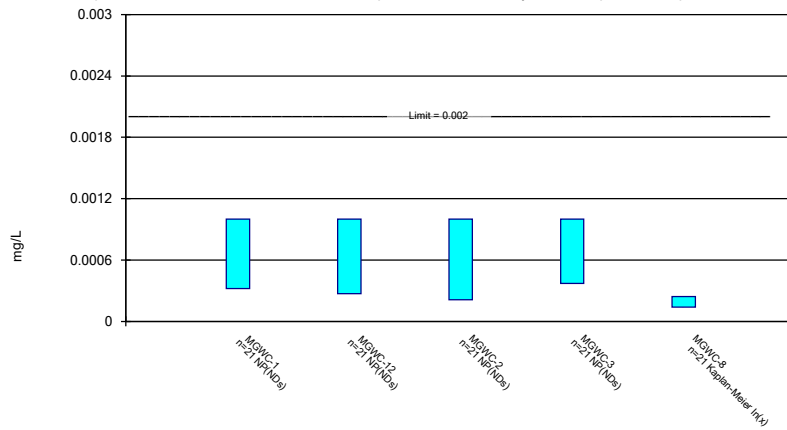
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 9/25/2023 4:23 PM View: Confidence Intervals
 Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-3	MGWC-7
5/5/2016			0.00197 (J)
5/6/2016		<0.002	
6/21/2016	0.0004 (J)	0.0003 (J)	<0.002
8/15/2016			<0.002
8/16/2016	<0.002	<0.002	
9/28/2016			<0.002
9/29/2016	<0.002	<0.002	
11/16/2016	<0.002	<0.002	<0.002
1/17/2017		<0.002	<0.002
1/18/2017	<0.002		
3/2/2017	<0.002	<0.002	<0.002
4/18/2017		<0.002	<0.002
4/25/2017	<0.002		
7/13/2017	<0.002		
3/29/2018	<0.002		<0.002
3/30/2018		<0.002	
1/29/2019	<0.002	<0.002	<0.002
1/28/2020	<0.002		<0.002
1/29/2020		<0.002	
3/10/2020	<0.002	<0.002	<0.002
9/16/2020	<0.002		
9/17/2020		<0.002	<0.002
3/24/2021	<0.002	<0.002	<0.002
8/24/2021		<0.002	
8/25/2021	<0.002		<0.002
2/22/2022	<0.002		
2/23/2022		<0.002	<0.002
8/2/2022	0.0015 (J)		
8/3/2022		<0.002	<0.002
2/7/2023	<0.002	<0.002	
2/8/2023			0.00051 (J)
8/1/2023		<0.002	
8/2/2023	<0.002		<0.002
Mean	0.001889	0.001911	0.00192
Std. Dev.	0.0003784	0.00039	0.0003415
Upper Lim.	0.002	0.002	0.002
Lower Lim.	0.0015	0.0003	0.00197

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.00143 (J)	<0.001
5/6/2016	0.00299 (J)		<0.001	0.00154 (J)		
6/21/2016	0.0047 (J)	0.0015 (J)	<0.001	0.0016 (J)	0.0009 (J)	<0.001
8/15/2016					0.0012 (J)	<0.001
8/16/2016	0.003	0.00082 (J)	<0.001	0.0017		
9/28/2016	0.0036				0.00084 (J)	<0.001
9/29/2016		0.0019	<0.001	0.0013		
11/16/2016	0.003	0.0017	0.00068 (J)	0.0014	<0.001	<0.001
1/17/2017				0.00056 (J)	<0.001	<0.001
1/18/2017		0.00096 (J)	<0.001			
1/19/2017	0.0024					
3/2/2017	0.0027	0.00082 (J)	0.00065 (J)	0.0018	0.0009 (J)	<0.001
4/18/2017	0.0024			0.0018	0.0005 (J)	0.00059 (J)
4/19/2017			<0.001			
4/25/2017		<0.001				
7/13/2017		0.00047 (J)				
3/29/2018	0.0023	0.00053 (J)			0.00066 (J)	
3/30/2018			<0.001	0.0017		<0.001
6/12/2018		0.00063 (J)				
6/13/2018	0.0021		<0.001	0.0015	<0.001	<0.001
10/10/2018	0.0024	0.00098 (J)	<0.001	0.0016	<0.001	<0.001
1/29/2019	0.00255	<0.001	<0.001	0.00143	<0.001	<0.001
3/26/2019	0.002	0.00079 (J)	<0.001	0.0012 (J)	<0.001	<0.001
9/10/2019	0.0018	0.0011	0.00036 (J)	0.0017	0.00074 (J)	0.00056 (J)
1/28/2020		0.00051 (J)			0.00046 (J)	
1/29/2020	0.0021		0.0004 (J)	0.0017		0.00047 (J)
3/10/2020	0.0019	<0.001	<0.001	<0.005	<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
8/1/2023	0.0012			0.0017		0.00098 (J)
8/2/2023		<0.001	<0.001		<0.001	
Mean	0.002303	0.001003	0.000917	0.001584	0.0008265	0.0009035
Std. Dev.	0.0008228	0.0003575	0.0001949	0.0003356	0.0002772	0.0001913
Upper Lim.	0.002733	0.001061	0.001	0.0017	0.0008039	0.001
Lower Lim.	0.001872	0.0006636	0.00068	0.00143	0.0005182	0.00098

