Georgia Power

Georgia Power Company
Plant McIntosh Inactive Landfill No. 3

Permit No. 051-008D(LI)
Effingham County

2022 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

Atlantic Coast Consulting, Inc.

PROFESSIONAL CERTIFICATION

This *2022 Semiannual Groundwater Monitoring and Corrective Action Report, Georgia Power Company – Plant McIntosh Inactive Landfill No. 3* has been prepared in compliance with the United States Environmental Protection Agency Coal Combustion Residuals Rule [40 Code of Federal Regulations (CFR) 257 Subpart D] and the Georgia Environmental Protection Division Rules (EPD) for Solid Waste Management 391-3-4-.10 and 391-3-4-.14 by a qualified groundwater scientist or engineer with Atlantic Coast Consulting, Inc. (ACC). I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management, and 40 CFR Part 258.50(g).

ATLANTIC COAST CONSULTING, INC.

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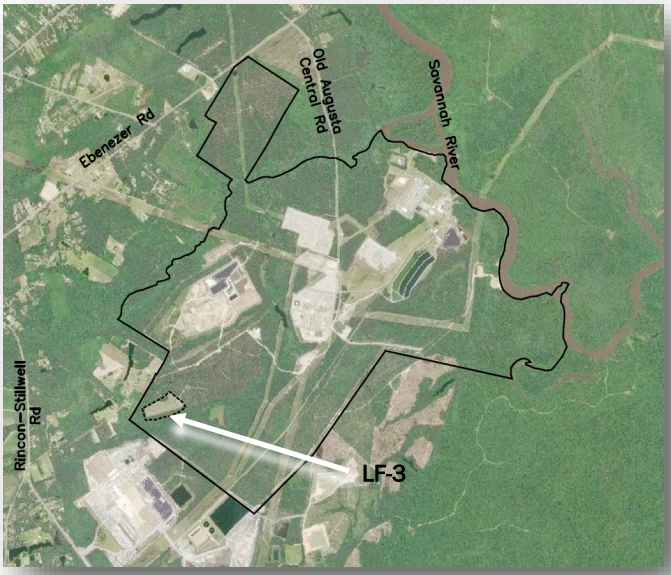
SUMMARY

This summary of the 2022 Semiannual Groundwater Monitoring and Corrective Action Report provides the groundwater monitoring and corrective action program status from July 2022 through December 2022 for Georgia Power Company (Georgia Power) Plant McIntosh Inactive Landfill No. 3 (Site). This summary was prepared by Atlantic Coast Consulting, Inc. (ACC) on behalf of Georgia Power.

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 west of the Savannah River. The Site is located on the southwestern portion of the plant property.



Plant McIntosh and Inactive Landfill No. 3

The Site is monitored using a comprehensive monitoring system of wells installed to meet monitoring requirements of Solid Waste Permit (051-008D(LI)). Routine sampling and reporting began after background groundwater conditions were established in accordance with the Solid Waste Permit requirements specified in the Design and Operation (D&O) Plan. The monitoring program has been modified to include Appendix III parameters to meet the requirements of the Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). Background groundwater conditions for Appendix III and IV parameters were established between September 2016 and October 2018. During the 2022 semiannual reporting period, the Site remained in detection monitoring.

During the 2022 semiannual reporting period, ACC conducted a groundwater sampling event in August 2022. Groundwater samples were submitted to Eurofins Environment Testing America (Eurofins) for analysis. Per the Coal Combustion Residuals (CCR) Rule, groundwater results for August 2022 data were evaluated in accordance with the certified statistical methods. That evaluation showed there are no statistically significant increases (SSIs) of Appendix III parameters [boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)].

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

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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 and 391-3-4-.14, Atlantic Coast Consulting, Inc. (ACC) has prepared this *2022 Semiannual Groundwater Monitoring and Corrective Action Report* to document groundwater monitoring activities conducted for the reporting period of July 2022 through December 2022 at Plant McIntosh Inactive Landfill No. 3 (Site). Semiannual monitoring and reporting for the CCR Unit are performed in accordance with the monitoring requirements of Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a).

Groundwater monitoring is currently performed in accordance with the Solid Waste Permit (051-008D(LI)) requirements specified in the Design and Operation (D&O) Plan (Georgia Power, 2010). A Georgia EPD-approved 2017 permit minor modification added parameters included in Appendix III and IV of 40 CFR § 257 Subpart D to the groundwater monitoring plan. An application for a new Georgia CCR permit was submitted to Georgia EPD in November 2018 for the facility to replace the existing Solid Waste Permit and is currently under review.

This report provides the results of the sampling event conducted in August 2022 and includes: (1) a state-modified list of Appendix I detection parameters according to Georgia EPD Rule 391-3-4-.14 and the approved Solid Waste Permit; and (2) CCR detection monitoring sampling events for Appendix III constituents.

This document serves as the *2022 Semiannual Groundwater Monitoring and Corrective Action Report* in accordance with Georgia EPD Rule 391-3-4-.10(6)(a).

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. The Site is located on the southwestern portion of the plant property.

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 45 and 10 feet North American Vertical Datum of 1988 (NAVD88). The predominant groundwater flow direction across Plant McIntosh to the north/northeast.

1.3 Groundwater Monitoring Well Network and CCR Unit Description

A groundwater monitoring system was installed within the uppermost aquifer at Plant McIntosh Inactive Landfill No. 3. The monitoring system is designed to monitor groundwater passing the waste boundary of the CCR Unit within the uppermost aquifer. The monitoring well locations are depicted in Figure 2, Well Location Map. Wells were located to serve as upgradient and

downgradient monitoring points based on groundwater flow direction (Table 1A, Detection Monitoring Well Summary). Existing locations not included in the monitoring network are presented in Table 1B, Piezometer Summary.

A request for minor modification to the permit was submitted on October 6, 2022 to update the D&O Plan to remove four groundwater monitoring wells from the network (GWA-1A, GWC-1, GWC-5, and GWC-6) and add two piezometers (PZ-4 and PZ-5) for water level measurements. The four wells have had higher groundwater elevations than other Site wells and rationale for abandonment was provided in the minor modification. Each of the wells has an adjacent well counterpart (GWA-1B, GWC-1A, GWC-5A, GWC-6A) that is installed in the uppermost water bearing zone to yield representative groundwater samples. Georgia EPD approved the minor modification in a letter dated December 19, 2022. The wells (GWA-1A, GWC-1, GWC-5, and GWC-6) were abandoned February 7, 2023, and the adjacent well counterparts are now the respective detection monitoring wells. An abandonment report was provided to Georgia EPD under a separate cover (Appendix A). Tables 1A and 1B have been updated in accordance with the Georgia EPD approved minor modification.

2.0 GROUNDWATER MONITORING ACTIVITIES

Pursuant to 40 CFR § 257.90(e), the following describes monitoring-related activities performed from July 2022 through December 2022 (the reporting period) 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 in August 2022 from each well in the certified monitoring system shown on Figure 2. Pursuant to 40 CFR § 257.90(e)(3), a summary and description of groundwater sampling events completed at the Site during the semiannual monitoring period is shown in Table 2, Groundwater Sampling Event Summary.

2.1 Monitoring Well Installation and Maintenance

The Georgia EPD-approved locations of detection monitoring wells and piezometers are depicted on Figure 2. Other 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 to perform sampling under safe and clean conditions. Well inspection checklists completed during semiannual sampling are included in Appendix B, Laboratory Analytical and Field Sampling Reports. Monitoring wells are inspected semiannually to determine if any repairs or corrective actions are necessary to meet the requirements of the Georgia Water Well Standards Act (O.C.G.A. § 12-5-134(5)(d)(vii)). In August 2022, monitoring wells were inspected. Necessary corrective actions were identified in August 2022 and subsequently completed, as documented in Appendix B.

2.2 Detection Monitoring Program

Detection monitoring is performed on a semiannual basis in accordance with the approved Georgia EPD Solid Waste Permit and the Site's D&O Plan. A semiannual sampling event was conducted in August 2022.

Groundwater samples from wells in the detection monitoring system were collected and analyzed for:

- Appendix III constituents according to 40 CFR § 257.94(a); and

- A state-modified Appendix I list of detection parameters according to Georgia EPD Rules for Solid Waste Management 391-3-4-.14 and the approved D&O Plan. The state-modified analyte list includes barium, beryllium, chromium, cobalt, copper, lead, vanadium, and zinc.

A copy of the analytical data packages for each of the semiannual detection monitoring events is included in Appendix B.

3.0 SAMPLE METHODOLOGY AND ANALYSIS

The following sections 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 elevations were recorded from piezometers and wells at the Site. Groundwater elevations recorded during the monitoring event are summarized in Table 3, Summary of Groundwater Elevations – August 2022. Groundwater elevation data were used to develop Figure 3, Potentiometric Contour Map – August 2022. Wells with the elevation most consistent with overall Site groundwater flow pattern were selected for contouring. The groundwater flow has consistently had a northeastern flow direction. The groundwater flow velocity at the Site was calculated using a derivation of Darcy's Law. Specifically:

Equation

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

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

Groundwater flow velocities were calculated for the Site based on hydraulic gradients, average permeability based on previous slug test data, and an estimated effective porosity of 0.20. The groundwater flow velocity has been calculated and is tabulated in Table 4, Horizontal Groundwater Flow Velocity Calculations – August 2022. The calculated flow velocity was approximately 0.039 feet per day during the August 2022 event.

These calculated groundwater velocities across the Site are 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 a peristaltic pump. The pump intakes were located at the midpoint of the well screens (or as appropriate determined by the water level). All non-disposable equipment was decontaminated before use and between well locations using procedures described in the latest version of the Region 4 US EPA Laboratory Services and Applied Science Division (LSASD) Operating Procedure for Field Equipment Cleaning and Decontamination as a guide.

Monitoring wells were purged and sampled using low-flow sampling procedures. A SmarTroll or AquaTroll (In-Situ field instruments) 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 turbidimeter. Groundwater samples were collected when the following stabilization criteria were met:

- ± 0.1 standard units for pH
- ± 5% for specific conductance
- ± 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 (NTU)

Once stabilization was achieved, samples were collected directly into appropriately preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to Eurofins Environment Testing America (Eurofins) of Pittsburgh, Pennsylvania and Savannah, Georgia laboratory branches following chain-of-custody protocol. Stabilization logs for each well and field calibration logs for each monitoring event are included in Appendix B.

3.3 Laboratory Analyses

Groundwater samples were collected during the monitoring event completed in August 2022. Analytical methods used for groundwater monitoring parameters are provided in laboratory reports in Appendix B. Samples were analyzed for Appendix III parameters and Appendix I parameters required by the current state permit. Analytical data collected in the monitoring event are summarized in Table 5, Summary of Groundwater Analytical Data – August 2022.

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 B.

3.4 Quality Assurance and Quality Control

During each sampling event, quality assurance/quality control (QA/QC) samples are collected at a rate of one set of QA/QC samples per every 10 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 B.

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

Values followed by a "J" flag in Table 5 indicate that the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory reporting limit (RL). 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

Statistical analysis of August 2022 groundwater monitoring data was completed by Groundwater Stats Consulting, LLC (GSC) following the appropriate certified statistical methodology for the Site. A summary of the statistical methodology used at the Site for routine groundwater monitoring is provided in Table 6, Statistical Method Summary. Statistical analysis methods and results are provided in Appendix C, Statistical Analyses. A summary of methods and results are provided in the following sections.

4.1 Methods

The statistical method used at the Site was developed by GSC, using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance*, March 2009, US EPA 530/ R-09-007 (US EPA, 2009). To develop the statistical methods, analytical data collected during the background period were evaluated and used to develop statistical limits for each Appendix III parameter and Appendix I parameter required by the existing Georgia EPD permit. Sanitas groundwater statistical software was used to screen the data and 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.

Statistically significant increasing trends identified in upgradient wells are not considered statistically significant increases (SSIs). Typically, when changes in concentrations are present upgradient of the facility, it is an indication of naturally changing groundwater quality.

A permit minor modification was submitted to Georgia EPD on January 13, 2022, to allow for only interwell methods to be used for evaluation of state Appendix I parameters and Appendix III parameters. The selected statistical method for Plant McIntosh Inactive Landfill No. 3 was developed and updated in accordance with 40 CFR § 257.93(f) and Georgia EPD Rule 391-3-4-.10(6) using methodology presented in US EPA Unified Guidance (2009), US EPA 530/R-09-007 and as requested by Georgia EPD. On March 18, 2022, Georgia EPD approved this request for Minor Modification.

Therefore, statistical tests used to evaluate the August 2022 groundwater monitoring data consist of interwell prediction limits (PLs) combined with a 1-of-2 verification resample plan for each of the Appendix I and III parameters. Interwell PLs are constructed using pooled data from upgradient wells GWA-1A, GWA-1B, GWA-2B, GWA-3A, GWA-4, GWA-5, and GWA-7A to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether there are SSIs. An "initial exceedance" occurs when an Appendix I or III constituent reported in a downgradient groundwater compliance monitoring well exceeds the constituent's associated PL. The 1-of-2 resample plan allows for collection of an independent resample. A confirmed exceedance is noted only when the resample verifies the initial exceedance. If the resample result is less than its relevant PL, the initial exceedance is not verified.

A summary of the statistical methodology used at the Site for the August 2022 routine groundwater monitoring data is provided in Table 6.

4.2 Statistical Analyses Results

Based on review of the Appendix I and III statistical analyses presented in Appendix C, statistical exceedances identified during the reporting period have been addressed previously by alternate source demonstrations (ASDs) as outlined in Section 5.0.

4.2.1 Summary of Results for State Appendix I Parameters

Analytical data from the August 2022 monitoring event were statistically analyzed in accordance with the methods described in Section 4.1 and Table 6. The statistical analysis and comparisons to PLs are included in Appendix C.

Statistical analysis of the August 2022 Appendix I parameter data identified a PL exceedance of barium at GWC-5. This exceedance was previously addressed by an ASD completed in August 2017 (ERM, 2017) that was updated in 2022 (ACC, 2022) in accordance with the Georgia EPD Rules for Solid Waste Management Chapter 391-3-4-.14(23)(c). The 2022 ASD concluded that barium and cobalt SSIs are due to a natural variation in groundwater quality. This ASD was approved by Georgia EPD in a letter dated December 16, 2022.

The SSI is consistent with the conditions outlined by the ASD completed in 2017. The conditions are still present; therefore, the previous ASD remains relevant.

Therefore, during the August 2022 event, there are no statistical exceedances that have not been previously addressed by ASDs.

4.2.2 Summary of Results for Appendix III Parameters

Analytical data from the August 2022 monitoring event were statistically analyzed in accordance with the methods described in Section 4.1 and Table 6. The statistical analysis and comparisons to PLs are included in Appendix C.

Statistical analysis of the August 2022 Appendix III parameter data identified no PL exceedances.

5.0 ALTERNATE SOURCE DEMONSTRATIONS

ASDs were previously submitted to Georgia EPD under separate report covers to address SSIs of Appendix I and Appendix III constituents. Based on Georgia EPD guidance, ASDs no longer require concurrence if an SSI has not been detected for two consecutive events, which indicates natural variability. The SSI confirmed during this reporting period is addressed by the ASDs listed below. A copy of the 2022 ASD is provided in Appendix D, Alternate Source Demonstration. As shown in the table below the 2017 ASD was resubmitted in 2022 and approved by Georgia EPD.

As discussed in report Section 1.3, a request for minor modification to the permit was submitted to update the Groundwater Monitoring Plan to remove groundwater monitoring wells from the network (GWA-1A, GWC-1, GWC-5, and GWC-6). Georgia EPD approved the minor modification in a letter dated December 19, 2022. The wells (GWA-1A, GWC-1, GWC-5, and GWC-6) were abandoned February 7, 2023, and an abandonment report is provided as Appendix A.

Reference	SSI(s)	Well(s)	Status
ERM, 2017. Alternate Source Demonstration – Plant McIntosh Ash Disposal Site No. 3, August 2017	Barium	GWC-5	EPD concurrence
ACC 2022. Update to Barium and Cobalt Alternate Source Demonstrations	Barium, Cobalt	GWC-5	EPD approval 12/16/2022

6.0 MONITORING PROGRAM STATUS

Based on current data, the only SSI identified for barium is addressed by an ASD; therefore, the Site will remain in detection monitoring.

7.0 CONCLUSIONS AND FUTURE ACTIONS

This *2022 Semiannual Groundwater Monitoring and Corrective Action Report* for Georgia Power's Plant McIntosh Inactive Landfill No. 3 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 and 391-3-4-.14.

Statistical evaluation of Site groundwater monitoring data during the reporting period did not identify SSIs of Appendix III groundwater monitoring parameters or Appendix I parameters required by the existing Georgia EPD permit that have not been previously addressed by ASDs. The Site remains in detection monitoring.

The next semiannual detection monitoring event is planned for late January/early February 2023.

8.0 REFERENCES

ACC, 2022, Update to Barium and Cobalt Alternate Source Demonstrations - *Plant McIntosh Inactive Landfill No. 3.* September 30, 2022.

ACC, 2020a, *2020 Annual Groundwater Monitoring and Corrective Action Report – Plant McIntosh Inactive Landfill No. 3.*

ACC, 2020b, *September 2020 Well Installation Report Addendum, Plant McIntosh – Inactive Landfill No. 3, October 29, 2020.*

ACC 2020c, *Alternate Source Demonstration – Plant McIntosh Inactive Landfill No. 3.* September 2020.

ACC, 2022, *March 2022 Piezometer Installation Report, Plant McIntosh – Inactive Landfill No. 3, March 18, 2022.*

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US EPA, 2011, *Region IV Data Validation Standard Operating Procedures.* Science and Ecosystem Support Division. Athens, Georgia.

US EPA, 2013, Groundwater Sampling – Operating Procedure: SESDPROC-3-1-R3, Athens, Georgia, 31 p.

US EPA, 2015, Field Equipment Cleaning and Decontamination – Operating Procedure: LSASDPROC-205-R4, Athens, Georgia, 15 p.

US EPA, 2017. *National Functional Guidelines for Inorganic Superfund Methods Data Review,* Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [US EPA-540-R-2017-001]. Washington, DC.

TABLES

Table 1A
Detection Monitoring Well Summary
Plant McIntosh Inactive Landfill No. 3
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
GWA-1B	12/04/2020	852028.09	954564.84	67.36	58.53	8.83	47.96	19.40	Upgradient
GWA-2B	08/29/2018	851831.06	954866.86	66.20	51.78	14.42	41.48	24.72	Upgradient
GWA-3A	05/16/1998	851893.61	955179.89	62.77	33.88	28.89	22.74	40.03	Upgradient
GWA-4	05/07/1998	851980.91	955475.74	62.01	29.16	32.85	23.71	38.30	Upgradient
GWA-5	05/07/1998	852110.59	955844.69	60.43	33.00	27.43	22.58	37.85	Upgradient
GWA-7A	08/29/2018	852254.28	954654.74	67.92	46.94	20.98	36.64	31.28	Upgradient
GWC-1A	12/08/2020	852453.58	955300.47	66.76	47.37	19.39	36.83	29.93	Downgradient
GWC-2	01/23/1996	852343.90	955958.27	64.19	36.79	27.40	26.99	37.20	Downgradient
GWC-4A	05/16/1998	852544.35	955702.05	66.60	36.96	29.64	24.73	41.87	Downgradient
GWC-5A	12/09/2020	852689.80	955477.18	67.84	42.60	25.24	32.45	35.39	Downgradient
GWC-6A	12/07/2020	852462.38	955046.58	68.37	42.43	25.94	32.08	36.29	Downgradient

Notes:
1. ft BTOC indicates feet below top of casing.
2. Northings and eastings are feet relative to North American Datum 1983 (NAD83), State Plane Georgia East Zone.
3. NAVD88 indicates feet relative to North American Vertical Datum of 1988.
4. Georgia EPD approved minor modification dated October 6, 2022 for the abandonment of GWA-1A, GWC-1, GWC-5, GWC-6 and replacing them with GWA-1B, GWC-1A, GWC-5A, GWC-6A, respectively.

Table 1B
Piezometer Summary
Plant McIntosh Inactive Landfill No. 3
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
PZ-1	08/29/2018	852400.01	954904.93	67.41	52.71	14.70	42.41	25.00	Piezometer
PZ-2	08/28/2018	852549.77	955306.02	67.26	42.27	24.99	31.97	35.29	Piezometer
PZ-3	08/30/2018	852032.57	955677.60	61.28	41.59	19.69	31.29	29.99	Piezometer
PZ-4	01/21/2022	851879.27	954615.01	66.41	53.19	13.22	42.84	23.57	Piezometer
PZ-5	01/20/2022	852171.15	954557.82	67.52	53.13	14.39	42.78	24.74	Piezometer

Notes:
1. ft BTOC indicates feet below top of casing.
2. Northings and eastings are feet relative to North American Datum 1983 (NAD83), State Plane Georgia East Zone.
3. NAVD88 indicates feet relative to North American Vertical Datum of 1988.
4. The Georgia EPD minor modification dated October 6, 2022 approved the addition of PZ-4 and PZ-5.

Table 2
Groundwater Sampling Event Summary
Plant McIntosh Inactive Landfill No. 3
Effingham County, Georgia

Well	Hydraulic Location	August 30 – September 1, 2022
Purpose of Sampling Event		Semiannual Detection
GWA-1A	Upgradient	X
GWA-1B	Upgradient	X
GWA-2B	Upgradient	X
GWA-3A	Upgradient	X
GWA-4	Upgradient	X
GWA-5	Upgradient	X
GWA-7A	Upgradient	X
GWC-1	Downgradient	X
GWC-1A	Downgradient	X
GWC-2	Downgradient	X
GWC-4A	Downgradient	X
GWC-5	Downgradient	X
GWC-5A	Downgradient	X
GWC-6	Downgradient	X
GWC-6A	Downgradient	X

Notes:
1. X indicates sample was collected.
2. Semiannual Detection Event includes Appendix III and Appendix I Parameters.

Table 3
Summary of Groundwater Elevations
August 2022
Plant McIntosh Inactive Landfill No. 3
Effingham County, Georgia

Well ID	Top-of-Casing Elevation (NAVD88)	Groundwater Elevation (NAVD88)
GWA-1A	66.76	51.17
GWA-1B	67.36	44.94
GWA-2B	66.20	46.09
GWA-3A	62.77	45.98
GWA-4	62.01	45.29
GWA-5	60.43	44.57
GWA-7A	67.92	44.23
GWC-1	66.08	44.39
GWC-1A	66.76	44.35
GWC-2	64.19	43.63
GWC-4A	66.60	43.96
GWC-5	68.08	45.37
GWC-5A	67.84	43.75
GWC-6	68.51	45.36
GWC-6A	68.37	44.11
PZ-1	67.41	44.11
PZ-2	67.26	43.94
PZ-3	61.28	44.93
PZ-4	66.41	45.93
PZ-5	67.52	44.52

Notes:
1. NAVD88 indicates feet relative to North American Vertical Datum of 1988.
2. Groundwater elevations measured August 30, 2022.

Table 4
Horizontal Groundwater Flow Velocity Calculations
August 2022
Plant McIntosh Inactive Landfill No. 3
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 =	7.9E-04	cm/sec	See note 1.
	2.24	ft/day	
			Hydraulic gradient from
dh/dl_1 =	0.0037	unitless	GWA-5 to GWC-2
dh/dl_2 =	0.0032	unitless	GWA-3A to GWC-6A
dh/dl_{avg} =	0.0034	unitless	Average of $dh/dl_{1,2}$
P_e =	0.20	unitless	See note 2.