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.039	0.0364
5/6/2016	0.11		0.0605	0.151		
6/21/2016	0.165	0.0439	0.0613	0.174	0.0152	0.0386
8/15/2016					0.015	0.03
8/16/2016	0.094	0.041	0.052	0.13		
9/28/2016	0.1				0.014	0.034
9/29/2016		0.052	0.053	0.14		
11/16/2016	0.096	0.044	0.056	0.14	0.013	0.034
1/17/2017				0.16	0.014	0.038
1/18/2017		0.056	0.06			
1/19/2017	0.12					
3/2/2017	0.097	0.04	0.056	0.15	0.013	0.037
4/18/2017	0.092			0.14	0.011	0.04
4/19/2017			0.051			
4/25/2017		0.042				
7/13/2017		0.043				
3/29/2018	0.095	0.061			0.01	
3/30/2018			0.049	0.13		0.041
6/12/2018		0.063				
6/13/2018	0.096		0.05	0.14	0.0098	0.038
10/10/2018	0.095	0.071	0.046	0.13	0.011	0.035
1/29/2019	0.107	0.06	0.0496	0.138	<0.0025	0.0344
3/26/2019	0.096	0.06	0.048	0.13	0.0086	0.032
9/10/2019	0.11	0.073	0.053	0.15	0.012	0.035
1/28/2020		0.069			0.012	
1/29/2020	0.11		0.051	0.15		0.033
3/10/2020	0.13	0.056	0.049	0.15	0.013	0.036
9/16/2020		0.1	0.048			
9/17/2020	0.11			0.16	0.0091 (J)	0.028
3/24/2021	0.1	0.056	0.049	0.16	0.011	0.054
8/24/2021			0.047	0.16		
8/25/2021	0.11	0.051			0.013	0.031
2/22/2022	0.11	0.067				
2/23/2022			0.046	0.17	0.014	0.036
8/2/2022		0.057				
8/3/2022	0.11			0.15	0.018	
8/4/2022			0.042			0.043
2/7/2023		0.06		0.16		
2/8/2023	0.1		0.044		0.02	0.052
8/1/2023	0.1			0.16		0.056
8/2/2023		0.055	0.04		0.015	
Mean	0.1067	0.05743	0.0505	0.1488	0.01356	0.03793
Std. Dev.	0.01576	0.01347	0.005561	0.01295	0.006621	0.00727
Upper Lim.	0.11	0.06448	0.0534	0.1556	0.015	0.04133
Lower Lim.	0.096	0.05038	0.04759	0.1421	0.01	0.0341

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-3	MGWC-8
5/5/2016			<0.0025
5/6/2016	<0.0025	<0.0025	
6/21/2016	<0.0025	<0.0025	0.0004 (J)
8/15/2016			0.00053 (J)
8/16/2016	<0.0025	<0.0025	
9/28/2016	<0.0025		0.00049 (J)
9/29/2016		<0.0025	
11/16/2016	<0.0025	<0.0025	0.0004 (J)
1/17/2017		<0.0025	0.00084 (J)
1/19/2017	<0.0025		
3/2/2017	<0.0025	<0.0025	0.00068 (J)
4/18/2017	<0.0025	<0.0025	0.00067 (J)
3/29/2018	<0.0025		
3/30/2018		<0.0025	0.0015 (J)
6/13/2018	<0.0025	<0.0025	0.0012 (J)
10/10/2018	<0.0025	<0.0025	0.0016 (J)
1/29/2019	<0.0025	<0.0025	<0.0025
1/29/2020	0.00018 (J)	0.00031 (J)	0.0019
3/10/2020	<0.0025	<0.0025	0.0013 (J)
9/17/2020	<0.0025	<0.0025	0.0019 (J)
3/24/2021	<0.0025	<0.0025	<0.0025
8/24/2021		<0.0025	
8/25/2021	<0.0025		0.0015 (J)
2/22/2022	<0.0025		
2/23/2022		<0.0025	0.0014 (J)
8/3/2022	<0.0025	<0.0025	
8/4/2022			0.00064 (J)
2/7/2023		<0.0025	
2/8/2023	<0.0025		0.0002 (J)
8/1/2023	<0.0025	<0.0025	0.00025 (J)
Mean	0.00239	0.002396	0.001007
Std. Dev.	0.0005063	0.0004779	0.0005351
Upper Lim.	0.0025	0.0025	0.001302
Lower Lim.	0.00018	0.00031	0.000712

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-2	MGWC-7	MGWC-8
5/5/2016			<0.0025	0.000784 (J)
5/6/2016	0.000126 (J)	0.00166		
6/21/2016	0.0005 (J)	0.0008 (J)	<0.0025	0.0003 (J)
8/15/2016			<0.0025	<0.0025
8/16/2016	<0.0025	0.0034		
9/28/2016	<0.0025		<0.0025	<0.0025
9/29/2016		0.0027		
11/16/2016	<0.0025	0.0022 (J)	<0.0025	<0.0025
1/17/2017			<0.0025	<0.0025
1/18/2017		0.008		
1/19/2017	<0.0025			
3/2/2017	<0.0025	0.005	<0.0025	<0.0025
4/18/2017	<0.0025		<0.0025	0.00044 (J)
4/19/2017		0.0011 (J)		
3/29/2018	<0.0025		<0.0025	
3/30/2018		0.0016 (J)		0.00058 (J)
6/13/2018	<0.0025	0.0016 (J)	<0.0025	0.00076 (J)
10/10/2018	<0.0025	0.001 (J)	<0.0025	0.00035 (J)
1/29/2019	<0.0025	0.00315	<0.0025	<0.0025
3/26/2019	<0.0025	0.0019 (J)	<0.0025	0.0005 (J)
9/10/2019	0.00017 (J)	0.0011	<0.0025	0.00079 (J)
1/28/2020			<0.0025	
1/29/2020	<0.0025	0.0054		0.0009 (J)
3/10/2020	<0.0025	0.0011 (J)	<0.0025	0.0011 (J)
9/16/2020		0.00053 (J)		
9/17/2020	<0.0025		0.00023 (J)	0.00072 (J)
3/24/2021	<0.0025	0.0022 (J)	<0.0025	0.001 (J)
8/24/2021		0.00054 (J)		
8/25/2021	<0.0025		<0.0025	0.0046
2/22/2022	<0.0025			
2/23/2022		0.0039	<0.0025	0.0014 (J)
8/3/2022	8.5E-05 (J)		0.00041 (J)	
8/4/2022		0.0002 (J)		0.0037
2/8/2023	0.00012 (J)	0.0021 (J)	<0.0025	0.0018 (J)
8/1/2023	<0.0025			0.002 (J)
8/2/2023		0.00032 (J)	0.00031 (J)	
Mean	0.002	0.002239	0.002215	0.001597
Std. Dev.	0.0009726	0.001888	0.0007523	0.001153
Upper Lim.	0.0025	0.002854	0.0025	0.001482
Lower Lim.	0.0005	0.001149	0.00041	0.000647

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					<0.002	<0.002
5/6/2016	<0.002		<0.002	<0.002		
6/21/2016	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8/15/2016					<0.002	<0.002
8/16/2016	<0.002	<0.002	<0.002	<0.002		
9/28/2016	<0.002				<0.002	<0.002
9/29/2016		<0.002	<0.002	<0.002		
11/16/2016	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/17/2017				<0.002	<0.002	<0.002
1/18/2017		<0.002	<0.002			
1/19/2017	<0.002					
3/2/2017	0.0036	0.0032	0.0033	0.003	0.0034	0.0031
4/18/2017	<0.002			<0.002	<0.002	<0.002
4/19/2017			<0.002			
4/25/2017		<0.002				
7/13/2017		<0.002				
3/29/2018	<0.002	<0.002			<0.002	
3/30/2018			<0.002	<0.002		<0.002
6/12/2018		<0.002				
6/13/2018	<0.002		<0.002	<0.002	<0.002	<0.002
10/10/2018	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/29/2019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/28/2020		<0.002			0.0015 (J)	
1/29/2020	<0.002		<0.002	<0.002		<0.002
3/10/2020	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
9/16/2020		0.029	<0.002			
9/17/2020	<0.002			<0.002	<0.002	<0.002
3/24/2021	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8/24/2021			<0.002	<0.002		
8/25/2021	<0.002	<0.002			<0.002	<0.002
2/22/2022	<0.002	<0.002				
2/23/2022			<0.002	<0.002	<0.002	<0.002
8/2/2022		<0.002				
8/3/2022	<0.002			<0.002	<0.002	
8/4/2022			<0.002			<0.002
2/7/2023		0.0012 (J)		<0.002		
2/8/2023	0.0014 (J)		<0.002		0.0013 (J)	0.0013 (J)
8/1/2023	<0.002			<0.002		<0.002
8/2/2023		<0.002	<0.002		<0.002	
Mean	0.002048	0.003305	0.002062	0.002048	0.00201	0.002019
Std. Dev.	0.000379	0.005896	0.0002837	0.0002182	0.0003673	0.0002909
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 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.0036 (J)	0.00359 (J)
5/6/2016	<0.0025		0.00311 (J)	<0.0025		
6/21/2016	0.0012 (J)	<0.0025	0.0031 (J)	0.0006 (J)	0.0097 (J)	0.0033 (J)
8/15/2016					0.0098	0.0038
8/16/2016	0.00047 (J)	<0.0025	0.0034	0.00064 (J)		
9/28/2016	0.00058 (J)				0.0095	0.0043
9/29/2016		<0.0025	0.0032	0.00054 (J)		
11/16/2016	<0.0025	<0.0025	0.0032	0.00041 (J)	0.0094	0.004
1/17/2017				0.00051 (J)	0.0099	0.0051
1/18/2017		<0.0025	0.0032			
1/19/2017	0.0004 (J)					
3/2/2017	<0.0025	<0.0025	0.0042	0.00064 (J)	0.013	0.0064
4/18/2017	<0.0025			0.00057 (J)	0.0086	0.005
4/19/2017			0.0035			
4/25/2017		<0.0025				
7/13/2017		<0.0025				
3/29/2018	<0.0025	<0.0025			0.0088	
3/30/2018			0.0037	0.00068 (J)		0.015
6/12/2018		<0.0025				
6/13/2018	<0.0025		0.0035	0.00048 (J)	0.0093	0.014
10/10/2018	<0.0025	<0.0025	0.0034	0.00063 (J)	0.012	0.018
1/29/2019	<0.0025	<0.0025	0.00293	<0.0025	0.0103	0.0159
3/26/2019	<0.0025	<0.0025	0.003	<0.0025	0.009	0.02
9/10/2019	0.00032 (J)	0.00016 (J)	0.0027	0.00065	0.011	0.019
1/28/2020		<0.0025			0.008	
1/29/2020	0.00027 (J)		0.003	0.00067		0.025
3/10/2020	<0.0025	<0.0025	0.0024 (J)	0.0005 (J)	0.0081	0.017
9/16/2020		0.0015 (J)	0.002 (J)			
9/17/2020	0.0002 (J)			0.00053 (J)	0.0098	0.024
3/24/2021	<0.0025	<0.0025	0.0019 (J)	0.00053 (J)	0.0063	0.002 (J)
8/24/2021			0.0018 (J)	0.00034 (J)		
8/25/2021	0.00018 (J)	<0.0025			0.0032	0.021
2/22/2022	<0.0025	<0.0025				
2/23/2022			0.0016 (J)	0.0012 (J)	0.007	0.015
8/2/2022		<0.0025				
8/3/2022	<0.0025			0.00051 (J)	0.0044	
8/4/2022			0.0013 (J)			0.0092
2/7/2023		<0.0025		0.0025		
2/8/2023	<0.0025		0.0012 (J)		0.0044	0.0019 (J)
8/1/2023	<0.0025			0.00054 (J)		0.0015 (J)
8/2/2023		<0.0025	0.0011 (J)		0.0031	
Mean	0.001788	0.002355	0.002715	0.0007574	0.008183	0.01104
Std. Dev.	0.001014	0.0005218	0.0008745	0.0004694	0.002793	0.007889
Upper Lim.	0.0025	0.0025	0.003172	0.00068	0.009643	0.01517
Lower Lim.	0.00047	0.0015	0.002257	0.00051	0.006722	0.006917