Calculated Flow Velocity

$$v = \frac{(2.24)\,(0.003)}{0.20}$$

v = 0.039 ft/day, or 14 ft/year

Notes

(1) Slug tests performed by Southern Company Services, Inc. (2002)

(2) Default value for silty sands from Interim Final RCRA Investigation (EPA, 1989)

Table 5
Summary of Groundwater Analytical Data
August 2022
Plant McIntosh Inactive Landfill No. 3
Effingham County, Georgia

Substance		Well ID							
		GWA-1A	GWA-1B	GWA-2B	GWA-3A	GWA-4	GWA-5	GWA-7A	GWC-1
		8/30/2022	8/30/2022	8/30/2022	8/30/2022	8/30/2022	8/30/2022	8/30/2022	8/31/2022
APPENDIX III	Boron	<0.060	0.12	0.98	0.10	<0.060	<0.060	1.2	<0.060
	Calcium	1.8	5.2	15	3.9	1.2	3.4	14	0.31 J
	Chloride	8.5	7.7	5.9	26	4.7	15	7.5	12
	Fluoride	<0.040	0.51	<0.040	<0.040	0.047 J	0.11	<0.040	<0.040
	pH	5.01	5.86	4.90	4.71	4.72	4.51	5.00	4.69
	Sulfate	<0.40	1.6	74	<0.40	3.5	13	73	<0.40
	TDS	55	79	150	87	40	64	160	37
Required by Permit	Barium	0.023	0.022	0.030	0.11	0.046	0.13	0.047	0.030
	Beryllium	0.00035 J	<0.00020	0.0019 J	0.00083 J	0.00028 J	<0.00020	0.00070 J	<0.00020
	Chromium	0.0047	<0.0015	0.0028	0.0084	<0.0015	<0.0015	<0.0015	<0.0015
	Cobalt	0.00031 J	0.00029 J	0.0040	0.0023 J	0.00097 J	0.0016 J	0.0024 J	0.00036 J
	Copper	<0.0011	<0.0011	0.0013 J	0.0029	0.0012 J	0.0011 J	0.0028	<0.0011
	Lead	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	0.00064 J	<0.00017	<0.00017
	Vanadium	0.0019	0.0019	0.0016	<0.00078	<0.00078	0.0028	0.0016	0.0011
	Zinc	<0.0029	0.0030 J	0.014	0.012	0.010	0.013	0.0089	<0.0029

Notes:
1. Results for substances are reported in milligrams per liter (mg/L). pH results are reported in Standard Units.
2. < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).
3. 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.
4. TDS indicates total dissolved solids.
5. Appendix III = indicator parameters evaluated during Detection Monitoring.
6. Parameters required by permit are Appendix I parameters included to meet GA EPD Rule 391-3-4-.14 requirements.

Table 5
Summary of Groundwater Analytical Data
August 2022
Plant McIntosh Inactive Landfill No. 3
Effingham County, Georgia

Substance		Well ID						
		GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
		8/30/2022	8/30/2022	8/30/2022	9/1/2022	8/31/2022	8/31/2022	8/31/2022
APPENDIX III	Boron	0.099	0.085	<0.060	<0.060	<0.060	<0.060	<0.060
	Calcium	2.3	1.4	0.39 J	5.2	0.98	1.5	3.2
	Chloride	14	4.8	4.8	7.0	4.5	7.3	9.6
	Fluoride	0.071 J	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
	pH	4.43	4.96	4.71	4.29	4.97	4.85	5.07
	Sulfate	<0.40	1.1	<0.40	<0.40	<0.40	0.41 J	3.5
	TDS	65	38	21	140	27	61	73
Required by Permit	Barium	0.24	0.058	0.035	0.36	0.057	0.043	0.081
	Beryllium	0.00042 J	0.00038 J	<0.00020	0.0018 J	<0.00020	0.00049 J	0.00029 J
	Chromium	<0.0015	0.0050	<0.0015	0.014	0.0021	<0.0015	<0.0015
	Cobalt	0.0044	0.0012 J	0.00048 J	0.012	0.0018 J	0.00058 J	0.0012 J
	Copper	0.0019 J	<0.0011	<0.0011	0.0012 J	<0.0011	<0.0011	<0.0011
	Lead	<0.00017	<0.00017	<0.00017	0.00031 J	0.00027 J	<0.00017	<0.00017
	Vanadium	0.00087 J	<0.00078	<0.00078	<0.00078	<0.00078	0.0013	<0.00078
	Zinc	0.020	0.012	0.0046 J	0.035	0.014	0.0073	0.0049 J

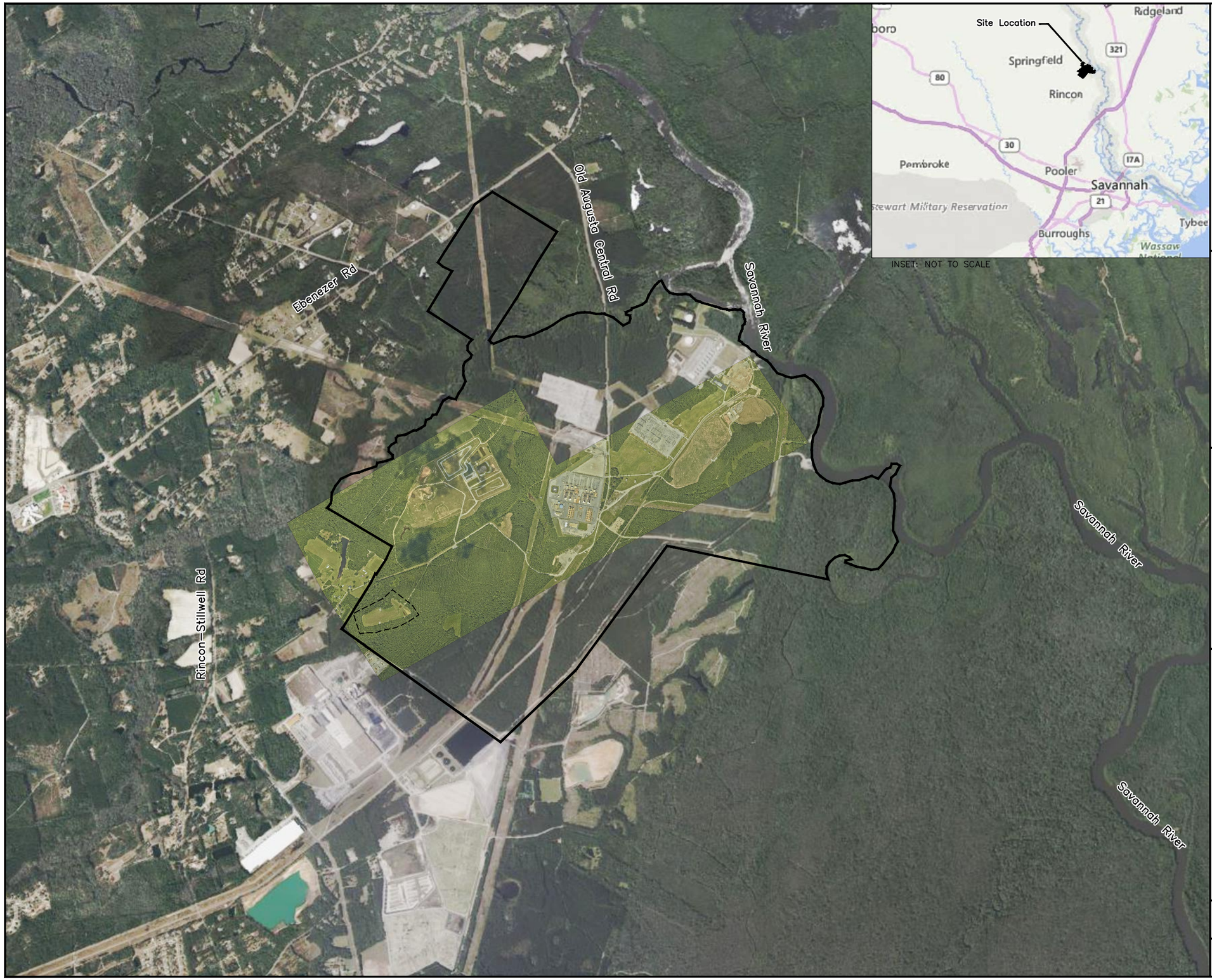
Notes:
1. Results for substances are reported in milligrams per liter (mg/L). pH results are reported in Standard Units.
2. < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).
3. J indicates the substance was detected at such low levels that the precision 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.
4. TDS indicates total dissolved solids.
5. Appendix III = indicator parameters evaluated during Detection Monitoring.
6. Parameters required by permit are Appendix I parameters included to meet GA EPD Rule 391-3-4-.14 requirements.

Table 6
Statistical Method Summary
Plant McIntosh Inactive Landfill No. 3
Effingham County, Georgia

Plant McIntosh Inactive Landfill No. 3 Statistical Method Summary		
Monitoring Well Network	Upgradient Wells	GWA-1B, GWA-2B, GWA-3A, GWA-4, GWA-5, GWA-7A
	Downgradient Wells	GWC-1A, GWC-2, GWC-4A, GWC-5A, GWC-6A
CCR Monitoring Parameters	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
EPD Permit Metals	Detection Monitoring	Barium, Beryllium, Chromium, Cobalt, Copper, Lead, Vanadium, and Zinc
Statistical Methodology	Data Screening Proposed Background	Evaluate outliers, trends, and seasonality when sufficient data are available
	Statistical Limits	Interwell statistical limits

Note:
1. The selected statistical method for Plant McIntosh Inactive Landfill No. 3 was developed and updated to analyze the March 2021 groundwater data in accordance with Georgia EPD Rule 391-3-4-.10(6) using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities*, Unified Guidance, March 2009, EPA530/R-09-007 (Unified Guidance) and as requested by Georgia EPD.
2. Abandonment of GWA-1A, GWC-1, GWC-5, GWC-6 is approved in the Georgia EPD minor modification dated October 6, 2022.

FIGURES



INSET: NOT TO SCALE

ATLANTIC COAST CONSULTING, INC.

2,500 0 1,250 2,500

SCALE (IN FEET)

LEGEND:

EXISTING	DESCRIPTION
———	APPROXIMATE PROPERTY BOUNDARY
- - - - - -	INACTIVE LANDFILL No. 3

NOTES:

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

PROJECT

Georgia Power

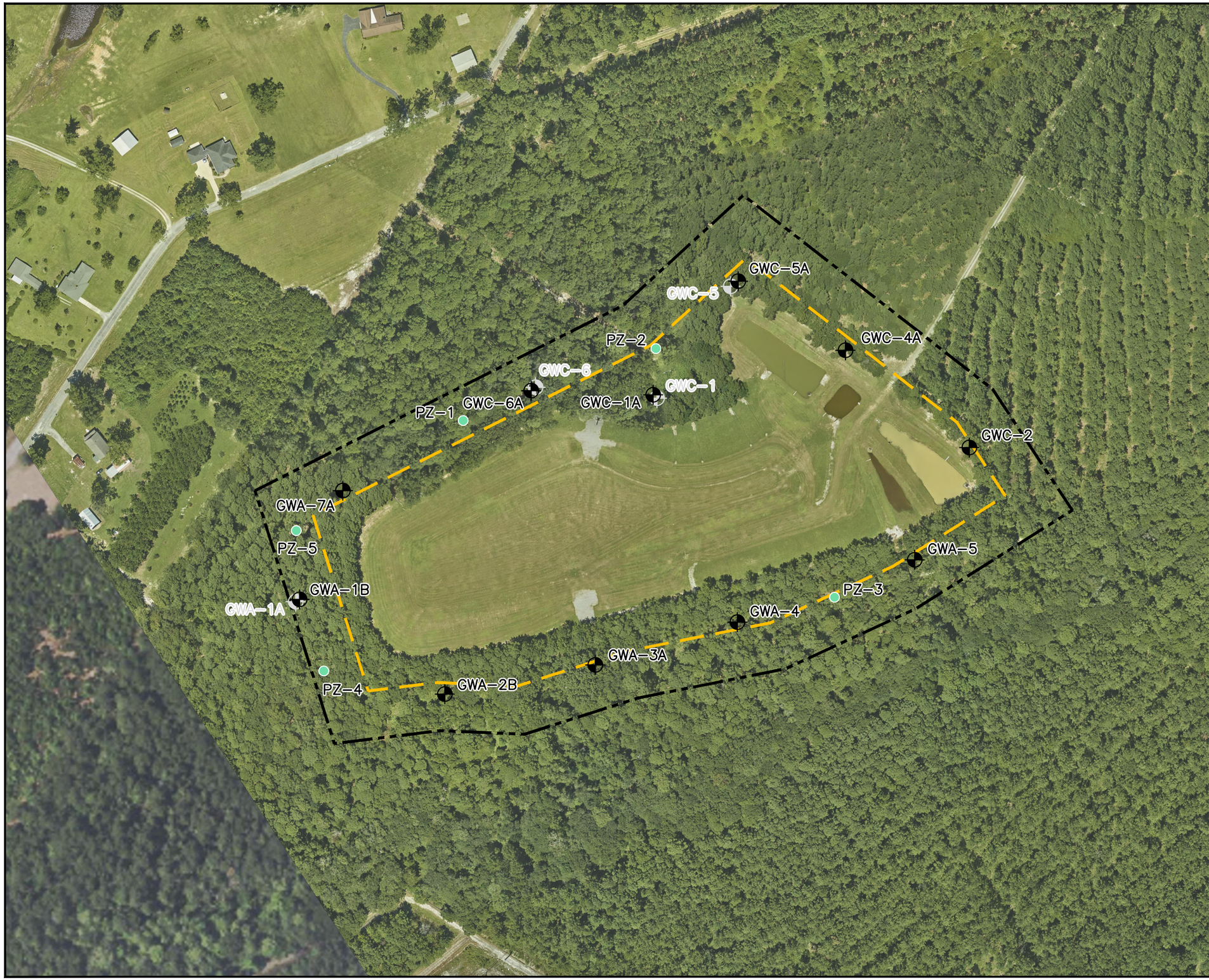
GEORGIA POWER COMPANY
PLANT McINTOSH
INACTIVE LANDFILL No. 3

2022 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

SITE LOCATION MAP

PROJECT NO. I054-117 February 2023

DRAWN BY:	MM	FIGURE:	1
CHECKED BY:	CA		



ATLANTIC COAST CONSULTING, INC.

200 0 100 200

SCALE (IN FEET)

LEGEND:

EXISTING	DESCRIPTION
	EXISTING 100–FOOT BUFFER ZONE
	WASTE MANAGEMENT BOUNDARY
GWC-1A	DETECTION WELL
PZ-1	PIEZOMETER
GWA-1A	ABANDONED PIEZOMETER

NOTES:
1. AERIAL DATED 8/25/2022 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY DATED 2022 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.
2. PIEZOMETERS GWA-1A, GWC-1, GWC-5, AND GWC-6 WERE ABANDONED ON FEBRUARY 7, 2023 PER MINOR MODIFICATION APPROVED ON OCTOBER 5, 2022.

PROJECT

Georgia Power

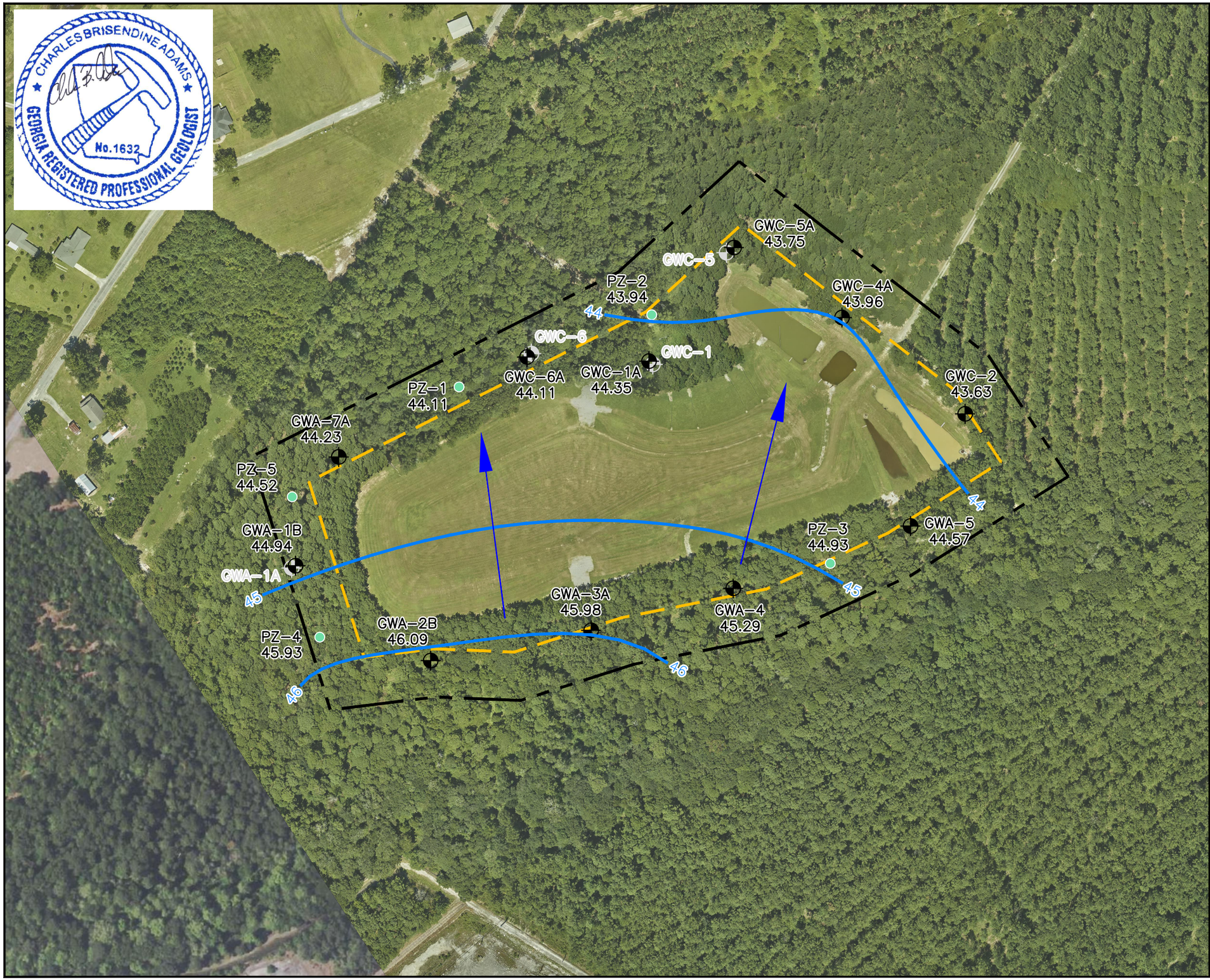
GEORGIA POWER COMPANY
PLANT McINTOSH
INACTIVE LANDFILL No. 3

2022 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

WELL LOCATION MAP

PROJECT NO. I054-117 February 2023

DRAWN BY:	MM	FIGURE:
CHECKED BY:	CA	2



CHARLES BRISENDINE ADAMS
GEORGIA REGISTERED PROFESSIONAL GEOLOGIST
No. 1632

ATLANTIC COAST CONSULTING, INC.

200 0 100 200

SCALE (IN FEET)

LEGEND:

EXISTING	DESCRIPTION
	EXISTING 100-FOOT BUFFER ZONE
	WASTE MANAGEMENT BOUNDARY
GWC-1A 46.79	DETECTION WELL GROUNDWATER ELEVATION (FT NAVD88)
PZ-1 46.35	PIEZOMETER GROUNDWATER ELEVATION (FT NAVD88)
GWC-1	ABANDONED PIEZOMETER
47	GROUNDWATER ELEVATION CONTOUR (FT NAVD88)
	GROUNDWATER FLOW DIRECTION

NOTES:
1. DEPTHS TO WATER MEASURED AUGUST 30, 2022.
2. FT NAVD88 = FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988.
3. PIEZOMETERS GWA-1A, GWC-1, GWC-5, AND GWC-6 WERE ABANDONED ON FEBRUARY 7, 2023 PER MINOR MODIFICATION DATED OCTOBER 5, 2022 AND NOT USED TO CONSTRUCT POTENTIOMETRIC CONTOURS. WELLS SELECTED FOR CONTOURING WERE MOST CONSISTENT WITH OVERALL SITE GROUNDWATER FLOW PATTERN.
4. PIEZOMETERS PZ-4 AND PZ-5 WERE INSTALLED IN JANUARY 2022.
5. AERIAL DATED 8/25/2022 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY DATED 2022 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.

PROJECT

Georgia Power

GEORGIA POWER COMPANY
PLANT McINTOSH
INACTIVE LANDFILL No. 3

2022 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

POTENTIOMETRIC CONTOUR MAP AUGUST 2022

PROJECT NO. I054-117 February 2023

DRAWN BY:	RW	FIGURE:
CHECKED BY:	MM	3

APPENDICES

APPENDIX A

WELL ABANDONMENT REPORT

Georgia Power

Georgia Power Company
Plant McIntosh Inactive Landfill No. 3

Rincon, Georgia
PERMIT #: 051-008D(LI)
Effingham County

WELL ABANDONMENT REPORT

Atlantic Coast Consulting, Inc.

ATLANTIC COAST CONSULTING, INC.

TABLE OF CONTENTS

PROFESSIONAL GEOLOGIST CERTIFICATION

I, Charles B. Adams, certify that I am a qualified groundwater scientist as demonstrated by a Georgia state registered professional geologist certification, in accordance with the Georgia Rules of Solid Waste Management, 391-3-4-.01. I have sufficient training and experience in groundwater hydrology and related fields to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that the data in this report have been prepared by me or a subordinate working under my direction.

_____

Charles B. Adams, P.G.
Georgia P.G. Registration Number 1632
Date: February 24, 2023

1.0 INTRODUCTION

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 west of the Savannah River. Plant McIntosh Inactive Landfill No. 3 is located on the southwestern portion of the plant property.

A groundwater monitoring system was installed within the uppermost aquifer at Plant McIntosh Inactive Landfill No. 3. The monitoring system is designed to monitor groundwater passing the waste boundary of the Coal Combustion Residual (CCR) Unit within the uppermost aquifer. Figure 1, Well Location Map, shows the site monitoring wells, piezometers, and "Hunt Club" well location. The objective of this report is to document the abandonment of four wells and the abandonment of the "Hunt Club" water well. A minor modification was submitted in GEOS, submittal identification 701522, to remove four wells from the network (GWA-1A, GWC-1, GWC-5, and GWC-6) and to remove the "Hunt Club" well as the well is no longer in use and all associated infrastructure has been removed. This modification was approved in an Environmental Protection Division (EPD) letter dated December 19, 2022.

2.0 ABANDONMENT PROTOCOLS

Wells were abandoned in accordance with the Groundwater Monitoring Plan, the Georgia EPD 1991 Manual for Groundwater Monitoring, and the U.S. Environmental Protection Agency 2018 Design and Installation of Monitoring Wells, SESDGUID-101-R2. Field work for this project occurred from February 6 to 16, 2023 under the direction of Charles Adams, P.G. (Georgia P.G. No. 1632) and field supervision of Taylor Goble (Georgia P.G. No. 2364). The abandonments for GWA-1A, GWC-1, GWC-5, and GWC-6 were performed by Southern Company Services, Inc. Civil Field Services, and the abandonment of the "Hunt Club" well was performed by Cascade Drilling, L.P. (Cascade), a licensed water well driller in Georgia with a valid bond provided in Appendix A. A copy of the State abandonment form is included in Appendix A. A summary of construction details for wells GWA-1A, GWC-1, GWC-5, and GWC-6 is provided in Table 1. A well location map is provided as Figure 1. Boring and well construction logs are included in Appendix A.

2.1 Well Abandonments

The well abandonments of GWA-1A, GWC-1, GWC-5, and GWC-6 were completed by Southern Company Services, Inc., Civil Field Services (bond copy in Appendix A). Depths to water and total well depths were measured at each location on February 7, 2023, prior to abandonment. The wells were filled from the bottom up, utilizing the tremie pipe method, with a mixture of AquaGuard grout up to the top of well casing. The surface completions (outer steel casing, concrete pad, and concrete bollards) were then removed and disposed of at an approved location on site. The well riser pipe was cut and removed to a depth of approximately 3 feet below ground surface. Locations were rechecked for grout settlement and additional grout was added to ensure the grout column was flush with the ground surface. Abandonment logs are provided in Appendix B.