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.75	1.21
5/6/2016	1.07		0.633	1.41		
6/21/2016	2.01	0.292 (U)	1.19 (U)	1.71	1.01	0.895 (U)
8/15/2016					1.3	1.64
8/16/2016	1.12	0.232 (U)	0.516	1.75		
9/28/2016	1.09				1.06	2.17
9/29/2016		1.11	0.665	1.43		
11/16/2016	1.58	0.798	0.694	1.9	0.855	1.49
1/17/2017				1.9	1.59	1.75
1/18/2017		0.302 (U)	0.688			
1/19/2017	1.64					
3/2/2017	1.08	0.437	0.484	1.37	1.4	1.03
4/18/2017	1.23			1.42	0.684	1.83
4/19/2017			0.599			
4/25/2017		0.391				
7/13/2017		0.47				
3/29/2018	1.21	0.736			0.822	
3/30/2018			0.677	1.43		2.15
6/12/2018		0.438				
6/13/2018	1.09		0.272 (U)	1.27	0.716	1.51
10/10/2018	1.95	0.371	0.336	1.54	1.51	2.72
1/29/2019	1.11	0.639	0.719	1.34	1.7	1.93
3/26/2019	1	0.607	0.41 (U)	1.25	0.784	1.79
9/10/2019	1.26	0.939	0.548	1.6	0.958	1.78
1/28/2020		0.465			1.38	
1/29/2020	1.39		0.0985 (U)	1.44		1.61
3/10/2020	1.4	0.34 (U)	0.589	1.32	0.903	1.95
9/16/2020		1.09	1.11			
9/17/2020	1.79			0.666 (U)	1.28	1.56
12/8/2020	1.87			1.65		
3/24/2021	1.81	0.434 (U)	0.625	1.58	1.2	0.636
8/24/2021			0.313 (U)	1.65		
8/25/2021	2.12	0.563			0.767	2.13
2/22/2022	1.85	0.888				
2/23/2022			0.598	1.47	1.42	2.62
8/2/2022		1.08				
8/3/2022	2.2			2.56	1.11	
8/4/2022			0.632			1.24
2/7/2023		0.849		2.14		
2/8/2023	1.77		0.799		1.88	1.11
8/1/2023	1.61			2.07		0.872
8/2/2023		0.432 (U)	1.09		1.46	
Mean	1.51	0.6045	0.6211	1.578	1.154	1.636
Std. Dev.	0.3825	0.2761	0.2604	0.3681	0.3472	0.5383
Upper Lim.	1.706	0.7489	0.7573	1.766	1.335	1.917
Lower Lim.	1.315	0.4601	0.4849	1.39	0.9723	1.354

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.394	0.103 (J)
5/6/2016	0.28 (J)		0.088 (J)	0.086 (J)		
6/21/2016	0.36	0.14 (J)	0.19 (J)	0.23 (J)	0.49	0.1 (J)
8/15/2016					0.44	0.11 (J)
8/16/2016	0.27	0.29	0.087 (J)	<0.2		
9/28/2016	0.26				0.4	0.1 (J)
9/29/2016		0.26	<0.2	0.082 (J)		
11/16/2016	0.24	0.25	<0.2	0.087 (J)	0.36	0.091 (J)
1/17/2017				0.086 (J)	0.2	<0.082
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)
8/1/2023	0.15			0.1		0.11
8/2/2023		0.25	0.087 (J)		0.2	
Mean	0.1835	0.2194	0.1266	0.125	0.2684	0.08995
Std. Dev.	0.07909	0.058	0.05876	0.05834	0.102	0.03274
Upper Lim.	0.226	0.251	0.2	0.2	0.3231	0.1075
Lower Lim.	0.1411	0.1993	0.075	0.082	0.2136	0.07238

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-7	MGWC-8
5/5/2016		<0.001	<0.001
6/21/2016	0.0001 (J)	0.0003 (J)	<0.001
8/15/2016		<0.001	<0.001
8/16/2016	<0.001		
9/28/2016		<0.001	<0.001
9/29/2016	<0.001		
11/16/2016	<0.001	<0.001	<0.001
1/17/2017		<0.001	<0.001
1/18/2017	<0.001		
3/2/2017	<0.001	<0.001	<0.001
4/18/2017		<0.001	<0.001
4/25/2017	<0.001		
7/13/2017	<0.001		
3/29/2018	<0.001	<0.001	
3/30/2018			<0.001
1/29/2019	<0.001	<0.001	<0.001
1/28/2020	<0.001	<0.001	
1/29/2020			<0.001
3/10/2020	<0.001	<0.001	<0.001
9/16/2020	<0.001		
9/17/2020		<0.001	<0.001
3/24/2021	<0.001	<0.001	<0.001
8/25/2021	<0.001	0.00019 (J)	0.00022 (J)
2/22/2022	<0.001		
2/23/2022		<0.001	<0.001
8/2/2022	<0.001		
8/3/2022		0.00021 (J)	
8/4/2022			<0.001
2/7/2023	<0.001		
2/8/2023		<0.001	<0.001
8/1/2023			<0.001
8/2/2023	<0.001	<0.001	
Mean	0.0009526	0.0008789	0.0009589
Std. Dev.	0.0002065	0.0002879	0.0001789
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.0001	0.0003	0.00022