2.2 Hunt Club Well Abandonment

The Hunt Club well abandonment was completed by grouting in place by Cascade, a licensed water well driller, bonded in Georgia (a copy of bond is in Appendix A). The depth to water and total well depth was measured prior to abandonment. Construction information on the "Hunt

Club" well is not available. Prior to abandonment Cascade utilized a downhole camera to inspect the well casing and the depth was verified using a weighted tag line. There were no obstructions in the well. Prior to abandonment the in-place plumbing of the well was secured and the pump and associated lines were removed from the well. The well was tremie grouted with AquaGuard up to 60 feet below ground, and the remainder of the casing was filled with a non-shrinking Portland Type I cement grout. The cement was mixed with a ratio of 6 gallons of water per 94 pounds of Portland Type I cement. Then the casing was cut off approximately 3 feet below the ground surface and the protective cover was removed. An abandonment log is provided in **Appendix C.**

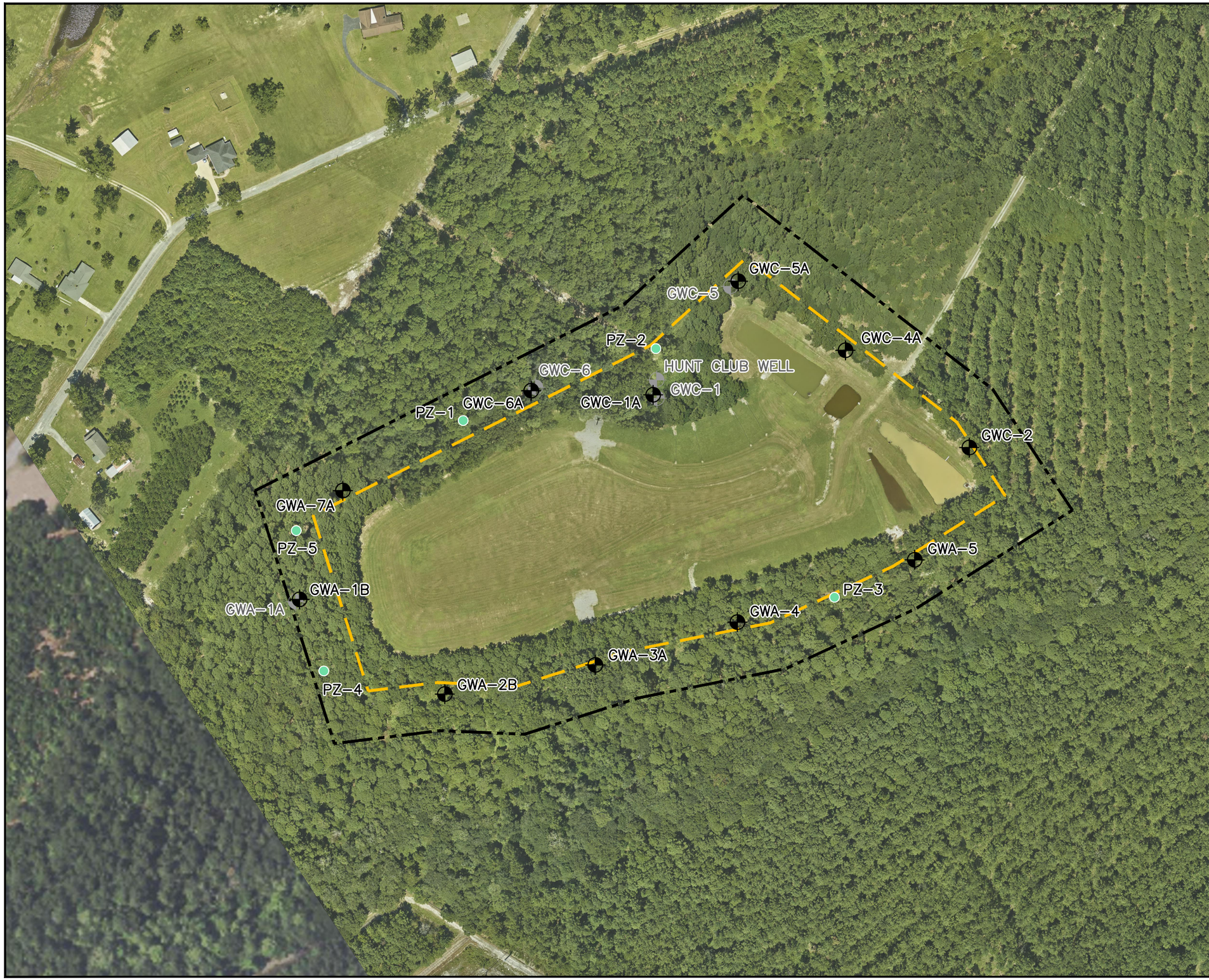
3.0 REFERENCES

Georgia Environmental Protection Division, Georgia Department of Natural Resources, 1991. *Manual for Groundwater Monitoring*, September 1991.

Georgia Power, 2022. *Request for Minor Modification to Groundwater Monitoring Network,* October 6, 2022, GEOS Submittal Id.: 701522.

U.S. Environmental Protection Agency Region 4, Science and Ecosystem Support Division, 2018. *Design and Installation of Monitoring Wells*, SESDGUID-101-R2, Effective Date January 16, 2018.

FIGURE



ATLANTIC COAST CONSULTING, INC.

200 0 100 200

SCALE (IN FEET)

LEGEND:

EXISTING	DESCRIPTION
	EXISTING 100–FOOT BUFFER ZONE
	WASTE MANAGEMENT BOUNDARY
GWC-1A	WELL
PZ-1	PIEZOMETER
GWA-1A	ABANDONED PIEZOMETER

NOTES:
1. AERIAL DATED 8/25/2022 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY DATED 2022 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.
2. PIEZOMETERS GWA-1A, GWC-1, GWC-5, AND GWC-6 WERE ABANDONED ON FEBRUARY 7, 2023 AND THE HUNT CLUB WELL WAS ABANDONED ON FEBRUARY 20, 2023 PER MINOR MODIFICATION APPROVED ON OCTOBER 5, 2022.

PROJECT

Georgia Power

GEORGIA POWER COMPANY
PLANT McINTOSH
INACTIVE LANDFILL No. 3

WELL ABANDONMENT REPORT

WELL LOCATION MAP

PROJECT NO. I054-117 February 2023

DRAWN BY:	MM	FIGURE:	1
CHECKED BY:	CA		

TABLE

Table 1
Well Summary
Plant McIntosh Inactive Landfill No. 3
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
GWA-1A	01/05/2017	852023.48	954556.79	66.76	37.53	29.23	27.53	39.23	Upgradient
GWC-1	01/22/1996	852446.79	955308.31	66.08	35.95	30.13	26.15	39.93	Downgradient
GWC-5	05/05/1998	852679.23	955461.61	68.08	31.00	37.08	21.15	46.93	Downgradient
GWC-6	05/06/1998	852469.31	955055.59	68.51	32.64	35.87	26.73	41.78	Downgradient

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

APPENDICES

APPENDIX A

Driller's Bonds,
Boring/Well Construction Logs
State Abandonment Form

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **Deanna M. French, Susan B. Larson, Elizabeth R. Hahn, Jana M. Roy, Scott McGilvray, Mindee L. Rankin, Ronald J. Lange, John R. Claeys, Roger Kaltenbach, Guy Armfield, Scott Fisher, Andrew P. Larsen, Nicholas Fredrickson, William M. Smith, Derek Sabo, Charla M. Boadle**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-seventh day of April, 2020.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

By _____
Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA
HENNEPIN COUNTY

On this twenty-seventh day of April, 2020, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.

ALISON DWAN NASH-TROUT
NOTARY PUBLIC - MINNESOTA
My Commission Expires
January 31, 2025

_____
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 12 day of April, 2021.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

This Power of Attorney expires
January 31, 2025

_____
Kara Barrow, Secretary

Please direct bond verifications to surety@intactinsurance.com

CONTINUATION
CERTIFICATE

Atlantic Specialty Insurance Company , Surety upon

a certain Bond No. 800033976

dated effective 09/27/2017
(MONTH-DAY-YEAR)

on behalf of Ricky Davis / Cascade Drilling, L.P.
(PRINCIPAL)

and in favor of Department of Natural Resources, State of Georgia
(OBLIGEE)

does hereby continue said bond in force for the further period

beginning on 06/30/2021
(MONTH-DAY-YEAR)

and ending on 06/30/2023
(MONTH-DAY-YEAR)

Amount of bond Thirty Thousand and 00/100 Dollars ($30,000.00)

Description of bond Performance Bond for Water Well Contractors

PROVIDED: That this continuation certificate does not create a new obligation and is executed upon the express condition and provision that the Surety's liability under said bond and this and all Continuation Certificates issued in connection therewith shall not be cumulative and that the said Surety's aggregate liability under said bond and this and all such Continuation Certificates on account of all defaults committed during the period (regardless of the number of years) said bond had been and shall be in force, shall not in any event exceed the amount of said bond as hereinbefore set forth.

Signed and dated on April 12th , 2021
(MONTH-DAY-YEAR)

Atlantic Specialty Insurance Company

By Andrew P. Larsen
Attorney-in-Fact Andrew P. Larsen

Parker, Smith & Feek, Inc.
Agent

2233 112th Ave NE Bellevue, WA 98004
Address of Agent

425-709-3600
Telephone Number of Agent

S-0157/GE 8/08

XDP

CONTINUATION
CERTIFICATE

SAFECO Insurance Company of America , Surety upon

a certain Bond No. **4993104**

dated effective June 30, 1987
(MONTH-DAY-YEAR)

on behalf of Southern Company Services, Inc.
(PRINCIPAL)

and in favor of Georgia Department of Natural Resources, Environmental Protection Division
(OBLIGEE)

does hereby continue said bond in force for the further period

beginning on June 30, 2021
(MONTH-DAY-YEAR)

and ending on June 30, 2022
(MONTH-DAY-YEAR)

Amount of bond Fifteen Thousand Dollars and 00/100 ($15,000.00)

Description of bond Water Well Contractors & Drillers

Premium: $100.00

PROVIDED: That this continuation certificate does not create a new obligation and is executed upon the express condition and provision that the Surety's liability under said bond and this and all Continuation Certificates issued in connection therewith shall not be cumulative and that the said Surety's aggregate liability under said bond and this and all such Continuation Certificates on account of all defaults committed during the period (regardless of the number of years) said bond had been and shall be in force, shall not in any event exceed the amount of said bond as hereinbefore set forth.

Signed and dated on 05/06/2021
(MONTH-DAY-YEAR)
SAFECO Insurance Company of America
175 Berkeley Street, Boston, MA 02116

By
Attorney-in-Fact Jeffrey M. Wilson, Attorney-in-Fact

McGriff Insurance Services, Inc.
Agent
2211 7th Avenue South, Birmingham, AL 35233
Address of Agent
(205) 252-9871
Telephone Number of Agent

S-0157/GE 8/08

XDP

CONTINUATION
CERTIFICATE

SAFECO Insurance Company of America , Surety upon

a certain Bond No. **4993104**

dated effective June 30, 1987
(MONTH-DAY-YEAR)

on behalf of Southern Company Services, Inc.
(PRINCIPAL)

and in favor of Georgia Department of Natural Resources, Environmental Protection Division
(OBLIGEE)

does hereby continue said bond in force for the further period

beginning on June 30, 2022
(MONTH-DAY-YEAR)

and ending on June 30, 2023
(MONTH-DAY-YEAR)

Amount of bond Fifteen Thousand Dollars and 00/100 ($15,000.00)

Description of bond Water Well Contractors & Drillers

Premium: $100.00

PROVIDED: That this continuation certificate does not create a new obligation and is executed upon the express condition and provision that the Surety's liability under said bond and this and all Continuation Certificates issued in connection therewith shall not be cumulative and that the said Surety's aggregate liability under said bond and this and all such Continuation Certificates on account of all defaults committed during the period (regardless of the number of years) said bond had been and shall be in force, shall not in any event exceed the amount of said bond as hereinbefore set forth.

Signed and dated on 05/06/2021
(MONTH-DAY-YEAR)
SAFECO Insurance Company of America
175 Berkeley Street, Boston, MA 02116

By
Attorney-in-Fact Jeffrey M. Wilson, Attorney-in-Fact

McGriff Insurance Services, Inc.
Agent
2211 7th Avenue South, Birmingham, AL 35233
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XDP

Liberty Mutual SURETY

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

American States Insurance Company
First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

Certificate No: **8205019-016032**

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American States Insurance Company is a corporation duly organized under the laws of the State of Indiana, that First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America are corporations duly organized under the laws of the State of New Hampshire (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Alisa B. Ferris; Anna Childress; Jeffrey M. Wilson; Mark W. Edwards II; Richard H. Mitchell; Robert R. Freel; Sam Audia; William M. Smith

all of the city of Birmingham state of AL each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 11th day of March, 2021.

American States Insurance Company
First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

By: David M. Carey
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 11th day of March, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.

Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-law and Authorizations of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, which are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.
Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorney-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 6th day of May, 2021.

By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

ERM
3200 Windy Hill Rd Ste 1500W
Atlanta, GA 30339
Telephone: 678-486-2700

WELL NUMBER GWA-1A

CLIENT Southern Company Services, Inc.
PROJECT NAME Plant McIntosh
PROJECT NUMBER 0372382
PROJECT LOCATION Ash Disposal Site
DATE STARTED 1/4/17 **COMPLETED** 1/5/17
#3 **GROUND ELEVATION** 64.23 **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Southern Comparny Services, Inc
GROUND WATER LEVELS AFTER DRILLING: 6.17 ft / Elev 57.63 ft
DRILLING METHOD Hollow Stem Auger 2"
Northing 852023.48
LOGGED BY NGV **CHECKED BY** ALR
Easting 954556.79
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION		WELL DIAGRAM
0								Casing Top Elev: 66.76 Casing Type: PVC
	SS	100	3-3-4 (7)	SP		(SP) loose light gray, fine grained SAND, loose, poorly graded, subrounded, dry	61.7	
2.5								
5	SS	100	7-5-11 (16)	SP-SC		(SP-SC) light gray, fine grained SAND with Clay, medium dense, poorly graded, subrounded, moist	59.2	
5.0								
	SS	100	3-2-4 (6)	SP-SC		(SP-SC) light gray, fine grained SAND with Clay, medium dense, poorly graded, subrounded, wet	56.7	
7.5								
10	SS	100	5-8-6 (14)	SC		(SC) light gray, fine grained Clayey SAND, medium dense, poorly graded, subrounded, wet	54.2	70/30 Portland Cement / bentonite mix
10.0								
15	SS	100	1-2-2 (4)	SC		(SC) light gray, fine grained Clayey SAND, medium dense, poorly graded, subrounded, wet, trace clay nodules	49.2	
15.0								
20	SS	100	3-3-5 (8)	CL		(CL) light gray, Sandy CLAY, very stiff, moderate plasticity, wet	44.2	
20.0								Pel Plug 3/8"
25	SS	100	3-3-2 (5)	SC		(SC) light gray and tan, fine grained Clayey SAND, dense, poorly graded, subrounded, wet	39.2	
25.0								
30	SS	100		SC		(SC) light gray and tan, more tan than above, fine grained Clayey SAND, dense, poorly graded, subrounded, wet	34.2	20/40 industrial quartz ANSI std 61 4" UPack
30.0								
35	SS	100	1-2-1 (3)	CL		(CL) light gray, Sandy CLAY, medium stiff, moderate plasticity, wet	29.2	
35.0								
40	SS	100	5-5-5 (10)	CL		(CL) light gray, Sandy CLAY, medium stiff, moderate plasticity, wet	24.2	
40.0								
						Bottom of borehole at 40.0 feet.		

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 3/30/17 10:39 - C:\USERS\PUBLIC\DOCUMENTS\BENTLEY\GINT\PROJECTS\GWA-1A.GPJ

NAVD = feet North American Vertical Datum of 1988.
Coordinates are in NAD 1983 Georgia State Plane East Zone.
Well resurveyed June 2020.

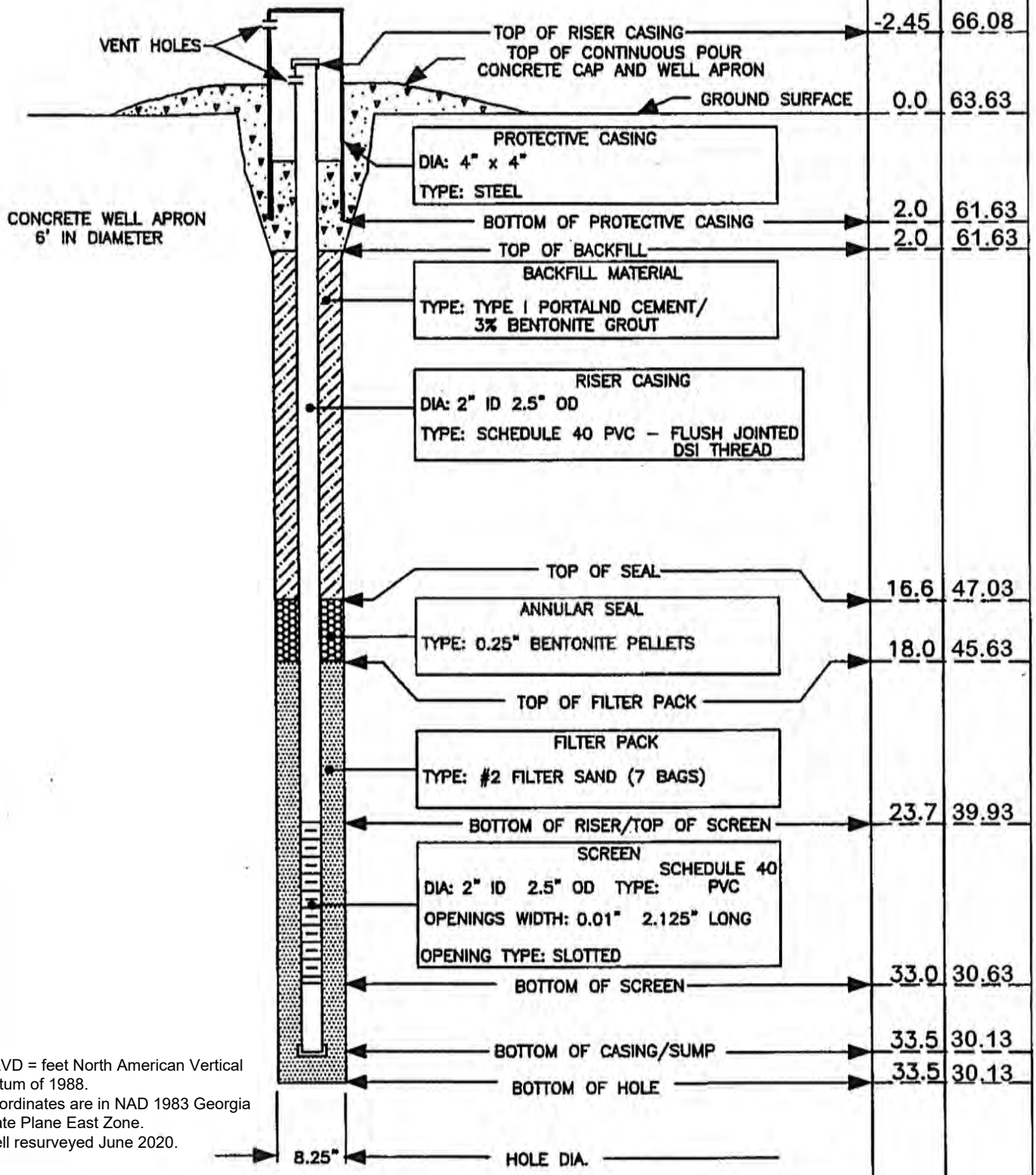
Southern Company Services

WELL CONSTRUCTION LOG

PROJECT	WELL NO.
Plant McIntosh Groundwater Monitoring Plan	GWC-1

SITE	LOCATION
Hunt Club–Ash Disposal Area #3	N 852446.79 E 955308.31

BEGUN	COMPLETED	PREPARED BY	WATER LEVEL	CONTRACTOR
1/22/96	1/22/96	Terri Hartsfield	EL. 53.81	SCS – Atlanta



NAVD = feet North American Vertical Datum of 1988.
Coordinates are in NAD 1983 Georgia State Plane East Zone.
Well resurveyed June 2020.

Well Identification	GWC-1
Name of Drillers	Jeff Gilreath David Ivey Melvin Hughes
Identification of Drill Rig	CME 75 Serial # 242227
Drilling Method	Hollow Stem Auger w/ Continuous Sampler
Well Location	N 852446.79 E 955308.31
Borehole Diameter	8.25"
Well Casing Diameter	2" I. D.
Well Depth	33.5'
Casing Materials	Schedule 40 PVC
Screen Materials	Schedule 40 PVC
Screen Design	Slotted
Casing and Screen Joint Type	Flush Jointed
Screen Slot Size	0.01"
Screen Slot Length	2 1/8"
Filter Pack Material and Size	#2 filter sand
Filter Pack Volume	7 bags (~ 3.5 cu. ft.)
Filter Pack Placement Method	tremie
Sealant Materials	0.25" bentonite pellets
Sealant Volume	0.47 cu. ft.
Sealant Placement Method	tremie
Well Development Procedures	Grunfos Rediflo
Type of Protective Well Cap	locking, compression ring

Southern Company Services, Inc.
Soil Boring Log

Project:	Plant McIntosh Groundwater Monitoring Plan		**HOLE No. GWC-1**
Location:	Ash Disposal Site No. 3		
Purpose:	Install 2" Monitoring Well		SHEET 1 OF 1
Position:	N 852446.79, E: 955308.31	Surface Elevation: 63.63	
Rig Type:	CME 75	Contractor: SCS Atlanta	Driller: Jeff Gilreath
Drilling Method:	Hollow Stem Auger	Boring Depth: 33.5	No. SPT: 7 No. UD Samples: 0
Date Started:	1/22/96	Date Completed: 1/22/96	Logged By: Terri Hartsfield Date Logged: 1/22/96
Hole Closure:	2" Monitoring Well		

WATER TABLE	DEPTH AND ELEVN. (FT)	SYMBOLIC LOG	SOIL DESCRIPTION	SAMPLE NUMBER	SAMPLE LEGEND	SAMPLE RECOVERY (%)	SAMPLE SPT VALUES BLOWS/6" (N)	COMMENTS	TEST RESULTS MOISTURE CONTENT (%)	TEST RESULTS LIQUID LIMIT (%)	TEST RESULTS PLASTIC LIMIT (%)	TEST RESULTS K (cm/s)
	0 63.63		3" Dark Gray TOPSOIL	SS-1		100		Auger w/ Continuous Sampler				
	63.63		Light Gray Slightly Silty Fine SAND Organgish Brown and Gray Silty Fine SAND									
	58.63 5		Orange and Gray, Stiff, Silty Fine SAND to Fine Sandy SILT	SS-2		100						
	53.63 10			SS-3		100						
	48.63 15		Grades to Dark Red, Stiff, Plastic CLAY/SILT interlayered with Gray and Tan Silty Sand to Fine Sandy Silt	SS-4		100						
	43.63 20		Mottled Pink and Gray, Fine, Clayey, Silty SAND w/Layers of Gray and Orange Interlayered Clayey Sand	SS-5		100						
	38.63 25		Orangish Brown and Gray Silty SAND Interlayered w/Stiff, Pink Sandy CLAY	SS-6		30						
	33.63 30			SS-7		100						
	30.13		^Boring Terminated @ 33.5'									

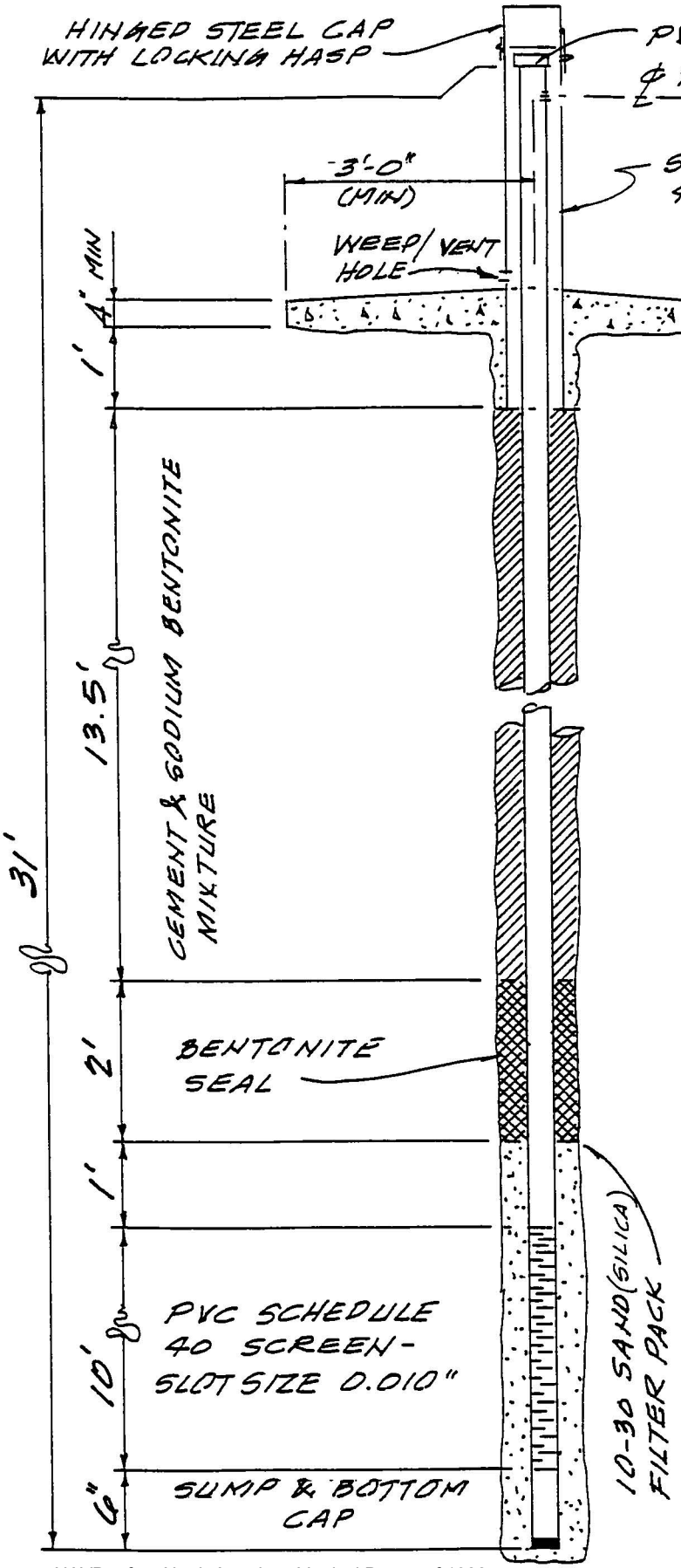
SS = Split Spoon; ST = Shelby Tube;
D = Dennison; P = Pitcher; O = Other

▽ while drilling
▼ after drilling

☑ 11.09 after 24 hours

Hole No. GWC-1

WELL Nº GWC-5



TOP OF WELL ELEVATION AT PLUG/CAP 68.08

24 HR. STATIC WATER LEVEL 1.49

NORTHING 852679.23

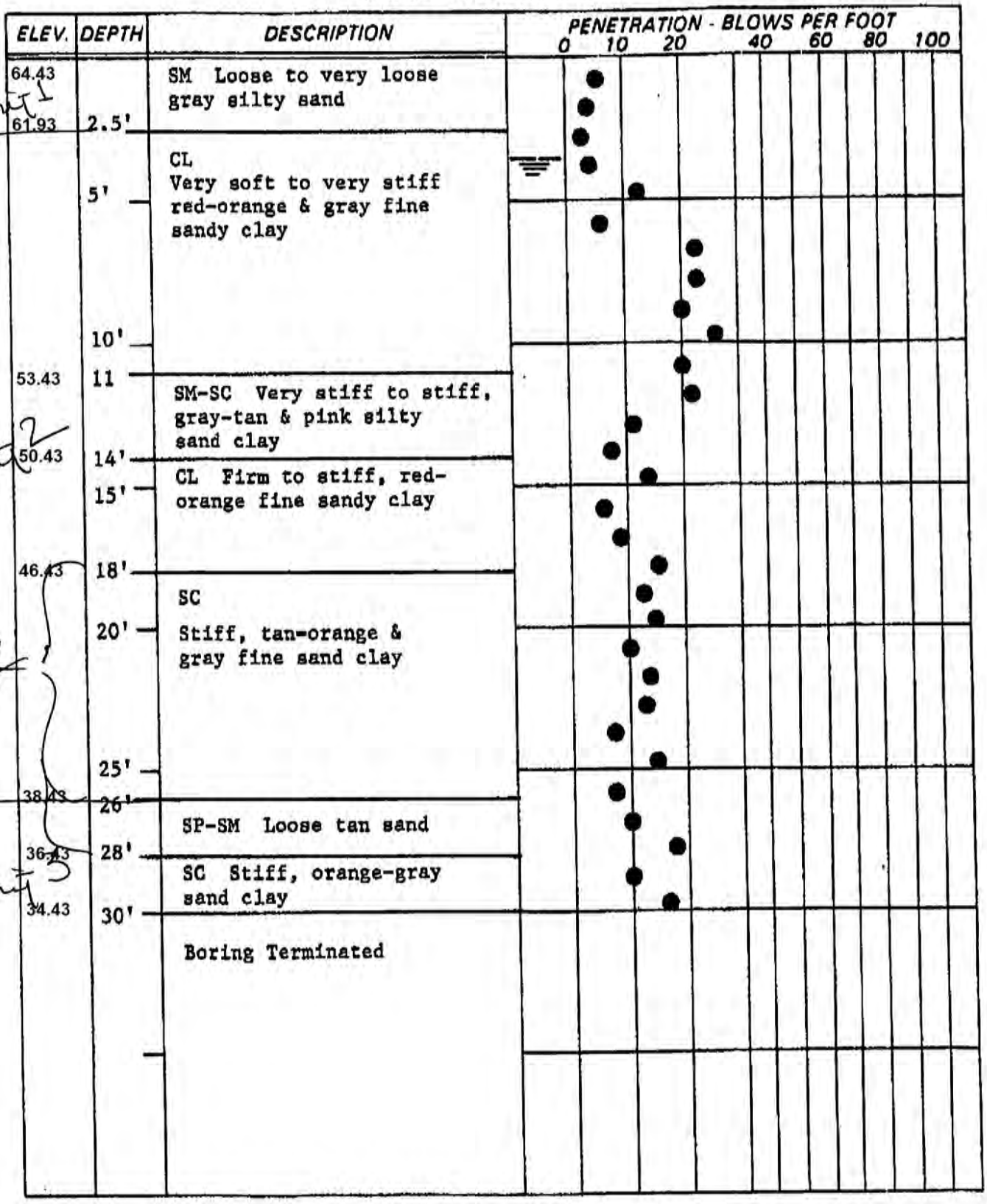
EASTING 955461.61

SCALE: 1/2" = 1'-0" VERT.
1" = 1'-0" HORZ

NAVD = feet North American Vertical Datum of 1988.
Coordinates are in NAD 1983 Georgia State Plane East Zone.
Well resurveyed June 2020.

TEST BORING RECORD

FIELD CLASSIFIED



Penetration is number of blows of 140 lb. hammer falling 30 in. required to drive 2.0 in. O.D. sampler one foot.

BORING NO. G.W.C.-5

WHITAKER LABORATORY, INC.

JOB SEPCO Plant McIntosh

DATE 5/5/98

SITE: SEPCO Plant McIntosh, Rincon, GA WELL NO. G.W.C.-6

"AS-BUILT" DIAGRAM OF EACH WELL: attached

NAME OF DRILLER(S): Ron Wilkerson
Tim Wainwright
Joseph Whitaker
Carroll Crowther

TYPE OF DRILL RIG(S): Cannonball B-53

DRILLING METHOD: 6.25" I. D. hollow stem augers

WELL LOCATION: See the attached well schematic

BOREHOLE DIAMETER: 12.25 inches

WELL CASING DIAMETER: 2.0" I. D.

WELL DEPTH: 29'

DRILLING AND LITHOLOGIC LOGS: attached

CASING MATERIALS: 2.0" dia. ASTM, NSF rated, Schedule 40 PVC

SCREEN MATERIALS AND DESIGN: 2" to 4" dia. PVC with 0.01" slots ("Pre-Pac Dual-Wall Well Screen")

SCREENING AND CASING JOINT TYPE: flush threaded

SCREEN SLOT SIZE: 0.01" slots - 1.5" long (4 slots per diameter) (8 slots per vertical inch)

SCREEN LENGTH: 5'

FILTER PACK MATERIAL/SIZE: 20/30 quartz (silica) sand

FILTER PACK VOLUME: 4.35 cu. ft.

FILTER PACK PLACEMENT METHOD: Tremie pipe

SEALANT MATERIALS: Course grit sodium benonite

SEALANT VOLUME: 1.55 cu. ft.

SEALANT PLACEMENT METHOD: Tremie pipe

SURFACE SEAL DESIGN/CONSTRUCTION: See the attached well schematic

WELL DEVELOPMENT PROCEDURE: Pumping/surging

TYPE OF PROTECTIVE WELL CAP: 4" x 4" x 4' locking steel cover

GROUND SURFACE ELEVATION: See the attached individual well schematic

WELL CAP ELEVATION: See the attached individual well schematic

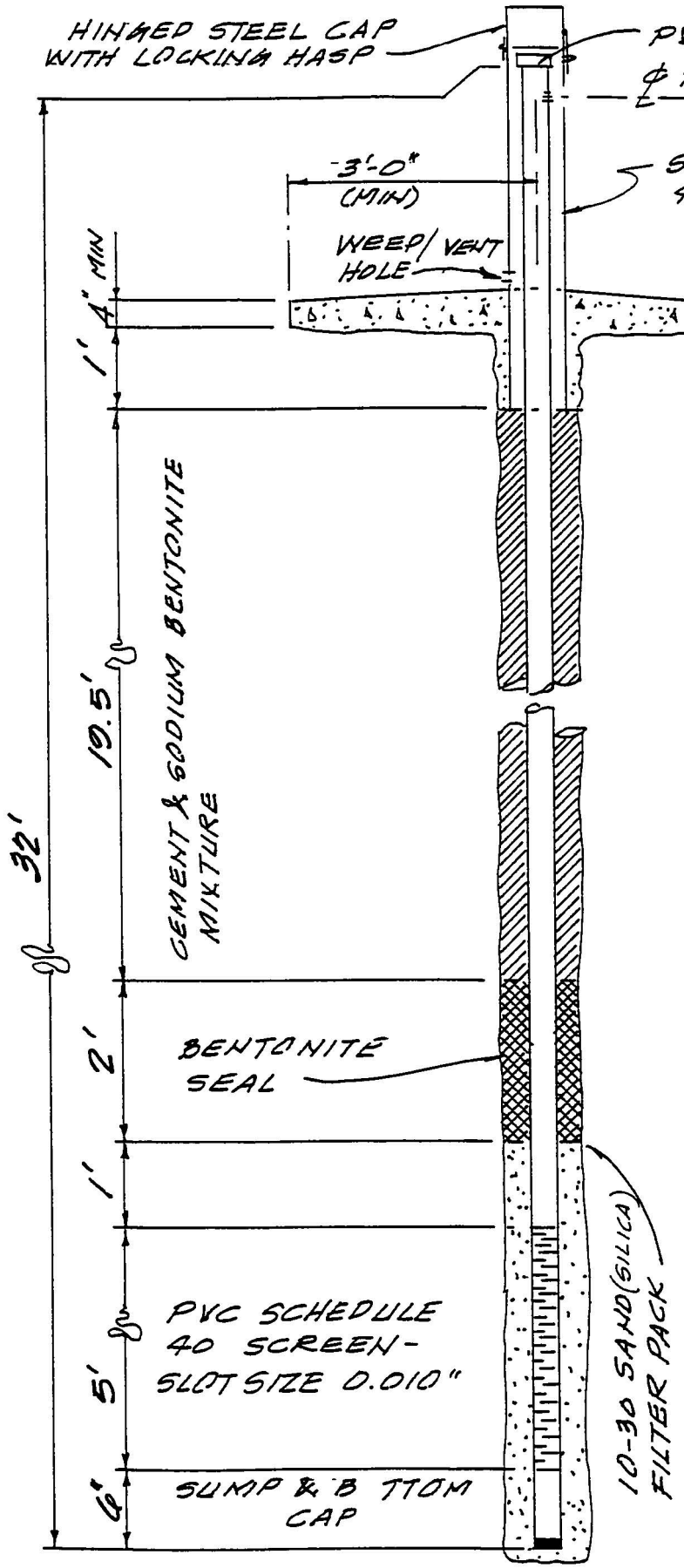
DETAILED DRAWING OF WELL: See the attached individual well schematic

GENERAL WELL INSTALLATION PROCEDURES

Prior to drilling the first well, all equipment was steam cleaned. This process was repeated after installation of each well.

All monitoring wells were installed using hollow-stem augers to advance the holes.

WELL Nº GWC-6



TOP OF WELL ELEVATION AT PLUG/CAP 68.51

24 HR. STATIC WATER LEVEL 16.48

NORTHING 852469.31

EASTING 955055.59

SCALE: 1/2" = 1'-0" VERT.
1" = 1'-0" HORZ

NAVD = feet American Vertical Datum of 1988.
Coordinates are in NAD 1983 Georgia State Plane East Zone.
Well resurveyed June 2020.

TE T BORING RECORD

FIELD CLASSIFIED

ELEV.	DEPTH	DESCRIPTION
65.28		SM Very loose to loose, gray-tan silty sand
62.28	3'	
	5'	CL Soft to hard, red-orange & brown-gray fine sandy clay
55.28	10'	
		SC Stiff to very stiff gray-tan fine sand clay
50.28	15'	
		CL Stiff to very stiff gray-orange, fine sandy clay
	20'	
41.28	24'	
	25'	SC Stiff to very stiff gray-tan fine sand clay
37.28	28'	
35.28	30'	SM-SC Stiff, tan silty sand clay
		Boring Terminated

PENETRATION · BLOWS PER FOOT
0 10 20 40 60 80 100

Penetration is number of blows of 140 lb. hammer falling 30 in. required to drive 2.0 in. O.D. sampler one foot.

BORING NO. G.W.C-6

JOB SEPCO - Plant McIntosh

WHITAKER LABORATORY, INC.

/98

Environmental Protection

Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr. Drive SE, Suite 1152 East Tower, Atlanta, Georgia 30334
PHONE: (404) 656-4713

Well Completion Data Form

Report Completion Date: 2/20/23

For ☐ New Construction ☐ Under Repair/Modification ☐ Completed ☒ Abandoned Wells

Property Owner Information

Property Owner Name: Georgia Power - Plant McIntosh	Phone: 205-438-5893	Email: dbsmelse@southernco.com
Company / Farm / Municipality / Water System Name: McIntosh LF3 Hunt Club Well		
Address: 981 Old Augusta Rd. Central (No. and Street)	Rincon (City) GA (State)	31326 (Zip)

Well Contractor Information

Onsite Well Driller Name: Richard Mooney	License No. 651	Phone: 706-834-5509
Well Contractor Company Name: Cascade Drilling, LP		
Address: 905 South Main Street (No. and Street)	New Ellenton (City) SC (State)	29809 (Zip)
Drilling under direction of Professional Geologist or Engineer Name:		License No.

Well Information

☐ Public Drinking ☐ Municipal ☐ Industrial ☐ Agricultural / Irrigation Well ☐ Bore/core hole ☐ Dewatering
☒ Individual Drinking ☐ Geothermal ☐ Test / Monitoring ☐ Injection ☐ Other Well Type:

Well Application or Permit Number: Unknown
☐ Permit/Concurrence Letter On-site

Public Water System ID:
Public Water System Well Number:

County where well is located: Effingham

Latitude: 32.340009 Longitude: -81.198099 Elevation: 64

Well Construction Description

Well Drilling Information

Total depth of well: 105.75 ft. Below Land Surface
Static water level: 73 ft. BLS
Date static water level measured: 2/15/23

☐ Rotary ☐ Percussion ☐ Bored
☐ Jetted ☐ Auger ☐ Cable Tool
☐ Horizontal ☐ Hand-Driven ☐ Hydraulic Pt.

Date Drilled:

Drill Hole Diameter

Size in., from 0 ft. to ft.
Size in., from ft. to ft.
Size in., from ft. to ft.

Grouting (☑ as applicable)

Method: ☐ Casing ☒ Tremie ☐ Packer ☐ Halliburton ☐ Under Pressure
Type: ☒ Bentonite ☒ Neat Cement ☐ Other:
☒ Present From 105.75 ft. to 60.0 ft. From 60.0 ft. to 0.0 ft.

Casing Record (☑ as applicable)

Primary: ☒ Black Steel ☐ Galvanized ☐ Stainless
☐ PVC ☐ Not Cased ☐ Other:
Secondary: ☐ Telescope ☐ Liner ☐ Surface Casing
Wall Thickness ____ in.
Weight per foot ____ SDR ____
Size: 4" in., from 0 ft. to ____ ft.
Size: ____ in., from ____ ft. to ____ ft.
Size: ____ in., from ____ ft. to ____ ft.
Size: ____ in., from ____ ft. to ____ ft.

Permanent Pump Data (☑ as applicable)

Pump Type: ____
Pump Diameter: ____ Outlet size: ____
Motor HP: ____ Motor RPM: ____
Pump Capacity: ____ GPM Total Dynamic Head: ____ ft.
Pump Set at: ____ ft. Pump Disinfected: ☐ Yes ☐ No
Meter Installed: ☐ Yes ☐ No Meter Size & Rating:
Casing Vent: ☐ Yes ☐ No Sample Tap: ☐ Yes ☐ No
Air Line: ☐ Yes ☐ No Depth ____ ft. Diameter ____ in.
Chemigation check valve installed: ☐ Yes ☐ No

Well Screen (if installed)

Type material Unknown
Size: 4" in., from 90 (approx.) ft. to 105.75 ft.
Size: ____ in., from ____ ft. to ____ ft.
Size: ____ in., from ____ ft. to ____ ft.
Size: ____ in., from ____ ft. to ____ ft.
Gravel Pack from ____ ft. to ____ ft.
Gravel Pack from ____ ft. to ____ ft.
Gravel Pack from ____ ft. to ____ ft.
Gravel Disinfected: ☐ Yes ☐ No

Test Pump Data (☑ as applicable)

Date Tested: ____ Static water level: ____ ft. BLS
Test Pump Rated: ____ GPM ____ HP
Total Continuous Hours Tested: ____
Water Level Stabilized: ☐ Yes ☐ No
Hours before Stabilization: ____ Sustained Yield: ____ GPM
Total Drawdown: ____ ft. Specific Capacity: ____ GPM/ft.
Pumping Water Level: ____ ft.
Number of Minutes to Recover: ____
Well Developed: ☐ Yes ☐ No Well Disinfected: ☐ Yes ☐ No

Well Application or Permit Number: _____

Well Construction Description (continued)	
Protection from Pollutants (☑ if done)	**Construction Techniques (☑ if done)**
☐ Upgradient from pollutant sources	☐ Drill cuttings, materials removed ☐ Well disinfected
☐ >10 ft. sewer line ☐ > 50 ft. septic tank	☐ Casing, liner pipe joints watertight ☐ Sanitary seal
☐ >150 ft. seep pit ☐ > 100 ft. septic drain field	☐ Grouted to 10 ft. (Individual) 20-50 ft. (Irrigation, Nonpublic)
☐ > 100 ft. animal enclosure ☐ protected from runoff	☐ Concrete Curbed/Pad > 4 in. thick, extend > 2 ft., sloped
☐ casing > 2 ft. above floodplain or highest known flood	☐ Gravel pack washed, disinfected
☐ Water-bearing formations sealed if likely to be polluted	☐ Casing material new or meets national standards
☐ Health Dept. notified ☐ Health Dept. variance	☐ Well screen – optimal development, low head loss & clog

Driller's Well Log (lithologic stratigraphy)

Feet (BLS)		Type Material Encountered	Remarks	Indicate Water Bearing Zones
from	to			
0				

(If more space is required, use additional sheets. If available, submit any additional pump test data or geophysical logs.)

This well was drilled and constructed (or plugged/abandoned, if applicable) in accordance with the Georgia Water Well Standards Act, O.C.G.A. 12-5-120 *et seq.*, Georgia Groundwater Use Act, O.C.G.A. 12-5-90 *et seq.* and 12-5-105 *et seq.*, Georgia Safe Drinking Water Act, O.C.G.A. 12-5-170 *et seq.*, and applicable Georgia Department of Natural Resources' rules, regulations and guidance documents.

I certify that the information on this form (Pages 1 and 2) is correct and true to the best of my knowledge.

Richard Mooney — 02/21/2023

Signature of Licensed Well Contractor's Name — Date

Richard Mooney — 651

Printed Licensed Well Contractor's Name — License No.

APPENDIX B

Well Abandonment Logs

ATLANTIC COAST CONSULTING, INC.

Well Abandonment Documentation Form

General Information

Project Name	McIntosh LF No. 3	**Inspector**	Taylor Goble	**Well Id.**	GWA-1A
Project Number	I054-117	**Weather**	Sunny/Clear	**Sheet** 1	**of** 1
Drilling Company	Southern Company (CFS)	**Temperature**	~45 degrees F	**Started**	2/7/2023
Client Name	Southern Company	**Driller**	Shawn Milam	**Completed**	2/7/2023

Well Construction Information

Well Depth (ft btoc)	38.14'	**Screen Type**	Sch. 40 PVC	**Grout Type**	Portland Cement
Well Casing Dia.	2" **L.F.** 28'	**Slot Size (in.)**	0.010" Machine slot	**End Cap/Sump**	4"
Casing Type	Sch. 40 PVC	**Pack Type & Size**	20/40 quartz sand	**Protective**	
Joint Type	Flush Threaded O-ring	**Seal Type**	Bentonite	**Casing**	Steel
Well Screen Dia.	2" **L.F.** 10'			**Well Pad Size**	4'x 4' x 4"

ft bgs = feet below ground surface, **ft btoc =** feet below top of casing, **ft³** = cubic feet

Abandonment Procedures and Volumes

Expected Grout Volume: 0.83 ft³ **Actual Grout Volume:** 0.83 ft³

1.Tagged depth to bottom, and depth to water with an electronic water level indicator.
2. Filled 2" PVC with Aqua Guard grout mixture utilizing tremie pipe method.
3. Removed protective casing, concrete well pad, and concrete bollards.
4. After adequate period of settling, location was topped off with additional grout as needed.
5. Concrete pad, bollards, and well casing material disposed of on site at approved location.

Notes:

No obstructions or bridging noted in the well during well tagging.
Water level 15.13' btoc shortly before abandonment.

ATLANTIC COAST CONSULTING, INC.