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					0.0586	0.0252 (J)
5/6/2016	0.0128 (J)		<0.05	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
8/1/2023	0.0084			0.011		0.012
8/2/2023		0.019	0.0031 (J)		0.13	
Mean	0.01112	0.01932	0.006533	0.0124	0.1227	0.03053
Std. Dev.	0.001925	0.00512	0.004171	0.001792	0.01927	0.01138
Upper Lim.	0.01212	0.022	0.0066	0.01334	0.13	0.03648
Lower Lim.	0.01011	0.01664	0.0051	0.01146	0.112	0.02458

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016				<0.0002	<0.0002
5/6/2016		<0.0002	<0.0002		
6/21/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/15/2016				<0.0002	0.00015 (J)
8/16/2016	<0.0002	7.8E-05 (J)	<0.0002		
9/28/2016				<0.0002	<0.0002
9/29/2016	<0.0002	<0.0002	<0.0002		
11/16/2016	8.6E-05 (J)	0.0001 (J)	7E-05 (J)	8E-05 (J)	0.00021
1/17/2017			<0.0002	<0.0002	7.6E-05 (J)
1/18/2017	<0.0002	<0.0002			
3/2/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4/18/2017			<0.0002	<0.0002	0.00018 (J)
4/19/2017		<0.0002			
4/25/2017	<0.0002				
7/13/2017	<0.0002				
3/29/2018	7.4E-05 (J)			<0.0002	
3/30/2018		<0.0002	<0.0002		0.00013 (J)
6/12/2018	<0.0002				
6/13/2018		<0.0002	<0.0002	<0.0002	0.00074
10/10/2018	<0.0002	<0.0002	<0.0002	<0.0002	0.00013 (J)
1/29/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/28/2020	<0.0002			<0.0002	
1/29/2020		<0.0002	<0.0002		0.00012 (J)
3/10/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/16/2020	<0.0002	<0.0002			
9/17/2020			<0.0002	<0.0002	0.00014 (J)
3/24/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/24/2021		<0.0002	<0.0002		
8/25/2021	<0.0002			<0.0002	0.0041
10/26/2021					<0.0002
2/22/2022	<0.0002				
2/23/2022		<0.0002	<0.0002	<0.0002	0.00028
8/2/2022	<0.0002				
8/3/2022			<0.0002	<0.0002	
8/4/2022		<0.0002			0.00068
2/7/2023	<0.0002		<0.0002		
2/8/2023		<0.0002		<0.0002	0.00026
8/1/2023			<0.0002		0.00014 (J)
8/2/2023	<0.0002	<0.0002		<0.0002	
Mean	0.0001886	0.0001894	0.0001938	0.0001943	0.0004062
Std. Dev.	3.614E-05	3.357E-05	2.837E-05	2.619E-05	0.0008409
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.00021
Lower Lim.	8.6E-05	0.0001	7E-05	8E-05	0.00014

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-7	MGWC-8
5/5/2016			0.00351 (J)	<0.015
5/6/2016	0.0021 (J)			
6/21/2016	0.002 (J)	0.002 (J)	<0.015	<0.015
8/15/2016			<0.015	<0.015
8/16/2016	0.0019 (J)	0.0012 (J)		
9/28/2016	0.0018 (J)		<0.015	<0.015
9/29/2016		0.0014 (J)		
11/16/2016	<0.075	<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
8/1/2023	0.0012 (J)			<0.015
8/2/2023		<0.015	<0.015	
Mean	0.01549	0.01112	0.01445	0.01446
Std. Dev.	0.02958	0.006291	0.002507	0.002466
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 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-7	MGWC-8
5/5/2016					<0.005	<0.005
5/6/2016	<0.005		<0.005	<0.005		
6/21/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/15/2016					<0.005	0.00033 (J)
8/16/2016	<0.005	<0.005	<0.005	<0.005		
9/28/2016	<0.005				<0.005	0.00038 (J)
9/29/2016		<0.005	<0.005	<0.005		
11/16/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/17/2017				<0.005	<0.005	<0.005
1/18/2017		<0.005	<0.005			
1/19/2017	<0.005					
3/2/2017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4/18/2017	<0.005			<0.005	<0.005	0.0024
4/19/2017			<0.005			
4/25/2017		<0.005				
7/13/2017		<0.005				
3/29/2018	0.0005 (J)	0.00027 (J)			0.00026 (J)	
3/30/2018			0.00045 (J)	0.00044 (J)		0.00027 (J)
6/12/2018		<0.005				
6/13/2018	<0.005		<0.005	<0.005	<0.005	<0.005
10/10/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/29/2019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/28/2020		<0.005			<0.005	
1/29/2020	<0.005		<0.005	<0.005		<0.005
2/22/2022	<0.005	<0.005				
2/23/2022			<0.005	<0.005	<0.005	<0.005
8/2/2022		<0.005				
8/3/2022	<0.005			<0.005	<0.005	
8/4/2022			<0.005			<0.005
2/7/2023		<0.005		<0.005		
2/8/2023	<0.005		<0.005		<0.005	<0.005
8/1/2023	<0.005			<0.005		<0.005
8/2/2023		<0.005	<0.005		<0.005	
Mean	0.004735	0.004722	0.004732	0.004732	0.004721	0.004022
Std. Dev.	0.001091	0.001147	0.001104	0.001106	0.00115	0.001871
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	0.0024