Well Abandonment Documentation Form

General Information

Project Name	McIntosh LF No. 3	**Inspector**	Taylor Goble	**Well Id.**	GWC-1
Project Number	I054-117	**Weather**	Sunny/Clear	**Sheet** 1	**of** 1
Drilling Company	Southern Company (CFS)	**Temperature**	~42 degrees F	**Started**	2/7/2023
Client Name	Southern Company	**Driller**	Shawn Milam	**Completed**	2/7/2023

Well Construction Information

Well Depth (ft btoc)	34.57'	**Screen Type**	Sch. 40 PVC	**Grout Type**	Portland Cement
Well Casing Dia.	2" **L.F.** 24'	**Slot Size (in.)**	0.010" Machine slot	**End Cap/Sump**	4"
Casing Type	Sch. 40 PVC	**Pack Type & Size**	20/40 quartz sand	**Protective**	
Joint Type	Flush Threaded O-ring	**Seal Type**	Bentonite	**Casing**	Steel
Well Screen Dia.	2" **L.F.** 10'			**Well Pad Size**	4' Diameter

ft bgs = feet below ground surface, **ft btoc =** feet below top of casing, **ft³** = cubic feet

Abandonment Procedures and Volumes

Expected Grout Volume: 0.75 ft³ **Actual Grout Volume:** 0.75 ft³

1.Tagged depth to bottom, and depth to water with an electronic water level indicator.
2. Filled 2" PVC with Aqua Guard grout mixture utilizing tremie pipe method.
3. Removed protective casing, concrete well pad, and concrete bollards.
4. After adequate period of settling, location was topped off with additional grout as needed.
5. Concrete pad, bollards, and well casing material disposed of on site at approved location.

Notes:

No obstructions or bridging noted in the well during well tagging.
Water level 21.98' btoc shortly before abandonment.

ATLANTIC COAST CONSULTING, INC.

Well Abandonment Documentation Form

General Information

Project Name	McIntosh LF No. 3	**Inspector**	Taylor Goble	**Well Id.**	GWC-5
Project Number	I054-117	**Weather**	Sunny/Clear	**Sheet** 1	**Of** 1
Drilling Company	Southern Company (CFS)	**Temperature**	~56 degrees F	**Started**	2/7/2023
Client Name	Southern Company	**Driller**	Shawn Milam	**Completed**	2/7/2023

Well Construction Information

Well Depth (ft btoc)	30.62'	**Screen Type**	Sch. 40 PVC	**Grout Type**	Portland Cement
Well Casing Dia.	2" **L.F.** 20'	**Slot Size (in.)**	0.010" Machine slot	**End Cap/Sump**	4"
Casing Type	Sch. 40 PVC	**Pack Type & Size**	20/40 quartz sand	**Protective**	
Joint Type	Flush Threaded O-ring	**Seal Type**	Bentonite	**Casing**	Steel
Well Screen Dia.	2" **L.F.** 10'			**Well Pad Size**	4' Diameter

ft bgs = feet below ground surface, **ft btoc =** feet below top of casing, **ft³** = cubic feet

Abandonment Procedures and Volumes

Expected Grout Volume: 0.67 ft³ **Actual Grout Volume:** 0.67 ft³

1.Tagged depth to bottom, and depth to water with an electronic water level indicator.
2. Filled 2" PVC with Aqua Guard grout mixture utilizing tremie pipe method.
3. Removed protective casing, concrete well pad, and concrete bollards.
4. After adequate period of settling, location was topped off with additional grout as needed.
5. Concrete pad, bollards, and well casing material disposed of on site at approved location.

Notes:

No obstructions or bridging noted in the well during well tagging.
Water level 23.51' btoc shortly before abandonment.

ATLANTIC COAST CONSULTING, INC.

Well Abandonment Documentation Form

General Information

Project Name	McIntosh LF No. 3	**Inspector**	Taylor Goble	**Well Id.**	GWC-6
Project Number	I054-117	**Weather**	Sunny/Clear	**Sheet** 1	**of** 1
Drilling Company	Southern Company (CFS)	**Temperature**	~44 degrees F	**Started**	2/7/2023
Client Name	Southern Company	**Driller**	Shawn Milam	**Completed**	2/7/2023

Well Construction Information

Well Depth (ft btoc)	32.65'	**Screen Type**	Sch. 40 PVC	**Grout Type**	Portland Cement
Well Casing Dia.	2" **L.F.** 22'	**Slot Size (in.)**	0.010" Machine slot	**End Cap/Sump**	4"
Casing Type	Sch. 40 PVC	**Pack Type & Size**	20/40 quartz sand	**Protective**	
Joint Type	Flush Threaded O-ring	**Seal Type**	Bentonite	**Casing**	Steel
Well Screen Dia.	2" **L.F.** 10'			**Well Pad Size**	4' Diameter

ft bgs = feet below ground surface, **ft btoc =** feet below top of casing, **ft³** = cubic feet

Abandonment Procedures and Volumes

Expected Grout Volume: 0.71 ft³ **Actual Grout Volume:** 0.71 ft³

1.Tagged depth to bottom, and depth to water with an electronic water level indicator.
2. Filled 2" PVC with Aqua Guard grout mixture utilizing tremie pipe method.
3. Removed protective casing, concrete well pad, and concrete bollards.
4. After adequate period of settling, location was topped off with additional grout as needed.
5. Concrete pad, bollards, and well casing material disposed of on site at approved location.

Notes:

No obstructions or bridging noted in the well during well tagging.
Water level 23.49' btoc shortly before abandonment.

APPENDIX C

Hunt Club Well Abandonment Log

ATLANTIC COAST CONSULTING, INC.

Well Abandonment Documentation Form

General Information

Project Name	McIntosh LF No. 3	**Inspector**	Taylor Goble	**Well Id.**	Hunt Club
Project Number	I054-117	**Weather**	Sunny/Clear	**Sheet** 1	**of** 1
Drilling Company	Cascade Drilling, L.P.	**Temperature**	60 degrees F	**Started**	2/20/2023
Client Name	Southern Company	**Driller**	Richard Mooney	**Completed**	2/20/2023

Well Construction Information

Well Depth (ft btoc)	105.75'			**Screen Type**	Unknown	**Grout Type**	Unknown
Well Casing Dia.	4"	**L.F.**	90'	**Slot Size (in.)**	Unknown	**End Cap/Sump**	4"
Casing Type	Steel			**Pack Type & Size**	Unknown	**Protective**	
Joint Type	Unknown			**Seal Type**	Unknown	**Casing**	Steel
Well Screen Dia.	4"	**L.F.**	15.75			**Well Pad Size**	None

ft bgs = feet below ground surface, **ft btoc =** feet below top of casing, **ft³** = cubic feet

Abandonment Procedures and Volumes

Expected Grout Volume: 9.23 ft³ **Actual Grout Volume:** 9.23 ft³

1. Removed existing steel pump from well.
2. Tagged depth to bottom, and depth to water with an electronic water level indicator.
3. Filled 4" casing with Aqua Guard grout mixture utilizing tremie pipe method up to 60 ft bgs.
4. Filled remainder of 4" casing with neat cement grout mixture utilizing tremie pipe method.
5. Removed steel casing and well housing materials, down to three feet below ground surface.
6. After adequate period of settling, location was topped off with additional grout as needed.
7. Well casing material disposed of on site at approved location.

Notes:

No obstructions or bridging noted in the well during well tagging.

Water level 73.50 ft btoc measured before abandonment.

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SECTION DIVIDER BETWEEN APPENDIX A AND APPENDIX B

Atlantic Coast Consulting, Inc.

APPENDIX B

LABORATORY ANALYTICAL AND FIELD SAMPLING REPORTS

eurofins | Environment Testing

ANALYTICAL REPORT

Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

Laboratory Job ID: 680-220481-1
Client Project/Site: Plant McIntosh Landfill #3
Revision: 1

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

Attn: Kristen N Jurinko

Authorized for release by:
10/28/2022 3:15:18 PM

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

Definitions/Glossary

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

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.

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.
¤	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 Landfill #3

Job ID: 680-220481-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-220481-1	GWA-7A	Water	08/30/22 11:20	09/01/22 11:48
680-220481-2	GWA-1B	Water	08/30/22 12:40	09/01/22 11:48
680-220481-3	GWA-1A	Water	08/30/22 13:30	09/01/22 11:48
680-220481-4	GWA-2B	Water	08/30/22 14:50	09/01/22 11:48
680-220481-5	GWC-1A	Water	08/30/22 16:00	09/01/22 11:48
680-220481-6	GWC-1	Water	08/31/22 09:55	09/01/22 11:48
680-220481-7	GWC-6	Water	08/31/22 11:35	09/01/22 11:48
680-220481-8	FD-06	Water	08/31/22 00:00	09/01/22 11:48
680-220481-9	FB-10	Water	08/31/22 09:45	09/01/22 11:48
680-220481-10	EB-11	Water	08/30/22 16:20	09/01/22 11:48
680-220481-11	FD-05	Water	08/30/22 00:00	09/01/22 11:48
680-220481-12	GWA-5	Water	08/30/22 10:33	09/01/22 11:48
680-220481-13	GWA-4	Water	08/30/22 11:35	09/01/22 11:48
680-220481-14	FB-09	Water	08/30/22 13:25	09/01/22 11:48
680-220481-15	GWA-3A	Water	08/30/22 13:47	09/01/22 11:48
680-220481-16	GWC-2	Water	08/30/22 14:53	09/01/22 11:48
680-220481-17	GWC-4A	Water	08/30/22 15:52	09/01/22 11:48
680-220481-18	EB-12	Water	08/31/22 11:35	09/01/22 11:48
680-220481-19	GWC-5A	Water	08/31/22 11:40	09/01/22 11:48
680-220481-20	GWC-6A	Water	08/31/22 12:35	09/01/22 11:48
680-220481-21	GWC-5	Water	09/01/22 10:00	09/01/22 11:48

Job ID: 680-220481-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-220481-1

Revision
The report being provided is a revision of the original report sent on 10/21/2022. The report (revision 1) is being revised in order to add missing batch QC for metals Prep Batch 413001 and associated Analytical Batches.

Receipt
The samples were received on 9/1/2022 11:48 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.2º C and 4.0º C.

Receipt Exceptions

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 SM 2540C: The sample duplicate precision for the following sample associated with analytical batch 680-738697 was outside control limits: (680-220453-A-1 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: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Client Sample ID: GWA-7A

Lab Sample ID: 680-220481-1

Date Collected: 08/30/22 11:20
Matrix: Water
Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.5		1.0	0.20	mg/L			09/10/22 13:15	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 13:15	1
Sulfate	73		1.0	0.40	mg/L			09/10/22 13:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.047		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 04:23	1
Beryllium	0.00070	J	0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 04:23	1
Calcium	14		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 04:23	1
Cobalt	0.0024	J	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 04:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.2		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:10	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 14:27	1
Copper	0.0028		0.0020	0.0011	mg/L		09/23/22 11:10	10/08/22 17:05	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/08/22 17:05	1
Vanadium	0.0016		0.0010	0.00078	mg/L		09/23/22 11:10	10/08/22 17:05	1
Zinc	0.0089		0.0050	0.0029	mg/L		09/23/22 11:10	10/08/22 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	160		10	10	mg/L			09/02/22 12:02	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.00				SU			08/30/22 11:20	1

Client Sample ID: GWA-1B

Lab Sample ID: 680-220481-2

Date Collected: 08/30/22 12:40
Matrix: Water
Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.7		1.0	0.20	mg/L			09/10/22 13:28	1
Fluoride	0.51		0.10	0.040	mg/L			09/10/22 13:28	1
Sulfate	1.6		1.0	0.40	mg/L			09/10/22 13:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.022		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 04:34	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 04:34	1
Calcium	5.2		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 04:34	1
Cobalt	0.00029	J	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 04:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.12		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:13	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 14:31	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 11:10	10/08/22 17:08	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/08/22 17:08	1

Client Sample ID: GWA-1B

Lab Sample ID: 680-220481-2

Date Collected: 08/30/22 12:40

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	0.0019		0.0010	0.00078	mg/L		09/23/22 11:10	10/08/22 17:08	1
Zinc	0.0030	J	0.0050	0.0029	mg/L		09/23/22 11:10	10/08/22 17:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	79		10	10	mg/L			09/02/22 12:02	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.86				SU			08/30/22 12:40	1

Client Sample ID: GWA-1A

Lab Sample ID: 680-220481-3

Date Collected: 08/30/22 13:30

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.5		1.0	0.20	mg/L			09/10/22 13:41	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 13:41	1
Sulfate	<0.40		1.0	0.40	mg/L			09/10/22 13:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.023		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 04:38	1
Beryllium	0.00035	J	0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 04:38	1
Calcium	1.8		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 04:38	1
Cobalt	0.00031	J	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 04:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:16	1
Chromium	0.0047		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 14:35	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 11:10	10/08/22 17:12	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/08/22 17:12	1
Vanadium	0.0019		0.0010	0.00078	mg/L		09/23/22 11:10	10/08/22 17:12	1
Zinc	<0.0029		0.0050	0.0029	mg/L		09/23/22 11:10	10/08/22 17:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	55		10	10	mg/L			09/02/22 12:02	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.01				SU			08/30/22 13:30	1

Client Sample ID: GWA-2B

Lab Sample ID: 680-220481-4

Date Collected: 08/30/22 14:50

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.9**		1.0	0.20	mg/L			09/10/22 13:53	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 13:53	1
Sulfate	**74**		1.0	0.40	mg/L			09/10/22 13:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.030**		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 04:42	1
Beryllium	**0.0019**	**J**	0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 04:42	1
Calcium	**15**		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 04:42	1
Cobalt	**0.0040**		0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 04:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.98**		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:20	1
Chromium	**0.0028**		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 14:38	1
Copper	**0.0013**	**J**	0.0020	0.0011	mg/L		09/23/22 11:10	10/08/22 17:15	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/08/22 17:15	1
Vanadium	**0.0016**		0.0010	0.00078	mg/L		09/23/22 11:10	10/08/22 17:15	1
Zinc	**0.014**		0.0050	0.0029	mg/L		09/23/22 11:10	10/08/22 17:15	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			09/02/22 12:02	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.90**				SU			08/30/22 14:50	1

Client Sample ID: GWC-1A

Lab Sample ID: 680-220481-5

Date Collected: 08/30/22 16:00

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14**		1.0	0.20	mg/L			09/10/22 14:06	1
Fluoride	**0.071**	**J**	0.10	0.040	mg/L			09/10/22 14:06	1
Sulfate	<0.40		1.0	0.40	mg/L			09/10/22 14:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.24**		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 04:45	1
Beryllium	**0.00042**	**J**	0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 04:45	1
Calcium	**2.3**		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 04:45	1
Cobalt	**0.0044**		0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 04:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.099**		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:30	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 14:42	1
Copper	**0.0019**	**J**	0.0020	0.0011	mg/L		09/23/22 11:10	10/09/22 10:30	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/09/22 10:30	1

Client Sample ID: GWC-1A

Lab Sample ID: 680-220481-5

Date Collected: 08/30/22 16:00

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	**0.00087**	**J**	0.0010	0.00078	mg/L		09/23/22 11:10	10/09/22 10:30	1
Zinc	**0.020**		0.0050	0.0029	mg/L		09/23/22 11:10	10/09/22 10:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	**65**		10	10	mg/L			09/02/22 12:02	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.43**				SU			08/30/22 16:00	1

Client Sample ID: GWC-1

Lab Sample ID: 680-220481-6

Date Collected: 08/31/22 09:55

Matrix: Water

Date Received: 09/01/22 11:48

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			09/10/22 14:19	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 14:19	1
Sulfate	<0.40		1.0	0.40	mg/L			09/10/22 14:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.030**		0.010	0.00089	mg/L		09/02/22 12:09	09/06/22 21:29	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 12:09	09/06/22 21:29	1
Calcium	**0.31**	**J**	0.50	0.14	mg/L		09/02/22 12:09	09/06/22 21:29	1
Cobalt	**0.00036**	**J**	0.0025	0.00022	mg/L		09/02/22 12:09	09/06/22 21:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:33	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 14:46	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 11:10	10/09/22 10:33	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/09/22 10:33	1
Vanadium	**0.0011**		0.0010	0.00078	mg/L		09/23/22 11:10	10/09/22 10:33	1
Zinc	<0.0029		0.0050	0.0029	mg/L		09/23/22 11:10	10/09/22 10:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	**37**		10	10	mg/L			09/02/22 12:02	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.69**				SU			08/31/22 09:55	1

Client Sample ID: GWC-6

Lab Sample ID: 680-220481-7

Date Collected: 08/31/22 11:35

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.3**		1.0	0.20	mg/L			09/10/22 14:31	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 14:31	1
Sulfate	**0.41**	**J**	1.0	0.40	mg/L			09/10/22 14:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.043**		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 04:49	1
Beryllium	**0.00049**	**J**	0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 04:49	1
Calcium	**1.5**		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 04:49	1
Cobalt	**0.00058**	**J**	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 04:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:36	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 14:56	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 11:10	10/09/22 10:36	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/09/22 10:36	1
Vanadium	**0.0013**		0.0010	0.00078	mg/L		09/23/22 11:10	10/09/22 10:36	1
Zinc	**0.0073**		0.0050	0.0029	mg/L		09/23/22 11:10	10/09/22 10:36	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			09/02/22 12:02	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.85**				SU			08/31/22 11:35	1

Client Sample ID: FD-06

Lab Sample ID: 680-220481-8

Date Collected: 08/31/22 00:00

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.5**		1.0	0.20	mg/L			09/10/22 14:44	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 14:44	1
Sulfate	**3.4**		1.0	0.40	mg/L			09/10/22 14:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.075**		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:00	1
Beryllium	**0.00020**	**J**	0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:00	1
Calcium	**2.9**		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:00	1
Cobalt	**0.0011**	**J**	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:40	1
Chromium	**0.0015**	**J**	0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 15:00	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 11:10	10/09/22 10:40	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/09/22 10:40	1

Client Sample ID: FD-06

Lab Sample ID: 680-220481-8
Date Collected: 08/31/22 00:00
Matrix: Water
Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	0.0013		0.0010	0.00078	mg/L		09/23/22 11:10	10/09/22 10:40	1
Zinc	0.0074		0.0050	0.0029	mg/L		09/23/22 11:10	10/09/22 10:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	70		10	10	mg/L			09/02/22 12:02	1

Client Sample ID: FB-10

Lab Sample ID: 680-220481-9
Date Collected: 08/31/22 09:45
Matrix: Water
Date Received: 09/01/22 11:48

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			09/10/22 14:56	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 14:56	1
Sulfate	<0.40		1.0	0.40	mg/L			09/10/22 14:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:04	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:04	1
Calcium	<0.14		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:04	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:43	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 15:04	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 11:10	10/09/22 10:43	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/09/22 10:43	1
Vanadium	0.0014		0.0010	0.00078	mg/L		09/23/22 11:10	10/09/22 10:43	1
Zinc	0.0056		0.0050	0.0029	mg/L		09/23/22 11:10	10/09/22 10:43	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			09/02/22 12:02	1

Client Sample ID: EB-11

Lab Sample ID: 680-220481-10
Date Collected: 08/30/22 16:20
Matrix: Water
Date Received: 09/01/22 11:48

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			09/10/22 17:13	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 17:13	1
Sulfate	<0.40		1.0	0.40	mg/L			09/10/22 17:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:08	1

Client Sample ID: EB-11

Lab Sample ID: 680-220481-10

Date Collected: 08/30/22 16:20

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:08	1
Calcium	<0.14		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:08	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:47	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 15:07	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 11:10	10/09/22 10:47	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/09/22 10:47	1
Vanadium	**0.0014**		0.0010	0.00078	mg/L		09/23/22 11:10	10/09/22 10:47	1
Zinc	**0.0055**		0.0050	0.0029	mg/L		09/23/22 11:10	10/09/22 10:47	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			09/02/22 12:02	1

Client Sample ID: FD-05

Lab Sample ID: 680-220481-11

Date Collected: 08/30/22 00:00

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.7**		1.0	0.20	mg/L			09/10/22 17:26	1
Fluoride	**0.12**		0.10	0.040	mg/L			09/10/22 17:26	1
Sulfate	**1.3**		1.0	0.40	mg/L			09/10/22 17:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.022**		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:11	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:11	1
Calcium	**5.5**		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:11	1
Cobalt	**0.00024**	**J**	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:50	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 15:11	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 11:10	10/09/22 10:50	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/09/22 10:50	1
Vanadium	**0.0011**		0.0010	0.00078	mg/L		09/23/22 11:10	10/09/22 10:50	1
Zinc	**0.0046**	**J**	0.0050	0.0029	mg/L		09/23/22 11:10	10/09/22 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	**80**		10	10	mg/L			09/02/22 12:02	1

Client Sample ID: GWA-5

Lab Sample ID: 680-220481-12

Date Collected: 08/30/22 10:33

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15		1.0	0.20	mg/L			09/10/22 17:39	1
Fluoride	0.11		0.10	0.040	mg/L			09/10/22 17:39	1
Sulfate	13		1.0	0.40	mg/L			09/10/22 17:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.13		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:15	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:15	1
Calcium	3.4		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:15	1
Cobalt	0.0016	J	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 10:53	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 15:15	1
Copper	0.0011	J	0.0020	0.0011	mg/L		09/23/22 11:10	10/09/22 10:53	1
Lead	0.00064	J	0.0010	0.00017	mg/L		09/23/22 11:10	10/09/22 10:53	1
Vanadium	0.0028		0.0010	0.00078	mg/L		09/23/22 11:10	10/09/22 10:53	1
Zinc	0.013		0.0050	0.0029	mg/L		09/23/22 11:10	10/09/22 10:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	64		10	10	mg/L			09/02/22 12:02	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.51				SU			08/30/22 10:33	1

Client Sample ID: GWA-4

Lab Sample ID: 680-220481-13

Date Collected: 08/30/22 11:35

Matrix: Water

Date Received: 09/01/22 11:48

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			09/10/22 17:51	1
Fluoride	0.047	J	0.10	0.040	mg/L			09/10/22 17:51	1
Sulfate	3.5		1.0	0.40	mg/L			09/10/22 17:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.046		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:19	1
Beryllium	0.00028	J	0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:19	1
Calcium	1.2		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:19	1
Cobalt	0.00097	J	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 14:25	09/30/22 09:45	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/23/22 14:25	09/28/22 19:19	1
Copper	0.0012	J	0.0020	0.0011	mg/L		09/23/22 14:25	09/28/22 19:19	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 14:25	09/28/22 19:19	1

Client Sample ID: GWA-4

Lab Sample ID: 680-220481-13

Date Collected: 08/30/22 11:35

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	<0.00078		0.0010	0.00078	mg/L		09/23/22 14:25	09/28/22 19:19	1
Zinc	**0.010**		0.0050	0.0029	mg/L		10/08/22 10:24	10/11/22 23:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	**40**		10	10	mg/L			09/02/22 12:02	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.72**				SU			08/30/22 11:35	1

Client Sample ID: FB-09

Lab Sample ID: 680-220481-14

Date Collected: 08/30/22 13:25

Matrix: Water

Date Received: 09/01/22 11:48

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			09/10/22 18:04	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 18:04	1
Sulfate	<0.40		1.0	0.40	mg/L			09/10/22 18:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:22	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:22	1
Calcium	<0.14		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:22	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 14:25	09/30/22 09:48	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/08/22 10:24	10/11/22 23:09	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 14:25	09/28/22 19:23	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 14:25	09/28/22 19:23	1
Vanadium	<0.00078		0.0010	0.00078	mg/L		09/23/22 14:25	09/28/22 19:23	1
Zinc	**0.012**		0.0050	0.0029	mg/L		10/08/22 10:24	10/11/22 23:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	<10		10	10	mg/L			09/02/22 12:02	1

Client Sample ID: GWA-3A

Lab Sample ID: 680-220481-15

Date Collected: 08/30/22 13:47

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26**		1.0	0.20	mg/L			09/10/22 18:17	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 18:17	1
Sulfate	<0.40		1.0	0.40	mg/L			09/10/22 18:17	1

Client Sample ID: GWA-3A

Lab Sample ID: 680-220481-15

Date Collected: 08/30/22 13:47
Matrix: Water
Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.11		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:26	1
Beryllium	0.00083	J	0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:26	1
Calcium	3.9		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:26	1
Cobalt	0.0023	J	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.10		0.080	0.060	mg/L		09/23/22 14:25	09/30/22 09:51	1
Chromium	0.0084		0.0020	0.0015	mg/L		09/23/22 14:25	09/28/22 19:26	1
Copper	0.0029		0.0020	0.0011	mg/L		09/23/22 14:25	09/28/22 19:26	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 14:25	09/28/22 19:26	1
Vanadium	<0.00078		0.0010	0.00078	mg/L		09/23/22 14:25	09/28/22 19:26	1
Zinc	0.012		0.0050	0.0029	mg/L		10/08/22 10:24	10/11/22 23:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	87		10	10	mg/L			09/02/22 12:02	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.71				SU			08/30/22 13:47	1

Client Sample ID: GWC-2

Lab Sample ID: 680-220481-16

Date Collected: 08/30/22 14:53
Matrix: Water
Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.8		1.0	0.20	mg/L			09/10/22 18:29	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 18:29	1
Sulfate	1.1		1.0	0.40	mg/L			09/10/22 18:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.058		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:30	1
Beryllium	0.00038	J	0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:30	1
Calcium	1.4		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:30	1
Cobalt	0.0012	J	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.085		0.080	0.060	mg/L		09/23/22 14:25	09/30/22 09:53	1
Chromium	0.0050		0.0020	0.0015	mg/L		09/23/22 14:25	09/28/22 19:30	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 14:25	09/28/22 19:30	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 14:25	09/28/22 19:30	1
Vanadium	<0.00078		0.0010	0.00078	mg/L		09/23/22 14:25	09/28/22 19:30	1
Zinc	0.012		0.0050	0.0029	mg/L		10/08/22 10:24	10/11/22 23:16	1

Client Sample ID: GWC-2

Lab Sample ID: 680-220481-16

Date Collected: 08/30/22 14:53

Matrix: Water

Date Received: 09/01/22 11:48

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	38		10	10	mg/L			09/06/22 11:31	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.96				SU			08/30/22 14:53	1

Client Sample ID: GWC-4A

Lab Sample ID: 680-220481-17

Date Collected: 08/30/22 15:52

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.8		1.0	0.20	mg/L			09/10/22 18:42	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 18:42	1
Sulfate	<0.40		1.0	0.40	mg/L			09/10/22 18:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.035		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:33	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:33	1
Calcium	0.39	J	0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:33	1
Cobalt	0.00048	J	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 14:25	09/30/22 09:56	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/23/22 14:25	09/28/22 19:34	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 14:25	09/28/22 19:34	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 14:25	09/28/22 19:34	1
Vanadium	<0.00078		0.0010	0.00078	mg/L		09/23/22 14:25	09/28/22 19:34	1
Zinc	0.0046	J	0.0050	0.0029	mg/L		10/08/22 10:24	10/11/22 23:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	21		10	10	mg/L			09/06/22 11:31	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.71				SU			08/30/22 15:52	1

Client Sample ID: EB-12

Lab Sample ID: 680-220481-18

Date Collected: 08/31/22 11:35

Matrix: Water

Date Received: 09/01/22 11:48

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			09/07/22 13:44	1
Fluoride	<0.040		0.10	0.040	mg/L			09/07/22 13:44	1
Sulfate	<0.40		1.0	0.40	mg/L			09/07/22 13:44	1

Client Sample ID: EB-12

Lab Sample ID: 680-220481-18

Date Collected: 08/31/22 11:35

Matrix: Water

Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:45	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:45	1
Calcium	<0.14		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:45	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 14:25	09/30/22 09:59	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/23/22 14:25	09/28/22 19:37	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 14:25	09/28/22 19:37	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 14:25	09/28/22 19:37	1
Vanadium	<0.00078		0.0010	0.00078	mg/L		09/23/22 14:25	09/28/22 19:37	1
Zinc	**0.0066**		0.0050	0.0029	mg/L		10/08/22 10:24	10/11/22 23:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	<10		10	10	mg/L			09/06/22 11:31	1

Client Sample ID: GWC-5A

Lab Sample ID: 680-220481-19

Date Collected: 08/31/22 11:40

Matrix: Water

Date Received: 09/01/22 11:48

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			09/07/22 13:57	1
Fluoride	<0.040		0.10	0.040	mg/L			09/07/22 13:57	1
Sulfate	<0.40		1.0	0.40	mg/L			09/07/22 13:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.057**		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 05:48	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 05:48	1
Calcium	**0.98**		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 05:48	1
Cobalt	**0.0018**	**J**	0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 05:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 14:25	09/30/22 10:02	1
Chromium	**0.0021**		0.0020	0.0015	mg/L		09/23/22 14:25	09/28/22 19:41	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 14:25	09/28/22 19:41	1
Lead	**0.00027**	**J**	0.0010	0.00017	mg/L		09/23/22 14:25	09/28/22 19:41	1
Vanadium	<0.00078		0.0010	0.00078	mg/L		09/23/22 14:25	09/28/22 19:41	1
Zinc	**0.014**		0.0050	0.0029	mg/L		10/08/22 10:24	10/11/22 23:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	**27**		10	10	mg/L			09/06/22 11:31	1

Client Sample ID: GWC-5A
Lab Sample ID: 680-220481-19

Date Collected: 08/31/22 11:40
Matrix: Water
Date Received: 09/01/22 11:48

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.97				SU			08/31/22 11:40	1

Client Sample ID: GWC-6A
Lab Sample ID: 680-220481-20

Date Collected: 08/31/22 12:35
Matrix: Water
Date Received: 09/01/22 11:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.6		1.0	0.20	mg/L			09/07/22 14:10	1
Fluoride	<0.040		0.10	0.040	mg/L			09/07/22 14:10	1
Sulfate	3.5		1.0	0.40	mg/L			09/07/22 14:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.081		0.010	0.00089	mg/L		09/02/22 08:10	09/06/22 18:41	1
Beryllium	0.00029	J	0.0025	0.00020	mg/L		09/02/22 08:10	09/06/22 18:41	1
Calcium	3.2		0.50	0.14	mg/L		09/02/22 08:10	09/06/22 18:41	1
Cobalt	0.0012	J	0.0025	0.00022	mg/L		09/02/22 08:10	09/06/22 18:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 14:25	09/30/22 10:05	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/23/22 14:25	09/28/22 19:52	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 14:25	09/28/22 19:52	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 14:25	09/28/22 19:52	1
Vanadium	<0.00078		0.0010	0.00078	mg/L		09/23/22 14:25	09/28/22 19:52	1
Zinc	0.0049	J	0.0050	0.0029	mg/L		10/08/22 10:24	10/11/22 23:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	73		10	10	mg/L			09/06/22 11:31	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.07				SU			08/31/22 12:35	1

Client Sample ID: GWC-5
Lab Sample ID: 680-220481-21

Date Collected: 09/01/22 10:00
Matrix: Water
Date Received: 09/01/22 11:48

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			09/07/22 14:22	1
Fluoride	<0.040		0.10	0.040	mg/L			09/07/22 14:22	1
Sulfate	<0.40		1.0	0.40	mg/L			09/07/22 14:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.36		0.010	0.00089	mg/L		09/02/22 08:10	09/06/22 18:45	1
Beryllium	0.0018	J	0.0025	0.00020	mg/L		09/02/22 08:10	09/06/22 18:45	1
Calcium	5.2		0.50	0.14	mg/L		09/02/22 08:10	09/06/22 18:45	1

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Client Sample ID: GWC-5

Date Collected: 09/01/22 10:00
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-21

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**0.012**		0.0025	0.00022	mg/L		09/02/22 08:10	09/06/22 18:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 14:25	09/30/22 10:13	1
Chromium	**0.014**		0.0020	0.0015	mg/L		09/23/22 14:25	09/28/22 19:55	1
Copper	**0.0012**	**J**	0.0020	0.0011	mg/L		09/23/22 14:25	09/28/22 19:55	1
Lead	**0.00031**	**J**	0.0010	0.00017	mg/L		09/23/22 14:25	09/28/22 19:55	1
Vanadium	<0.00078		0.0010	0.00078	mg/L		09/23/22 14:25	09/28/22 19:55	1
Zinc	**0.035**		0.0050	0.0029	mg/L		10/08/22 10:24	10/11/22 23:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2011)	**140**		10	10	mg/L			09/06/22 11:31	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**4.29**				SU			09/01/22 10:00	1

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

Lab Sample ID: MB 680-739220/2
Matrix: Water
Analysis Batch: 739220

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			09/07/22 11:32	1
Fluoride	<0.040		0.10	0.040	mg/L			09/07/22 11:32	1
Sulfate	<0.40		1.0	0.40	mg/L			09/07/22 11:32	1

Lab Sample ID: LCS 680-739220/3
Matrix: Water
Analysis Batch: 739220

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	9.94		mg/L		99	90 - 110
Fluoride	2.00	2.00		mg/L		100	90 - 110
Sulfate	10.0	10.7		mg/L		107	90 - 110

Lab Sample ID: LCSD 680-739220/4
Matrix: Water
Analysis Batch: 739220

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	9.93		mg/L		99	90 - 110	0	15
Fluoride	2.00	2.00		mg/L		100	90 - 110	0	15
Sulfate	10.0	10.6		mg/L		106	90 - 110	1	15

Lab Sample ID: 680-220574-D-13 MS
Matrix: Water
Analysis Batch: 739220

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	6.2		10.0	16.0		mg/L		98	80 - 120
Fluoride	0.075	J	2.00	2.12		mg/L		102	80 - 120
Sulfate	21		10.0	30.9		mg/L		97	80 - 120

Lab Sample ID: 680-220574-D-13 MSD
Matrix: Water
Analysis Batch: 739220

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	6.2		10.0	16.4		mg/L		102	80 - 120	2	15
Fluoride	0.075	J	2.00	2.20		mg/L		106	80 - 120	4	15
Sulfate	21		10.0	31.3		mg/L		100	80 - 120	1	15

Lab Sample ID: MB 680-739699/2
Matrix: Water
Analysis Batch: 739699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.20		1.0	0.20	mg/L			09/10/22 11:47	1
Fluoride	<0.040		0.10	0.040	mg/L			09/10/22 11:47	1
Sulfate	<0.40		1.0	0.40	mg/L			09/10/22 11:47	1

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

Lab Sample ID: LCS 680-739699/3
Matrix: Water
Analysis Batch: 739699

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	9.82		mg/L		98	90 - 110		
Fluoride			2.00	1.96		mg/L		98	90 - 110		
Sulfate			10.0	10.3		mg/L		103	90 - 110		

Lab Sample ID: LCSD 680-739699/4
Matrix: Water
Analysis Batch: 739699

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	9.74		mg/L		97	90 - 110	1	15
Fluoride			2.00	1.94		mg/L		97	90 - 110	1	15
Sulfate			10.0	10.4		mg/L		104	90 - 110	1	15

Lab Sample ID: 680-220510-H-1 MS
Matrix: Water
Analysis Batch: 739699

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	370		20.0	390	4	mg/L		79	80 - 120		
Fluoride	2.2		4.00	6.18		mg/L		100	80 - 120		
Sulfate	100		20.0	122	4	mg/L		97	80 - 120		

Lab Sample ID: 680-220510-H-1 MSD
Matrix: Water
Analysis Batch: 739699

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	370		20.0	393	4	mg/L		94	80 - 120	1	15
Fluoride	2.2		4.00	6.10		mg/L		98	80 - 120	1	15
Sulfate	100		20.0	122	4	mg/L		98	80 - 120	0	15

Lab Sample ID: 680-220514-H-1 MS
Matrix: Water
Analysis Batch: 739699

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	61		10.0	70.6	4	mg/L		97	80 - 120		
Fluoride	0.51		2.00	2.45		mg/L		97	80 - 120		
Sulfate	24		10.0	34.3		mg/L		100	80 - 120		

Lab Sample ID: 680-220514-H-1 MSD
Matrix: Water
Analysis Batch: 739699

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	61		10.0	70.5	4	mg/L		95	80 - 120	0	15
Fluoride	0.51		2.00	2.42		mg/L		95	80 - 120	1	15
Sulfate	24		10.0	34.2		mg/L		99	80 - 120	0	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 680-738607/1-A
Matrix: Water
Analysis Batch: 739706

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 738607

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		09/02/22 08:05	09/10/22 04:16	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 08:05	09/10/22 04:16	1
Calcium	<0.14		0.50	0.14	mg/L		09/02/22 08:05	09/10/22 04:16	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/02/22 08:05	09/10/22 04:16	1

Lab Sample ID: LCS 680-738607/2-A
Matrix: Water
Analysis Batch: 739706

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 738607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.100	0.0936		mg/L		94	80 - 120
Beryllium	0.0500	0.0544		mg/L		109	80 - 120
Calcium	5.00	4.69		mg/L		94	80 - 120
Cobalt	0.0500	0.0501		mg/L		100	80 - 120

Lab Sample ID: 680-220481-1 MS
Matrix: Water
Analysis Batch: 739706

Client Sample ID: GWA-7A
Prep Type: Total Recoverable
Prep Batch: 738607

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.047		0.100	0.142		mg/L		95	75 - 125
Beryllium	0.00070	J	0.0500	0.0554		mg/L		109	75 - 125
Calcium	14		5.00	18.0		mg/L		83	75 - 125
Cobalt	0.0024	J	0.0500	0.0535		mg/L		102	75 - 125

Lab Sample ID: 680-220481-1 MSD
Matrix: Water
Analysis Batch: 739706

Client Sample ID: GWA-7A
Prep Type: Total Recoverable
Prep Batch: 738607

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.047		0.100	0.139		mg/L		92	75 - 125	2	20
Beryllium	0.00070	J	0.0500	0.0527		mg/L		104	75 - 125	5	20
Calcium	14		5.00	17.6		mg/L		75	75 - 125	2	20
Cobalt	0.0024	J	0.0500	0.0525		mg/L		100	75 - 125	2	20

Lab Sample ID: MB 680-738753/1-A
Matrix: Water
Analysis Batch: 739233

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 738753

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		09/02/22 08:10	09/06/22 18:14	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 08:10	09/06/22 18:14	1
Calcium	<0.14		0.50	0.14	mg/L		09/02/22 08:10	09/06/22 18:14	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/02/22 08:10	09/06/22 18:14	1

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

Lab Sample ID: LCS 680-738753/2-A
Matrix: Water
Analysis Batch: 739233

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 738753

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Barium			0.100	0.0953		mg/L		95	80 - 120		
Beryllium			0.0500	0.0515		mg/L		103	80 - 120		
Calcium			5.00	4.86		mg/L		97	80 - 120		
Cobalt			0.0500	0.0520		mg/L		104	80 - 120		

Lab Sample ID: 680-220470-A-3-H MS
Matrix: Water
Analysis Batch: 739233

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 738753

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Barium	0.052		0.100	0.146		mg/L		94	75 - 125		
Beryllium	0.00030	J	0.0500	0.0554		mg/L		110	75 - 125		
Calcium	2.9		5.00	7.84		mg/L		100	75 - 125		
Cobalt	0.011		0.0500	0.0652		mg/L		108	75 - 125		

Lab Sample ID: 680-220470-A-3-I MSD
Matrix: Water
Analysis Batch: 739233

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 738753

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.052		0.100	0.156		mg/L		104	75 - 125	6	20
Beryllium	0.00030	J	0.0500	0.0541		mg/L		108	75 - 125	2	20
Calcium	2.9		5.00	7.90		mg/L		101	75 - 125	1	20
Cobalt	0.011		0.0500	0.0686		mg/L		115	75 - 125	5	20

Lab Sample ID: MB 680-739049/1-A
Matrix: Water
Analysis Batch: 739233

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 739049

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00089		0.010	0.00089	mg/L		09/02/22 12:09	09/06/22 21:10	1
Beryllium	<0.00020		0.0025	0.00020	mg/L		09/02/22 12:09	09/06/22 21:10	1
Calcium	<0.14		0.50	0.14	mg/L		09/02/22 12:09	09/06/22 21:10	1
Cobalt	<0.00022		0.0025	0.00022	mg/L		09/02/22 12:09	09/06/22 21:10	1

Lab Sample ID: LCS 680-739049/2-A
Matrix: Water
Analysis Batch: 739233

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 739049

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Barium			0.100	0.104		mg/L		104	80 - 120		
Beryllium			0.0500	0.0519		mg/L		104	80 - 120		
Calcium			5.00	5.13		mg/L		103	80 - 120		
Cobalt			0.0500	0.0586		mg/L		117	80 - 120		

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

Lab Sample ID: 660-123324-C-1-E MS
Matrix: Water
Analysis Batch: 739233

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 739049

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.0019	J	0.100	0.0941		mg/L		92	75 - 125
Beryllium	<0.00020		0.0500	0.0557		mg/L		111	75 - 125
Calcium	0.99		5.00	6.02		mg/L		101	75 - 125
Cobalt	<0.00022		0.0500	0.0521		mg/L		104	75 - 125

Lab Sample ID: 660-123324-C-1-F MSD
Matrix: Water
Analysis Batch: 739233

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 739049

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.0019	J	0.100	0.109		mg/L		107	75 - 125	15	20
Beryllium	<0.00020		0.0500	0.0580		mg/L		116	75 - 125	4	20
Calcium	0.99		5.00	6.34		mg/L		107	75 - 125	5	20
Cobalt	<0.00022		0.0500	0.0599		mg/L		120	75 - 125	14	20

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

Lab Sample ID: MB 180-413001/1-A
Matrix: Water
Analysis Batch: 414527

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 413001

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 11:10	10/08/22 16:12	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 11:10	10/08/22 16:12	1
Vanadium	<0.00078		0.0010	0.00078	mg/L		09/23/22 11:10	10/08/22 16:12	1
Zinc	<0.0029		0.0050	0.0029	mg/L		09/23/22 11:10	10/08/22 16:12	1

Lab Sample ID: MB 180-413001/1-A
Matrix: Water
Analysis Batch: 414650

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 413001

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 11:10	10/09/22 09:06	1

Lab Sample ID: LCS 180-413001/2-A
Matrix: Water
Analysis Batch: 414527

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 413001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	0.500	0.482		mg/L		96	80 - 120
Lead	0.500	0.510		mg/L		102	80 - 120
Vanadium	0.500	0.506		mg/L		101	80 - 120
Zinc	0.250	0.257		mg/L		103	80 - 120

Lab Sample ID: LCS 180-413001/2-A
Matrix: Water
Analysis Batch: 414650

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 413001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.25	1.21		mg/L		97	80 - 120

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

Lab Sample ID: 680-220434-G-1-C MS
Matrix: Water
Analysis Batch: 414527

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 413001

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	0.0055		0.500	0.489		mg/L		97	75 - 125
Lead	<0.00017		0.500	0.506		mg/L		101	75 - 125
Vanadium	0.0040		0.500	0.500		mg/L		99	75 - 125
Zinc	0.0035	J	0.250	0.258		mg/L		102	75 - 125

Lab Sample ID: 680-220434-G-1-C MS
Matrix: Water
Analysis Batch: 414650

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 413001

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.13		1.25	1.51		mg/L		110	75 - 125

Lab Sample ID: 680-220434-G-1-D MSD
Matrix: Water
Analysis Batch: 414527

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 413001

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	0.0055		0.500	0.494		mg/L		98	75 - 125	1	20
Lead	<0.00017		0.500	0.511		mg/L		102	75 - 125	1	20
Vanadium	0.0040		0.500	0.507		mg/L		101	75 - 125	1	20
Zinc	0.0035	J	0.250	0.255		mg/L		101	75 - 125	1	20

Lab Sample ID: 680-220434-G-1-D MSD
Matrix: Water
Analysis Batch: 414650

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 413001

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.13		1.25	1.68		mg/L		124	75 - 125	11	20
Copper	<0.0011		0.500	0.499		mg/L		100	75 - 125	2	20
Lead	<0.00017		0.500	0.505		mg/L		101	75 - 125	0	20
Vanadium	<0.00078		0.500	0.507		mg/L		101	75 - 125	3	20
Zinc	<0.0029		0.250	0.262		mg/L		105	75 - 125	1	20

Lab Sample ID: MB 180-413041/1-A
Matrix: Water
Analysis Batch: 413603

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 413041

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.0015		0.0020	0.0015	mg/L		09/23/22 14:25	09/28/22 19:12	1
Copper	<0.0011		0.0020	0.0011	mg/L		09/23/22 14:25	09/28/22 19:12	1
Lead	<0.00017		0.0010	0.00017	mg/L		09/23/22 14:25	09/28/22 19:12	1
Vanadium	<0.00078		0.0010	0.00078	mg/L		09/23/22 14:25	09/28/22 19:12	1

Lab Sample ID: MB 180-413041/1-A
Matrix: Water
Analysis Batch: 413758

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 413041

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		09/23/22 14:25	09/30/22 09:00	1

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

Lab Sample ID: LCS 180-413041/2-A
Matrix: Water
Analysis Batch: 413603

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 413041

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	0.500	0.517		mg/L		103	80 - 120
Copper	0.500	0.485		mg/L		97	80 - 120
Lead	0.500	0.510		mg/L		102	80 - 120
Vanadium	0.500	0.511		mg/L		102	80 - 120

Lab Sample ID: LCS 180-413041/2-A
Matrix: Water
Analysis Batch: 413758

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 413041

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.25	1.36		mg/L		109	80 - 120

Lab Sample ID: 680-220258-E-3-B MS
Matrix: Water
Analysis Batch: 413603

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 413041

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	0.0049		0.500	0.518		mg/L		103	75 - 125
Copper	<0.0011		0.500	0.490		mg/L		98	75 - 125
Lead	<0.00017		0.500	0.515		mg/L		103	75 - 125
Vanadium	0.0099		0.500	0.519		mg/L		102	75 - 125

Lab Sample ID: 680-220258-E-3-C MSD
Matrix: Water
Analysis Batch: 413603

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 413041

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	0.0049		0.500	0.521		mg/L		103	75 - 125	1	20
Copper	<0.0011		0.500	0.500		mg/L		100	75 - 125	2	20
Lead	<0.00017		0.500	0.525		mg/L		105	75 - 125	2	20
Vanadium	0.0099		0.500	0.529		mg/L		104	75 - 125	2	20

Lab Sample ID: MB 180-414497/1-A
Matrix: Water
Analysis Batch: 414780

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 414497

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	<0.0029		0.0050	0.0029	mg/L		10/08/22 10:24	10/11/22 22:59	1

Lab Sample ID: LCS 180-414497/2-A
Matrix: Water
Analysis Batch: 414780

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 414497

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.250	0.272		mg/L		109	80 - 120

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

Lab Sample ID: MB 180-415539/1-A
Matrix: Water
Analysis Batch: 415759

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 415539

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.0015		0.0020	0.0015	mg/L		10/19/22 12:05	10/20/22 13:48	1

Lab Sample ID: LCS 180-415539/2-A
Matrix: Water
Analysis Batch: 415759

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 415539

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	0.500	0.504		mg/L		101	80 - 120

Lab Sample ID: 680-220434-G-6-D MS
Matrix: Water
Analysis Batch: 415759

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 415539

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	<0.0015		0.500	0.505		mg/L		101	75 - 125

Lab Sample ID: 680-220434-G-6-E MSD
Matrix: Water
Analysis Batch: 415759

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 415539

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	<0.0015		0.500	0.504		mg/L		101	75 - 125	0	20

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

Lab Sample ID: MB 680-738697/1
Matrix: Water
Analysis Batch: 738697

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			09/02/22 12:02	1

Lab Sample ID: LCS 680-738697/2
Matrix: Water
Analysis Batch: 738697

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	2420	2440		mg/L		101	80 - 120

Lab Sample ID: LCSD 680-738697/3
Matrix: Water
Analysis Batch: 738697

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	2420	2400		mg/L		99	80 - 120	2	25