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 9/25/2023 4:24 PM View: Confidence Intervals

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

	MGWC-1	MGWC-12	MGWC-2	MGWC-3	MGWC-8
5/5/2016					<0.001
5/6/2016	<0.001		<0.001	<0.001	
6/21/2016	9E-05 (J)	<0.001	<0.001	<0.001	0.0001 (J)
8/15/2016					0.00016 (J)
8/16/2016	<0.001	<0.001	<0.001	<0.001	
9/28/2016	<0.001				0.00014 (J)
9/29/2016		<0.001	<0.001	<0.001	
11/16/2016	<0.001	<0.001	<0.001	<0.001	9E-05 (J)
1/17/2017				<0.001	0.00016 (J)
1/18/2017		<0.001	<0.001		
1/19/2017	<0.001				
3/2/2017	<0.001	<0.001	<0.001	<0.001	0.00018 (J)
4/18/2017	9.5E-05 (J)			<0.001	0.00019 (J)
4/19/2017			<0.001		
4/25/2017		<0.001			
7/13/2017		<0.001			
3/29/2018	0.00014 (J)	<0.001			
3/30/2018			<0.001	<0.001	0.00027 (J)
6/12/2018		<0.001			
6/13/2018	<0.001		<0.001	<0.001	0.00027 (J)
10/10/2018	<0.001	<0.001	<0.001	<0.001	0.00025 (J)
1/29/2019	<0.001	<0.001	<0.001	<0.001	<0.001
1/28/2020		<0.001			
1/29/2020	0.00032 (J)		0.00021 (J)	0.00037 (J)	0.00042 (J)
3/10/2020	<0.001	0.00015 (J)	<0.001	0.00016 (J)	0.00025 (J)
9/16/2020		0.00027 (J)	<0.001		
9/17/2020	0.00016 (J)			<0.001	0.00031 (J)
3/24/2021	<0.001	<0.001	<0.001	<0.001	<0.001
8/24/2021			<0.001	<0.001	
8/25/2021	<0.001	<0.001			0.0004 (J)
2/22/2022	<0.001	<0.001			
2/23/2022			<0.001	<0.001	<0.001
8/2/2022		<0.001			
8/3/2022	<0.001			<0.001	
8/4/2022			<0.001		<0.001
2/7/2023		<0.001		<0.001	
2/8/2023	<0.001		<0.001		<0.001
8/1/2023	<0.001			<0.001	<0.001
8/2/2023		<0.001	<0.001		
Mean	0.0008002	0.0009248	0.0009624	0.00093	0.0004852
Std. Dev.	0.0003686	0.0002384	0.0001724	0.0002236	0.0003818
Upper Lim.	0.001	0.001	0.001	0.001	0.0002416
Lower Lim.	0.00032	0.00027	0.00021	0.00037	0.0001397

FIGURE I.

Appendix IV Trend Tests - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:51 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWC-7	-0.0007131	-101	-76	Yes	23	0	n/a	n/a	0.05	NP

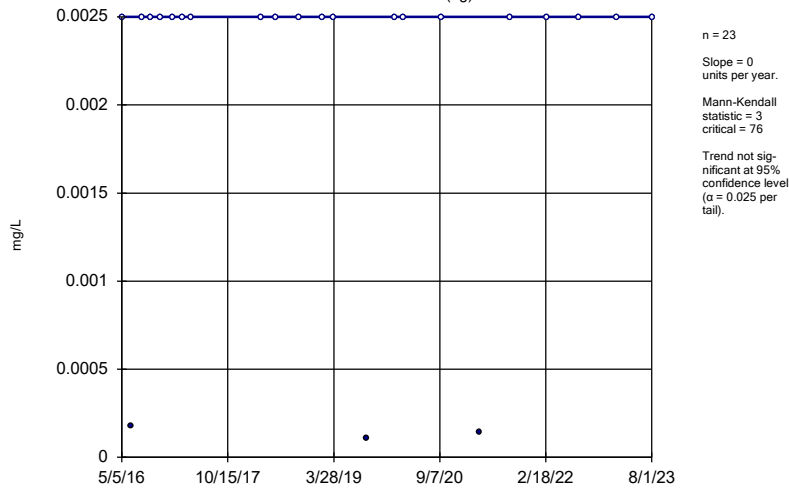
Appendix IV Trend Tests - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:51 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWA-10 (bg)	0	3	76	No	23	86.96	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-11 (bg)	0	22	76	No	23	95.65	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-5 (bg)	0	19	71	No	22	95.45	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-6 (bg)	0	-21	-76	No	23	43.48	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-6A (bg)	0.00003125	5	30	No	12	16.67	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWC-7	-0.0007131	-101	-76	Yes	23	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWC-8	0.00206	66	76	No	23	0	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-10 (bg)	-0.00002307	-8	-76	No	23	4.348	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-11 (bg)	0.0008063	50	76	No	23	0	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-5 (bg)	0.0002355	43	76	No	23	4.348	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-6 (bg)	0	4	76	No	23	95.65	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-6A (bg)	-0.00004875	-30	-30	No	12	66.67	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWC-7	0	36	76	No	23	0	n/a	n/a	0.05	NP