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

Lab Sample ID: 680-220450-A-1 DU
Matrix: Water
Analysis Batch: 738697

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	2700			2690		mg/L				1	5

Lab Sample ID: 680-220453-A-1 DU
Matrix: Water
Analysis Batch: 738697

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	3200			3000	F3	mg/L				6	5

Lab Sample ID: MB 680-739048/1
Matrix: Water
Analysis Batch: 739048

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			09/06/22 11:31	1

Lab Sample ID: LCS 680-739048/2
Matrix: Water
Analysis Batch: 739048

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			2420	2460		mg/L		102	80 - 120		

Lab Sample ID: LCSD 680-739048/3
Matrix: Water
Analysis Batch: 739048

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			2420	2430		mg/L		100	80 - 120	1	25

Lab Sample ID: 680-220538-A-2 DU
Matrix: Water
Analysis Batch: 739048

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	4800			4810		mg/L				0.2	5

HPLC/IC

Analysis Batch: 739220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-18	EB-12	Total/NA	Water	300.0-1993 R2.1	
680-220481-19	GWC-5A	Total/NA	Water	300.0-1993 R2.1	
680-220481-20	GWC-6A	Total/NA	Water	300.0-1993 R2.1	
680-220481-21	GWC-5	Total/NA	Water	300.0-1993 R2.1	
MB 680-739220/2	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-739220/3	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-739220/4	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
680-220574-D-13 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
680-220574-D-13 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 739699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-1	GWA-7A	Total/NA	Water	300.0-1993 R2.1	
680-220481-2	GWA-1B	Total/NA	Water	300.0-1993 R2.1	
680-220481-3	GWA-1A	Total/NA	Water	300.0-1993 R2.1	
680-220481-4	GWA-2B	Total/NA	Water	300.0-1993 R2.1	
680-220481-5	GWC-1A	Total/NA	Water	300.0-1993 R2.1	
680-220481-6	GWC-1	Total/NA	Water	300.0-1993 R2.1	
680-220481-7	GWC-6	Total/NA	Water	300.0-1993 R2.1	
680-220481-8	FD-06	Total/NA	Water	300.0-1993 R2.1	
680-220481-9	FB-10	Total/NA	Water	300.0-1993 R2.1	
680-220481-10	EB-11	Total/NA	Water	300.0-1993 R2.1	
680-220481-11	FD-05	Total/NA	Water	300.0-1993 R2.1	
680-220481-12	GWA-5	Total/NA	Water	300.0-1993 R2.1	
680-220481-13	GWA-4	Total/NA	Water	300.0-1993 R2.1	
680-220481-14	FB-09	Total/NA	Water	300.0-1993 R2.1	
680-220481-15	GWA-3A	Total/NA	Water	300.0-1993 R2.1	
680-220481-16	GWC-2	Total/NA	Water	300.0-1993 R2.1	
680-220481-17	GWC-4A	Total/NA	Water	300.0-1993 R2.1	
MB 680-739699/2	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-739699/3	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-739699/4	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	
680-220510-H-1 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
680-220510-H-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	
680-220514-H-1 MS	Matrix Spike	Total/NA	Water	300.0-1993 R2.1	
680-220514-H-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0-1993 R2.1	

Metals

Prep Batch: 413001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-1	GWA-7A	Total Recoverable	Water	3005A	
680-220481-2	GWA-1B	Total Recoverable	Water	3005A	
680-220481-3	GWA-1A	Total Recoverable	Water	3005A	
680-220481-4	GWA-2B	Total Recoverable	Water	3005A	
680-220481-5	GWC-1A	Total Recoverable	Water	3005A	
680-220481-6	GWC-1	Total Recoverable	Water	3005A	
680-220481-7	GWC-6	Total Recoverable	Water	3005A	
680-220481-8	FD-06	Total Recoverable	Water	3005A	
680-220481-9	FB-10	Total Recoverable	Water	3005A	
680-220481-10	EB-11	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 413001 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-11	FD-05	Total Recoverable	Water	3005A	
680-220481-12	GWA-5	Total Recoverable	Water	3005A	
MB 180-413001/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-413001/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-220434-G-1-C MS	Matrix Spike	Total Recoverable	Water	3005A	
680-220434-G-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 413041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-13	GWA-4	Total Recoverable	Water	3005A	
680-220481-14	FB-09	Total Recoverable	Water	3005A	
680-220481-15	GWA-3A	Total Recoverable	Water	3005A	
680-220481-16	GWC-2	Total Recoverable	Water	3005A	
680-220481-17	GWC-4A	Total Recoverable	Water	3005A	
680-220481-18	EB-12	Total Recoverable	Water	3005A	
680-220481-19	GWC-5A	Total Recoverable	Water	3005A	
680-220481-20	GWC-6A	Total Recoverable	Water	3005A	
680-220481-21	GWC-5	Total Recoverable	Water	3005A	
MB 180-413041/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-413041/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-220258-E-3-B MS	Matrix Spike	Total Recoverable	Water	3005A	
680-220258-E-3-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 413603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-13	GWA-4	Total Recoverable	Water	EPA 6020B	413041
680-220481-14	FB-09	Total Recoverable	Water	EPA 6020B	413041
680-220481-15	GWA-3A	Total Recoverable	Water	EPA 6020B	413041
680-220481-16	GWC-2	Total Recoverable	Water	EPA 6020B	413041
680-220481-17	GWC-4A	Total Recoverable	Water	EPA 6020B	413041
680-220481-18	EB-12	Total Recoverable	Water	EPA 6020B	413041
680-220481-19	GWC-5A	Total Recoverable	Water	EPA 6020B	413041
680-220481-20	GWC-6A	Total Recoverable	Water	EPA 6020B	413041
680-220481-21	GWC-5	Total Recoverable	Water	EPA 6020B	413041
MB 180-413041/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	413041
LCS 180-413041/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	413041
680-220258-E-3-B MS	Matrix Spike	Total Recoverable	Water	EPA 6020B	413041
680-220258-E-3-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	EPA 6020B	413041

Analysis Batch: 413758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-13	GWA-4	Total Recoverable	Water	EPA 6020B	413041
680-220481-14	FB-09	Total Recoverable	Water	EPA 6020B	413041
680-220481-15	GWA-3A	Total Recoverable	Water	EPA 6020B	413041
680-220481-16	GWC-2	Total Recoverable	Water	EPA 6020B	413041
680-220481-17	GWC-4A	Total Recoverable	Water	EPA 6020B	413041
680-220481-18	EB-12	Total Recoverable	Water	EPA 6020B	413041
680-220481-19	GWC-5A	Total Recoverable	Water	EPA 6020B	413041
680-220481-20	GWC-6A	Total Recoverable	Water	EPA 6020B	413041
680-220481-21	GWC-5	Total Recoverable	Water	EPA 6020B	413041
MB 180-413041/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	413041

Metals (Continued)

Analysis Batch: 413758 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-413041/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	413041

Prep Batch: 414497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-13	GWA-4	Total Recoverable	Water	3005A	
680-220481-14	FB-09	Total Recoverable	Water	3005A	
680-220481-15	GWA-3A	Total Recoverable	Water	3005A	
680-220481-16	GWC-2	Total Recoverable	Water	3005A	
680-220481-17	GWC-4A	Total Recoverable	Water	3005A	
680-220481-18	EB-12	Total Recoverable	Water	3005A	
680-220481-19	GWC-5A	Total Recoverable	Water	3005A	
680-220481-20	GWC-6A	Total Recoverable	Water	3005A	
680-220481-21	GWC-5	Total Recoverable	Water	3005A	
MB 180-414497/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-414497/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 414527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-1	GWA-7A	Total Recoverable	Water	EPA 6020B	413001
680-220481-2	GWA-1B	Total Recoverable	Water	EPA 6020B	413001
680-220481-3	GWA-1A	Total Recoverable	Water	EPA 6020B	413001
680-220481-4	GWA-2B	Total Recoverable	Water	EPA 6020B	413001
MB 180-413001/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	413001
LCS 180-413001/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	413001
680-220434-G-1-C MS	Matrix Spike	Total Recoverable	Water	EPA 6020B	413001
680-220434-G-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	EPA 6020B	413001

Analysis Batch: 414650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-1	GWA-7A	Total Recoverable	Water	EPA 6020B	413001
680-220481-2	GWA-1B	Total Recoverable	Water	EPA 6020B	413001
680-220481-3	GWA-1A	Total Recoverable	Water	EPA 6020B	413001
680-220481-4	GWA-2B	Total Recoverable	Water	EPA 6020B	413001
680-220481-5	GWC-1A	Total Recoverable	Water	EPA 6020B	413001
680-220481-6	GWC-1	Total Recoverable	Water	EPA 6020B	413001
680-220481-7	GWC-6	Total Recoverable	Water	EPA 6020B	413001
680-220481-8	FD-06	Total Recoverable	Water	EPA 6020B	413001
680-220481-9	FB-10	Total Recoverable	Water	EPA 6020B	413001
680-220481-10	EB-11	Total Recoverable	Water	EPA 6020B	413001
680-220481-11	FD-05	Total Recoverable	Water	EPA 6020B	413001
680-220481-12	GWA-5	Total Recoverable	Water	EPA 6020B	413001
MB 180-413001/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	413001
LCS 180-413001/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	413001
680-220434-G-1-C MS	Matrix Spike	Total Recoverable	Water	EPA 6020B	413001
680-220434-G-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	EPA 6020B	413001

Analysis Batch: 414780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-13	GWA-4	Total Recoverable	Water	EPA 6020B	414497
680-220481-14	FB-09	Total Recoverable	Water	EPA 6020B	414497
680-220481-15	GWA-3A	Total Recoverable	Water	EPA 6020B	414497

Metals (Continued)

Analysis Batch: 414780 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-16	GWC-2	Total Recoverable	Water	EPA 6020B	414497
680-220481-17	GWC-4A	Total Recoverable	Water	EPA 6020B	414497
680-220481-18	EB-12	Total Recoverable	Water	EPA 6020B	414497
680-220481-19	GWC-5A	Total Recoverable	Water	EPA 6020B	414497
680-220481-20	GWC-6A	Total Recoverable	Water	EPA 6020B	414497
680-220481-21	GWC-5	Total Recoverable	Water	EPA 6020B	414497
MB 180-414497/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	414497
LCS 180-414497/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	414497

Prep Batch: 415539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-1	GWA-7A	Total Recoverable	Water	3005A	
680-220481-2	GWA-1B	Total Recoverable	Water	3005A	
680-220481-3	GWA-1A	Total Recoverable	Water	3005A	
680-220481-4	GWA-2B	Total Recoverable	Water	3005A	
680-220481-5	GWC-1A	Total Recoverable	Water	3005A	
680-220481-6	GWC-1	Total Recoverable	Water	3005A	
680-220481-7	GWC-6	Total Recoverable	Water	3005A	
680-220481-8	FD-06	Total Recoverable	Water	3005A	
680-220481-9	FB-10	Total Recoverable	Water	3005A	
680-220481-10	EB-11	Total Recoverable	Water	3005A	
680-220481-11	FD-05	Total Recoverable	Water	3005A	
680-220481-12	GWA-5	Total Recoverable	Water	3005A	
MB 180-415539/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-415539/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-220434-G-6-D MS	Matrix Spike	Total Recoverable	Water	3005A	
680-220434-G-6-E MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 415759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-1	GWA-7A	Total Recoverable	Water	EPA 6020B	415539
680-220481-2	GWA-1B	Total Recoverable	Water	EPA 6020B	415539
680-220481-3	GWA-1A	Total Recoverable	Water	EPA 6020B	415539
680-220481-4	GWA-2B	Total Recoverable	Water	EPA 6020B	415539
680-220481-5	GWC-1A	Total Recoverable	Water	EPA 6020B	415539
680-220481-6	GWC-1	Total Recoverable	Water	EPA 6020B	415539
680-220481-7	GWC-6	Total Recoverable	Water	EPA 6020B	415539
680-220481-8	FD-06	Total Recoverable	Water	EPA 6020B	415539
680-220481-9	FB-10	Total Recoverable	Water	EPA 6020B	415539
680-220481-10	EB-11	Total Recoverable	Water	EPA 6020B	415539
680-220481-11	FD-05	Total Recoverable	Water	EPA 6020B	415539
680-220481-12	GWA-5	Total Recoverable	Water	EPA 6020B	415539
MB 180-415539/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	415539
LCS 180-415539/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	415539
680-220434-G-6-D MS	Matrix Spike	Total Recoverable	Water	EPA 6020B	415539
680-220434-G-6-E MSD	Matrix Spike Duplicate	Total Recoverable	Water	EPA 6020B	415539

Prep Batch: 738607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-1	GWA-7A	Total Recoverable	Water	3005A	
680-220481-2	GWA-1B	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 738607 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-3	GWA-1A	Total Recoverable	Water	3005A	
680-220481-4	GWA-2B	Total Recoverable	Water	3005A	
680-220481-5	GWC-1A	Total Recoverable	Water	3005A	
680-220481-7	GWC-6	Total Recoverable	Water	3005A	
680-220481-8	FD-06	Total Recoverable	Water	3005A	
680-220481-9	FB-10	Total Recoverable	Water	3005A	
680-220481-10	EB-11	Total Recoverable	Water	3005A	
680-220481-11	FD-05	Total Recoverable	Water	3005A	
680-220481-12	GWA-5	Total Recoverable	Water	3005A	
680-220481-13	GWA-4	Total Recoverable	Water	3005A	
680-220481-14	FB-09	Total Recoverable	Water	3005A	
680-220481-15	GWA-3A	Total Recoverable	Water	3005A	
680-220481-16	GWC-2	Total Recoverable	Water	3005A	
680-220481-17	GWC-4A	Total Recoverable	Water	3005A	
680-220481-18	EB-12	Total Recoverable	Water	3005A	
680-220481-19	GWC-5A	Total Recoverable	Water	3005A	
MB 680-738607/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-738607/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-220481-1 MS	GWA-7A	Total Recoverable	Water	3005A	
680-220481-1 MSD	GWA-7A	Total Recoverable	Water	3005A	

Prep Batch: 738753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-20	GWC-6A	Total Recoverable	Water	3005A	
680-220481-21	GWC-5	Total Recoverable	Water	3005A	
MB 680-738753/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-738753/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-220470-A-3-H MS	Matrix Spike	Total Recoverable	Water	3005A	
680-220470-A-3-I MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 739049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-6	GWC-1	Total Recoverable	Water	3005A	
MB 680-739049/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-739049/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
660-123324-C-1-E MS	Matrix Spike	Total Recoverable	Water	3005A	
660-123324-C-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 739233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-6	GWC-1	Total Recoverable	Water	6020B	739049
680-220481-20	GWC-6A	Total Recoverable	Water	6020B	738753
680-220481-21	GWC-5	Total Recoverable	Water	6020B	738753
MB 680-738753/1-A	Method Blank	Total Recoverable	Water	6020B	738753
MB 680-739049/1-A	Method Blank	Total Recoverable	Water	6020B	739049
LCS 680-738753/2-A	Lab Control Sample	Total Recoverable	Water	6020B	738753
LCS 680-739049/2-A	Lab Control Sample	Total Recoverable	Water	6020B	739049
660-123324-C-1-E MS	Matrix Spike	Total Recoverable	Water	6020B	739049
660-123324-C-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	739049
680-220470-A-3-H MS	Matrix Spike	Total Recoverable	Water	6020B	738753
680-220470-A-3-I MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	738753

Metals

Analysis Batch: 739706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-1	GWA-7A	Total Recoverable	Water	6020B	738607
680-220481-2	GWA-1B	Total Recoverable	Water	6020B	738607
680-220481-3	GWA-1A	Total Recoverable	Water	6020B	738607
680-220481-4	GWA-2B	Total Recoverable	Water	6020B	738607
680-220481-5	GWC-1A	Total Recoverable	Water	6020B	738607
680-220481-7	GWC-6	Total Recoverable	Water	6020B	738607
680-220481-8	FD-06	Total Recoverable	Water	6020B	738607
680-220481-9	FB-10	Total Recoverable	Water	6020B	738607
680-220481-10	EB-11	Total Recoverable	Water	6020B	738607
680-220481-11	FD-05	Total Recoverable	Water	6020B	738607
680-220481-12	GWA-5	Total Recoverable	Water	6020B	738607
680-220481-13	GWA-4	Total Recoverable	Water	6020B	738607
680-220481-14	FB-09	Total Recoverable	Water	6020B	738607
680-220481-15	GWA-3A	Total Recoverable	Water	6020B	738607
680-220481-16	GWC-2	Total Recoverable	Water	6020B	738607
680-220481-17	GWC-4A	Total Recoverable	Water	6020B	738607
680-220481-18	EB-12	Total Recoverable	Water	6020B	738607
680-220481-19	GWC-5A	Total Recoverable	Water	6020B	738607
MB 680-738607/1-A	Method Blank	Total Recoverable	Water	6020B	738607
LCS 680-738607/2-A	Lab Control Sample	Total Recoverable	Water	6020B	738607
680-220481-1 MS	GWA-7A	Total Recoverable	Water	6020B	738607
680-220481-1 MSD	GWA-7A	Total Recoverable	Water	6020B	738607

General Chemistry

Analysis Batch: 738697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-1	GWA-7A	Total/NA	Water	2540C-2011	
680-220481-2	GWA-1B	Total/NA	Water	2540C-2011	
680-220481-3	GWA-1A	Total/NA	Water	2540C-2011	
680-220481-4	GWA-2B	Total/NA	Water	2540C-2011	
680-220481-5	GWC-1A	Total/NA	Water	2540C-2011	
680-220481-6	GWC-1	Total/NA	Water	2540C-2011	
680-220481-7	GWC-6	Total/NA	Water	2540C-2011	
680-220481-8	FD-06	Total/NA	Water	2540C-2011	
680-220481-9	FB-10	Total/NA	Water	2540C-2011	
680-220481-10	EB-11	Total/NA	Water	2540C-2011	
680-220481-11	FD-05	Total/NA	Water	2540C-2011	
680-220481-12	GWA-5	Total/NA	Water	2540C-2011	
680-220481-13	GWA-4	Total/NA	Water	2540C-2011	
680-220481-14	FB-09	Total/NA	Water	2540C-2011	
680-220481-15	GWA-3A	Total/NA	Water	2540C-2011	
MB 680-738697/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-738697/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-738697/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-220450-A-1 DU	Duplicate	Total/NA	Water	2540C-2011	
680-220453-A-1 DU	Duplicate	Total/NA	Water	2540C-2011	

Analysis Batch: 739048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-16	GWC-2	Total/NA	Water	2540C-2011	

General Chemistry (Continued)

Analysis Batch: 739048 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-17	GWC-4A	Total/NA	Water	2540C-2011	
680-220481-18	EB-12	Total/NA	Water	2540C-2011	
680-220481-19	GWC-5A	Total/NA	Water	2540C-2011	
680-220481-20	GWC-6A	Total/NA	Water	2540C-2011	
680-220481-21	GWC-5	Total/NA	Water	2540C-2011	
MB 680-739048/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 680-739048/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 680-739048/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	
680-220538-A-2 DU	Duplicate	Total/NA	Water	2540C-2011	

Field Service / Mobile Lab

Analysis Batch: 738915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-220481-1	GWA-7A	Total/NA	Water	Field Sampling	
680-220481-2	GWA-1B	Total/NA	Water	Field Sampling	
680-220481-3	GWA-1A	Total/NA	Water	Field Sampling	
680-220481-4	GWA-2B	Total/NA	Water	Field Sampling	
680-220481-5	GWC-1A	Total/NA	Water	Field Sampling	
680-220481-6	GWC-1	Total/NA	Water	Field Sampling	
680-220481-7	GWC-6	Total/NA	Water	Field Sampling	
680-220481-12	GWA-5	Total/NA	Water	Field Sampling	
680-220481-13	GWA-4	Total/NA	Water	Field Sampling	
680-220481-15	GWA-3A	Total/NA	Water	Field Sampling	
680-220481-16	GWC-2	Total/NA	Water	Field Sampling	
680-220481-17	GWC-4A	Total/NA	Water	Field Sampling	
680-220481-19	GWC-5A	Total/NA	Water	Field Sampling	
680-220481-20	GWC-6A	Total/NA	Water	Field Sampling	
680-220481-21	GWC-5	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Client Sample ID: GWA-7A

Date Collected: 08/30/22 11:20
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 13:15	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 04:23	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 14:27	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414527	10/08/22 17:05	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:10	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/30/22 11:20	T1C	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-1B

Date Collected: 08/30/22 12:40
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 13:28	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 04:34	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 14:31	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414527	10/08/22 17:08	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:13	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/30/22 12:40	T1C	EET SAV
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Client Sample ID: GWA-1A

Date Collected: 08/30/22 13:30
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 13:41	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 04:38	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 14:35	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414527	10/08/22 17:12	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:16	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/30/22 13:30	T1C	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-2B

Date Collected: 08/30/22 14:50
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 13:53	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 04:42	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 14:38	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414527	10/08/22 17:15	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:20	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/30/22 14:50	T1C	EET SAV
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Client Sample ID: GWC-1A
Date Collected: 08/30/22 16:00
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 14:06	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 04:45	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 14:42	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:30	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/30/22 16:00	T1C	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-1
Date Collected: 08/31/22 09:55
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 14:19	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	739049	09/02/22 12:09	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739233	09/06/22 21:29	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 14:46	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:33	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/31/22 09:55	T1C	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-6
Date Collected: 08/31/22 11:35
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 14:31	AF	EET SAV
	Instrument ID: CICK									

Client Sample ID: GWC-6

Lab Sample ID: 680-220481-7

Date Collected: 08/31/22 11:35

Matrix: Water

Date Received: 09/01/22 11:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 04:49	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 14:56	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:36	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/31/22 11:35	T1C	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: FD-06

Lab Sample ID: 680-220481-8

Date Collected: 08/31/22 00:00

Matrix: Water

Date Received: 09/01/22 11:48

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	739699	09/10/22 14:44	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:00	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 15:00	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:40	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: FB-10

Lab Sample ID: 680-220481-9

Date Collected: 08/31/22 09:45

Matrix: Water

Date Received: 09/01/22 11:48

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	739699	09/10/22 14:56	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:04	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 15:04	RSK	EET PIT
	Instrument ID: A									

Lab Chronicle

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Client Sample ID: FB-10

Date Collected: 08/31/22 09:45
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:43	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: EB-11

Date Collected: 08/30/22 16:20
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 17:13	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:08	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 15:07	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:47	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: FD-05

Date Collected: 08/30/22 00:00
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 17:26	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:11	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 15:11	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:50	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Client Sample ID: GWA-5

Date Collected: 08/30/22 10:33
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 17:39	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:15	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	415539	10/19/22 12:05	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			415759	10/20/22 15:15	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	413001	09/23/22 11:10	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414650	10/09/22 10:53	RSK	EET PIT
	Instrument ID: DORY									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/30/22 10:33	T1C	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-4

Date Collected: 08/30/22 11:35
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 17:51	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:19	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413603	09/28/22 19:19	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	414497	10/08/22 10:24	KWP	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414780	10/11/22 23:06	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413758	09/30/22 09:45	RSK	EET PIT
	Instrument ID: NEMO									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/30/22 11:35	T1C	EET SAV
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Client Sample ID: FB-09

Date Collected: 08/30/22 13:25
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-14

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		1	5 mL	5 mL	739699	09/10/22 18:04	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:22	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413603	09/28/22 19:23	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	414497	10/08/22 10:24	KWP	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414780	10/11/22 23:09	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413758	09/30/22 09:48	RSK	EET PIT
	Instrument ID: NEMO									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-3A

Date Collected: 08/30/22 13:47
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-15

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		1	5 mL	5 mL	739699	09/10/22 18:17	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:26	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413603	09/28/22 19:26	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	414497	10/08/22 10:24	KWP	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414780	10/11/22 23:12	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413758	09/30/22 09:51	RSK	EET PIT
	Instrument ID: NEMO									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	738697	09/02/22 12:02	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/30/22 13:47	T1C	EET SAV
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Client Sample ID: GWC-2