Sen's Slope Estimator

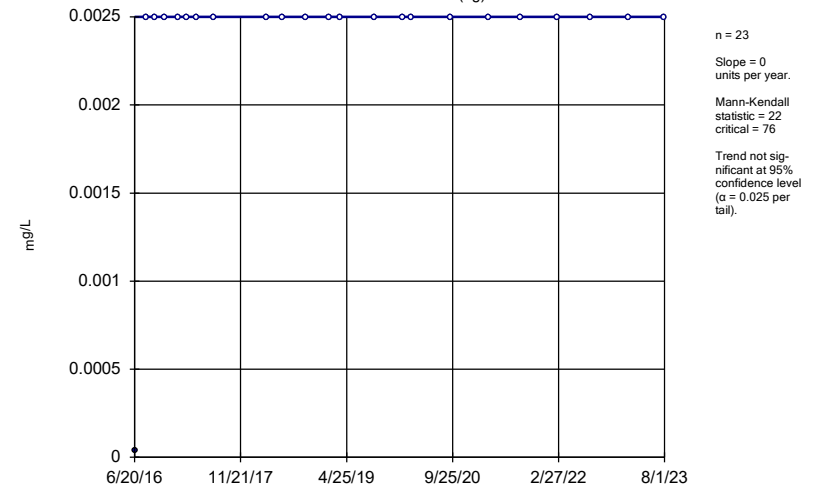
MGWA-10 (bg)



Constituent: Cobalt Analysis Run 9/26/2023 12:49 PM View: Trend Tests - App IV
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

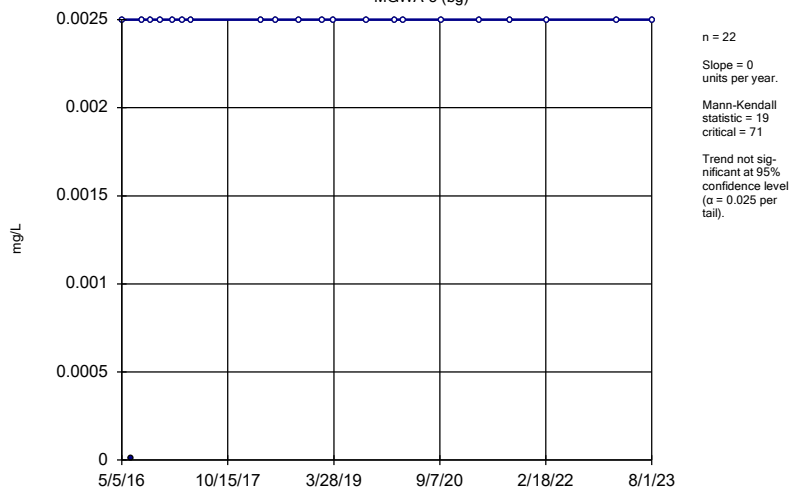
MGWA-11 (bg)



Constituent: Cobalt Analysis Run 9/26/2023 12:49 PM View: Trend Tests - App IV
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

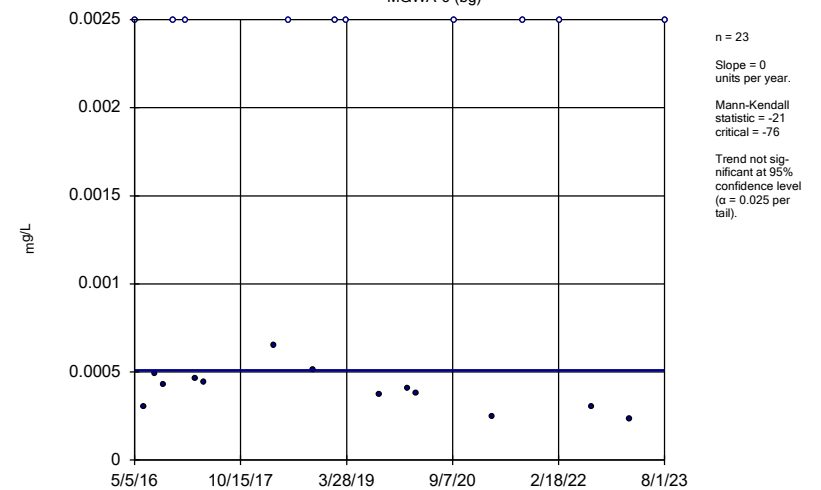
MGWA-5 (bg)



Constituent: Cobalt Analysis Run 9/26/2023 12:49 PM View: Trend Tests - App IV
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

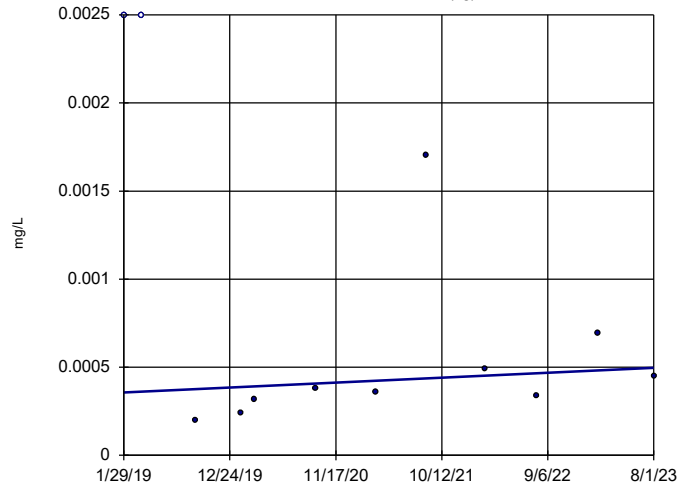
MGWA-6 (bg)



Constituent: Cobalt Analysis Run 9/26/2023 12:49 PM View: Trend Tests - App IV
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

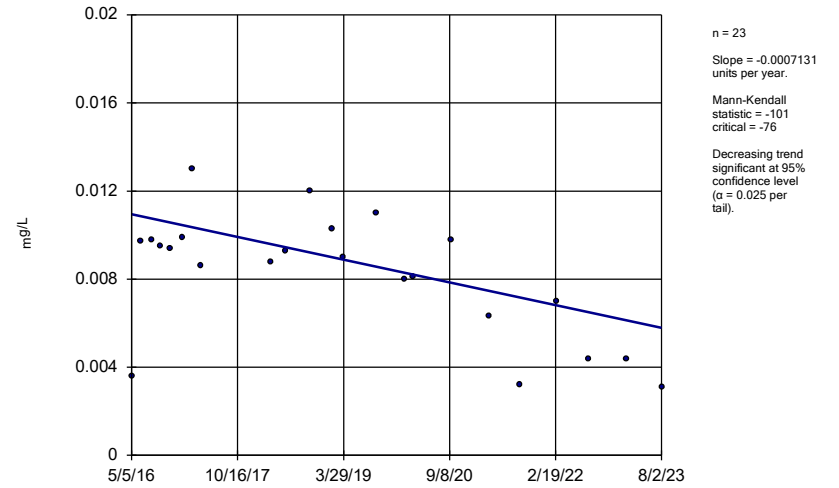
MGWA-6A (bg)



Constituent: Cobalt Analysis Run 9/26/2023 12:49 PM View: Trend Tests - App IV
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

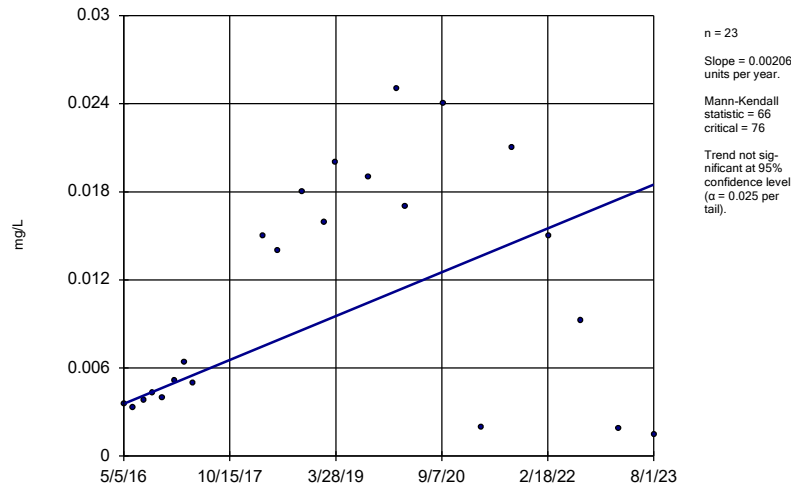
MGWC-7



Constituent: Cobalt Analysis Run 9/26/2023 12:49 PM View: Trend Tests - App IV
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

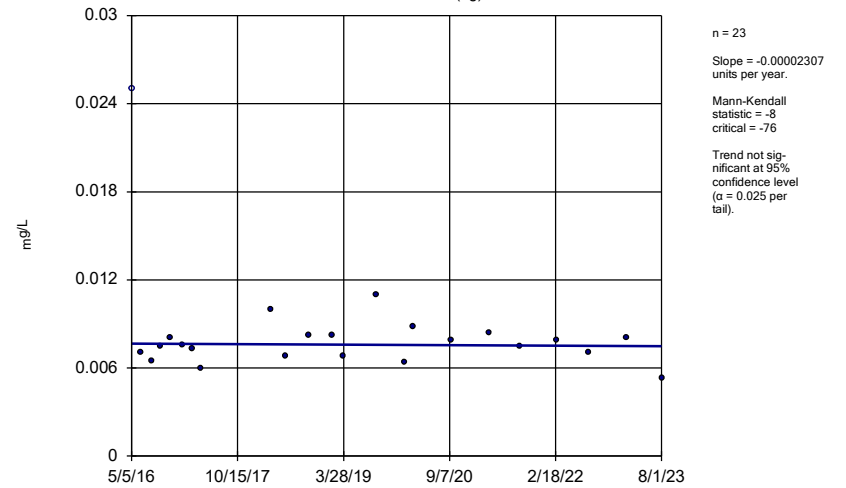
MGWC-8



Constituent: Cobalt Analysis Run 9/26/2023 12:49 PM View: Trend Tests - App IV
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Sen's Slope Estimator

MGWA-10 (bg)



Constituent: Lithium Analysis Run 9/26/2023 12:49 PM View: Trend Tests - App IV
Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond

Appendix IV Trend Tests - All Results

Plant McIntosh Client: Southern Company Data: McIntosh Ash Pond Printed 9/26/2023, 12:51 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MGWA-10 (bg)	0	3	76	No	23	86.96	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-11 (bg)	0	22	76	No	23	95.65	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-5 (bg)	0	19	71	No	22	95.45	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-6 (bg)	0	-21	-76	No	23	43.48	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWA-6A (bg)	0.00003125	5	30	No	12	16.67	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWC-7	-0.0007131	-101	-76	Yes	23	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	MGWC-8	0.00206	66	76	No	23	0	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-10 (bg)	-0.00002307	-8	-76	No	23	4.348	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-11 (bg)	0.0008063	50	76	No	23	0	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-5 (bg)	0.0002355	43	76	No	23	4.348	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-6 (bg)	0	4	76	No	23	95.65	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWA-6A (bg)	-0.00004875	-30	-30	No	12	66.67	n/a	n/a	0.05	NP
Lithium (mg/L)	MGWC-7	0	36	76	No	23	0	n/a	n/a	0.05	NP



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