Date Collected: 08/30/22 14:53
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-16

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		1	5 mL	5 mL	739699	09/10/22 18:29	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:30	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413603	09/28/22 19:30	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	414497	10/08/22 10:24	KWP	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414780	10/11/22 23:16	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413758	09/30/22 09:53	RSK	EET PIT
	Instrument ID: NEMO									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	739048	09/06/22 11:31	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/30/22 14:53	T1C	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-4A

Date Collected: 08/30/22 15:52
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739699	09/10/22 18:42	AF	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:33	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413603	09/28/22 19:34	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	414497	10/08/22 10:24	KWP	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414780	10/11/22 23:19	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413758	09/30/22 09:56	RSK	EET PIT
	Instrument ID: NEMO									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	739048	09/06/22 11:31	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/30/22 15:52	T1C	EET SAV
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Client Sample ID: EB-12

Date Collected: 08/31/22 11:35
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739220	09/07/22 13:44	OK	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:45	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413603	09/28/22 19:37	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	414497	10/08/22 10:24	KWP	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414780	10/11/22 23:22	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413758	09/30/22 09:59	RSK	EET PIT
	Instrument ID: NEMO									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	739048	09/06/22 11:31	PG	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-5A

Date Collected: 08/31/22 11:40
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739220	09/07/22 13:57	OK	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738607	09/02/22 08:05	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739706	09/10/22 05:48	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413603	09/28/22 19:41	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	414497	10/08/22 10:24	KWP	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414780	10/11/22 23:32	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413758	09/30/22 10:02	RSK	EET PIT
	Instrument ID: NEMO									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	739048	09/06/22 11:31	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/31/22 11:40	T1C	EET SAV
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Client Sample ID: GWC-6A

Date Collected: 08/31/22 12:35
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739220	09/07/22 14:10	OK	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738753	09/02/22 08:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739233	09/06/22 18:41	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413603	09/28/22 19:52	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	414497	10/08/22 10:24	KWP	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414780	10/11/22 23:36	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413758	09/30/22 10:05	RSK	EET PIT
	Instrument ID: NEMO									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	739048	09/06/22 11:31	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	08/31/22 12:35	T1C	EET SAV
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-5

Date Collected: 09/01/22 10:00
Date Received: 09/01/22 11:48

Lab Sample ID: 680-220481-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0-1993 R2.1		1	5 mL	5 mL	739220	09/07/22 14:22	OK	EET SAV
	Instrument ID: CICK									
Total Recoverable	Prep	3005A			50 mL	250 mL	738753	09/02/22 08:10	RR	EET SAV
Total Recoverable	Analysis	6020B		1			739233	09/06/22 18:45	BWR	EET SAV
	Instrument ID: ICPMSC									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413603	09/28/22 19:55	RSK	EET PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			25 mL	25 mL	414497	10/08/22 10:24	KWP	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			414780	10/11/22 23:39	RSK	EET PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	413041	09/23/22 14:25	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020B		1			413758	09/30/22 10:13	RSK	EET PIT
	Instrument ID: NEMO									
Total/NA	Analysis	2540C-2011		1	200 mL	200 mL	739048	09/06/22 11:31	PG	EET SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			738915	09/01/22 10:00	T1C	EET SAV
	Instrument ID: NOEQUIP									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Southern Company
Job ID: 680-220481-1
Project/Site: Plant McIntosh Landfill #3

Laboratory: Eurofins Savannah

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

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87052	09-14-22
Georgia	State	E87052	06-30-23

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Georgia	State	PA 02-00416	10-23-22
Pennsylvania	NELAP	02-00416	10-23-22

Method Summary

Client: Southern Company
Project/Site: Plant McIntosh Landfill #3

Job ID: 680-220481-1

Method	Method Description	Protocol	Laboratory
300.0-1993 R2.1	Anions, Ion Chromatography	MCAWW	EET SAV
6020B	Metals (ICP/MS)	SW846	EET SAV
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
2540C-2011	Total Dissolved Solids (Dried at 180 °C)	SM	EET SAV
Field Sampling	Field Sampling	EPA	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

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

Laboratory References:

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

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

Eurofins TestAmerica, Savannah
5102 LaRoch nue
Savannah GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Anna Schnitker	Lab PM: Fuller, David	Carrier Tracking No(s)	COC No.
Client Contact: SCS Contacts	Phone: 770 594 5998	E-Mail: david.fuller@et.eurofinsus.com		Page: 1 of 2
Company: GA Power			Analysis Requested	Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested			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, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify); Other:
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	Lab Project #: 68027732			
Email: SCS Contacts / ACC Contacts	PO #:			
Project Name: Plant McIntosh Landfill 3	Project #:			
Site: Georgia	SSOW#:			

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	Cl, F, SO4, & TDS (EPA 300.0 & SM 2540C)	Custom Slate 8 Permit Metals (EPA 6020) Ba Be Cr Co Cu Pb,V Zn	Total Number of containers	Special Instructions/Note. APP III plus 8 State Metals
			Preservation Code:				D	I	D		
GWA-7A	08/30/22	1120	G	WG	N	N	✓	✓	✓	3	pH = 5.00
GWA-1B	08/30/22	1240	G	WG	N	N	✓	✓	✓	3	pH = 5.86
GWA-1A	08/30/22	1330	G	WG	N	N	✓	✓	✓	3	pH = 5.01
GWA-2B	08/30/22	1450	G	WG	N	N	✓	✓	✓	3	pH = 4.90
GWC-1A	08/30/22	1600	G	WG	N	N	✓	✓	✓	3	pH = 4.43
GWC-1	08/31/22	0955	G	WG	N	N	✓	✓	✓	3	pH = 4.69
GWC-6	08/31/22	1135	G	WG	N	N	✓	✓	✓	3	pH = 4.85
FD-06	08/31/22	—	G	WG	N	N	✓	✓	✓	3	pH = NA
FB-10	08/31/22	0945	G	WQ	N	N	✓	✓	✓	3	pH = NA
EB-11	08/30/22	1620	G	WQ	N	N	✓	✓	✓	3	pH = NA
FD-05	08/30/22	—	G	WG	N	N	✓	✓	✓	3	pH = NA

680-220481 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III IV Other (specify)

Special Instructions/QC Requirements State Permit Metals barium beryllium, chromium cobalt, copper lead, vanadium, zinc

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/1/22 1148	ACC		9.1.22 1148	TA
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 2.3/2.2 4.1/4.0

Ver: 8/8/2019

Eurofins TestAmerica, Savannah
5102 LaRoche Avenue
Savannah GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Hunter Auld & Anna Schmitke	Lab PM: Fuller David	Carrier Tracking No(s):	COC No
Client Contact: SCS Contacts	Phone: 770-594-5998	E-Mail: david.fuller@et.eurofinsus.com		Page: 2 of 2
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	Lab Project #: 68027732			
Email: SCS Contacts / ACC Contacts	PO #:			
Project Name: Plant McIntosh Landfill 3	Project #:			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

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	Cl F SO4 & TDS (EPA 300.0 & SM 2540C)	Custom State 8 Permit Metals (EPA 6020). Ba Be Cr Co Cu Pb,V Zn	Total Number of containers	Special Instructions/Note: APP III plus 8 State Metals
			Preservation Code:				D	I	D		
GWA-5	08/30/22	1033	G	WG	N	N	✓	✓	✓	3	pH = 4.51
GWA-4	08/30/22	1135	G	WG	N	N	✓	✓	✓	3	pH = 4.72
FB-09	08/30/22	1325	G	WQ	N	N	✓	✓	✓	3	pH = NA
GWA-3A	08/30/22	1347	G	WG	N	N	✓	✓	✓	3	pH = 4.71
GWC-2	08/30/22	1453	G	WG	N	N	✓	✓	✓	3	pH = 4.96
GWC-4A	08/30/22	1552	G	WG	N	N	✓	✓	✓	3	pH = 4.71
EB-12	08/31/22	1135	G	WQ	N	N	✓	✓	✓	3	pH = NA
GWC-5A	08/31/22	1140	G	WG	N	N	✓	✓	✓	3	pH = 4.97
GWC-6A	08/31/22	1235	G	WG	N	N	✓	✓	✓	3	pH = 5.07
GWC-5	~~08~~ 09/01/22	1000	G	WG	N	N	✓	✓	✓	3	pH = 4.29
			G		N	N					pH =

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements State Permit Metals barium beryllium chromium, cobalt, copper lead, vanadium, zinc

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		9/1/22 1148	ACC		9-1-22 1148	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

Ver: 8/8/2019

RT 98 1 A
FZ 10:30 8702
09.08

Part # 159469-434 MTW EXP 01/23

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ORIGIN ID:SAVA (912) 354-7858
SHIPPING
EUROFINS/TESTAMERICA
5102 LA ROUCHE AVE

SAVANNAH, GA 31404
UNITED STATES US

SHIP DATE: 07SEP22
ACTWGT: 25.00 LB MAN
CAD: 0801261/CAFE3616

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
PO: YES

REF: S680-138945

Uncorrected temp 2.7 °C
Thermometer ID 49

CF 0 Initials

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

FedEx Express

TRK# 0201 1328 9416 8702

THU - 08 SEP 10:30A
PRIORITY OVERNIGHT

XN AGCA

15238
PA-US PIT

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

Chain of Custody Record

680-220481 Chain of Custody

ofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fuller, David		7414 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: David Fuller@et.eurofinsus com	State of Origin: Georgia	Page: Page 1 of 3
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): State - Georgia		Job #: 680-220481-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 9/15/2022			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant McIntosh Landfill #3	Project #: 68027732			
Site:	SSOW#:			

Analysis Requested

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, 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)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Custom 6 App III + 5 Permit Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
GWA-7A (680-220481-1)	9/2/22	08 06 Eastern		Water			X	1	
GWA-1B (680-220481-2)	9/2/22	08 06 Eastern		Water			X	1	
GWA-1A (680-220481-3)	9/2/22	08 06 Eastern		Water			X	1	
GWA-2B (680-220481-4)	9/2/22	08 06 Eastern		Water			X	1	
GWC-1A (680-220481-5)	9/2/22	08 06 Eastern		Water			X	1	
GWC-1 (680-220481-6)	9/2/22	12 10 Eastern		Water			X	1	
GWC-6 (680-220481-7)	9/2/22	08 06 Eastern		Water			X	1	
FD-06 (680-220481-8)	9/2/22	08 06 Eastern		Water			X	1	
FB-10 (680-220481-9)	9/2/22	08 06 Eastern		Water			X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing Southeast, LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/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 complicance to Eurofins Environment Testing Southeast, LLC

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements
Empty Kit Relinquished by	Date / Time / Method of Shipment:

Relinquished by: CJ	Date/Time: 9/7/22 1600	Company	Received by:	Date/Time: 9/8/22 1020	Company: ETHR
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Fuller, David	Carrier Tracking No(s)	COC No: 680-707414 2
Client Contact: Shipping/Receiving	Phone	E-Mail: David.Fuller@et.eurofinsus.com	State of Origin: Georgia	Page: Page 2 of 3
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): State - Georgia		Job #: 680-220481-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 9/15/2022			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email	WO #:			
Project Name: Plant McIntosh Landfill #3	Project #: 68027732			
Site	SSOW#:			

Analysis Requested

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, 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)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Custom 6 App III + 5 Permit Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EB-11 (680-220481-10)	9/2/22	08 06 Eastern		Water			X	1	
FD-05 (680-220481-11)	9/2/22	08 06 Eastern		Water			X	1	
GWA-5 (680-220481-12)	9/2/22	08 07 Eastern		Water			X	1	
GWA-4 (680-220481-13)	9/2/22	08 07 Eastern		Water			X	1	
FB-09 (680-220481-14)	9/2/22	08.07 Eastern		Water			X	1	
GWA-3A (680-220481-15)	9/2/22	08 07 Eastern		Water			X	1	
GWC-2 (680-220481-16)	9/2/22	08 07 Eastern		Water			X	1	
GWC-4A (680-220481-17)	9/2/22	08 07 Eastern		Water			X	1	
EB-12 (680-220481-18)	9/2/22	08 07 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/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 complicance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	9/7/22 1600			9/8/22 1020	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Fuller, David	Carrier Tracking No(s)	COC No: 680-707414 3
Client Contact: Shipping/Receiving	Phone:	E-Mail: David Fuller@et eurofinsus com	State of Origin: Georgia	Page: Page 3 of 3
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): State - Georgia		Job #: 680-220481-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 9/15/2022			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email	WO #:			
Project Name: Plant McIntosh Landfill #3	Project #: 68027732			
Site	SSOW#:			

Analysis Requested

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, 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 - Tnzma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Custom 6 App III + 5 Permit Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
GWC-5A (680-220481-19)	9/2/22	08 07 Eastern		Water			X	1	
GWC-6A (680-220481-20)	9/2/22	08 12 Eastern		Water			X	1	
GWC-5 (680-220481-21)	9/2/22	08 12 Eastern		Water			X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/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 complicance to Eurofins Environment Testing Southeast, LLC

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	9/7/22 1600			9/8/22 1020	ETAR
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-220481-1

Login Number: 220481
List Number: 1
Creator: Sims, Robert D

List Source: Eurofins Savannah

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

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 680-220481-1

Login Number: 220481
List Number: 2
Creator: Kovitch, Christina M

List Source: Eurofins Pittsburgh
List Creation: 09/08/22 10:27 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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 Inactive Landfill No. 3

Semiannual Event

August 2022

Georgia Power Company – McIntosh Landfill 3

Quality Control Review of Analytical Data – August 2022

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Eurofins Environment Testing America, Pittsburgh and Savannah for groundwater samples collected at McIntosh Landfill 3 (LF3) between August 30, 2022 and September 1, 2022. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix. SDG 680-220481-1 was revised for the lab to add missing QC data.

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 permit-required state metals. Test methods included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Determination of Inorganic Anions (USEPA Method 300.0), and Solids in Water (Standard Methods 2540C).

Data were reviewed in accordance with the USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)[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. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

DATA QUALITY OBJECTIVES

Laboratory Precision: Laboratory goals for precision were met.

Field Precision: Field goals for precision were met, except for vanadium and fluoride in GWA-1B (680-220481-2) and zinc in GWC-6A (680-220481-20) as described in the qualifications section below.

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 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 GWA-1B (680-220481-2) and FD-05 (680-220481-11) were qualified as estimated (J) for vanadium and fluoride as the field relative percent differences (RPDs) exceeded QC criteria (53.3% and 123.8%, respectively, above the limit of 20).

- Samples GWC-6A (680-220481-20) and FD-06 (680-220481-8) were qualified as estimated (J) for zinc as the field RPD exceeded QC criteria (40.6%, above the limit of 20).

Atlantic Coast Consulting, Inc. reviewed the laboratory data from McIntosh LF3 sampled between August 30, 2022 and September 1, 2022 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

REFERENCES

[1]USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

[2]USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0

TABLE 1

Georgia Power Company – McIntosh LF3

Sample Summary Table – August 2022

						Analyses		
SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Metals (6020B)	Anions (300.0)	TDS (SM 2540C)
220481	GWA-7A	8/30/2022	680-220481-1	WG		X	X	X
220481	GWA-1B	8/30/2022	680-220481-2	WG		X	X	X
220481	GWA-1A	8/30/2022	680-220481-3	WG		X	X	X
220481	GWA-2B	8/30/2022	680-220481-4	WG		X	X	X
220481	GWC-1A	8/30/2022	680-220481-5	WG		X	X	X
220481	GWC-1	8/31/2022	680-220481-6	WG		X	X	X
220481	GWC-6	8/31/2022	680-220481-7	WG		X	X	X
220481	FD-06	8/31/2022	680-220481-8	WG	FD (GWC-6A)	X	X	X
220481	FB-10	8/31/2022	680-220481-9	WQ	FB	X	X	X
220481	EB-11	8/30/2022	680-220481-10	WQ	EB	X	X	X
220481	FD-05	8/30/2022	680-220481-11	WG	FD (GWA-1B)	X	X	X
220481	GWA-5	8/30/2022	680-220481-12	WG		X	X	X
220481	GWA-4	8/30/2022	680-220481-13	WG		X	X	X
220481	FB-09	8/30/2022	680-220481-14	WQ	FB	X	X	X
220481	GWA-3A	8/30/2022	680-220481-15	WG		X	X	X
220481	GWC-2	8/30/2022	680-220481-16	WG		X	X	X
220481	GWC-4A	8/30/2022	680-220481-17	WG		X	X	X
220481	EB-12	8/31/2022	680-220481-18	WQ	EB	X	X	X
220481	GWC-5A	8/31/2022	680-220481-19	WG		X	X	X
220481	GWC-6A	8/31/2022	680-220481-20	WG		X	X	X
220481	GWC-5	9/1/2022	680-220481-21	WG		X	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

TABLE 2

Georgia Power Company – McIntosh LF3

Qualifier Summary Table – August 2022

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
220481	GWA-1B	Vanadium			J	RPD exceeds field goal
220481	FD-05	Vanadium			J	RPD exceeds field goal
220481	GWA-1B	Fluoride			J	RPD exceeds field goal
220481	FD-05	Fluoride			J	RPD exceeds field goal
220481	GWC-6A	Zinc			J	RPD exceeds field goal
220481	FD-06	Zinc			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

Low-Flow Test Report:

Test Date / Time: 8/30/2022 12:55:20 PM
Project: Plant McIntosh LF3
Operator Name: A. Schnittker

Location Name: GWA-1A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 27.5 ft** **Total Depth: 37.53 ft** **Initial Depth to Water: 15.59 ft**	**Pump Type: Peristaltic Pump** **Tubing Type: Poly** **Pump Intake From TOC: 32 ft** **Estimated Total Volume Pumped: 5.3 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 175 ml/min** **Final Draw Down: 3 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Sample time 1330. 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 %	+/- 10	+/- 100	+/- 5	
8/30/2022 12:55 PM	00:00	5.18 pH	26.08 °C	39.21 µS/cm	2.02 mg/L	2.43 NTU	39.3 mV	15.59 ft	175.00 ml/min
8/30/2022 1:00 PM	05:00	5.06 pH	23.26 °C	40.24 µS/cm	0.52 mg/L	1.68 NTU	41.1 mV	15.8 ft	175.00 ml/min
8/30/2022 1:05 PM	10:00	5.04 pH	22.71 °C	40.40 µS/cm	0.45 mg/L	1.63 NTU	42.0 mV	15.8 ft	175.00 ml/min
8/30/2022 1:10 PM	15:00	5.05 pH	22.26 °C	40.45 µS/cm	0.42 mg/L	1.59 NTU	40.8 mV	15.8 ft	175.00 ml/min
8/30/2022 1:15 PM	20:00	5.03 pH	22.34 °C	40.21 µS/cm	0.41 mg/L	1.61 NTU	40.8 mV	15.8 ft	175.00 ml/min
8/30/2022 1:20 PM	25:00	5.04 pH	22.19 °C	39.88 µS/cm	0.40 mg/L	1.81 NTU	40.2 mV	15.8 ft	175.00 ml/min
8/30/2022 1:25 PM	30:00	5.01 pH	22.07 °C	39.92 µS/cm	0.40 mg/L	1.64 NTU	41.3 mV	15.8 ft	175.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/30/2022 11:50:12 AM
Project: Plant McIntosh LF3
Operator Name: A. Schnittker

Location Name: GWA-1B **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 48.5 ft** **Total Depth: 58.53 ft** **Initial Depth to Water: 22.42 ft**	**Pump Type: Peristaltic Pump** **Tubing Type: Poly** **Pump Intake From TOC: 53 ft** **Estimated Total Volume Pumped: 10 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 2 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Sample time 12:40. Sunny 80s. FD-05 here.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 5	
8/30/2022 11:50 AM	00:00	5.38 pH	21.82 °C	40.86 µS/cm	0.27 mg/L	1.86 NTU	32.5 mV	22.42 ft	250.00 ml/min
8/30/2022 11:55 AM	05:00	5.41 pH	21.73 °C	42.74 µS/cm	0.19 mg/L	1.71 NTU	43.9 mV	22.60 ft	250.00 ml/min
8/30/2022 12:00 PM	10:00	5.46 pH	21.73 °C	45.34 µS/cm	0.17 mg/L	1.59 NTU	33.1 mV	22.60 ft	250.00 ml/min
8/30/2022 12:05 PM	15:00	5.63 pH	21.90 °C	48.82 µS/cm	0.14 mg/L	1.62 NTU	22.2 mV	22.60 ft	250.00 ml/min
8/30/2022 12:10 PM	20:00	5.69 pH	22.02 °C	50.37 µS/cm	0.13 mg/L	1.14 NTU	19.8 mV	22.60 ft	250.00 ml/min
8/30/2022 12:15 PM	25:00	5.74 pH	21.86 °C	52.45 µS/cm	0.12 mg/L	1.18 NTU	19.5 mV	22.60 ft	250.00 ml/min
8/30/2022 12:20 PM	30:00	5.83 pH	22.01 °C	56.07 µS/cm	0.11 mg/L	1.60 NTU	13.7 mV	22.60 ft	250.00 ml/min
8/30/2022 12:25 PM	35:00	5.82 pH	21.82 °C	56.61 µS/cm	0.11 mg/L	1.74 NTU	15.7 mV	22.60 ft	250.00 ml/min
8/30/2022 12:30 PM	40:00	5.86 pH	22.25 °C	57.13 µS/cm	0.10 mg/L	1.57 NTU	14.4 mV	22.60 ft	250.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/30/2022 2:05:56 PM
Project: Plant McIntosh LF3
Operator Name: A. Schnittker

Location Name: GWA-2B **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 41.7 ft** **Total Depth: 51.78 ft** **Initial Depth to Water: 20.11 ft**	**Pump Type: Peristaltic Pump** **Tubing Type: Poly** **Pump Intake From TOC: 46 ft** **Estimated Total Volume Pumped: 4.8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 120 ml/min** **Final Draw Down: 20 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Sample time 1450. 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 %	+/- 10	+/- 100	+/- 5	
8/30/2022 2:05 PM	00:00	5.55 pH	24.95 °C	128.88 µS/cm	0.89 mg/L	2.21 NTU	52.1 mV	20.11 ft	120.00 ml/min
8/30/2022 2:10 PM	05:00	5.57 pH	23.79 °C	133.62 µS/cm	0.38 mg/L	1.94 NTU	50.0 mV	20.70 ft	120.00 ml/min
8/30/2022 2:15 PM	10:00	5.54 pH	23.80 °C	133.39 µS/cm	0.29 mg/L	1.10 NTU	45.0 mV	21.60 ft	120.00 ml/min
8/30/2022 2:20 PM	15:00	5.48 pH	23.83 °C	134.93 µS/cm	0.26 mg/L	3.84 NTU	43.0 mV	21.60 ft	120.00 ml/min
8/30/2022 2:25 PM	20:00	5.32 pH	23.61 °C	141.99 µS/cm	0.24 mg/L	3.18 NTU	43.5 mV	21.60 ft	120.00 ml/min
8/30/2022 2:30 PM	25:00	5.06 pH	23.68 °C	157.36 µS/cm	0.19 mg/L	2.82 NTU	46.8 mV	21.70 ft	120.00 ml/min
8/30/2022 2:35 PM	30:00	4.97 pH	23.70 °C	163.91 µS/cm	0.18 mg/L	2.19 NTU	44.2 mV	21.80 ft	120.00 ml/min
8/30/2022 2:40 PM	35:00	4.92 pH	23.61 °C	167.50 µS/cm	0.17 mg/L	2.68 NTU	44.3 mV	21.80 ft	120.00 ml/min
8/30/2022 2:45 PM	40:00	4.90 pH	23.76 °C	167.62 µS/cm	0.16 mg/L	3.37 NTU	44.3 mV	21.80 ft	120.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/30/2022 1:19:42 PM
Project: Plant McIntosh LF3
Operator Name: Hunter Auld

Location Name: GWA-3A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 23.88 ft** **Total Depth: 33.88 ft** **Initial Depth to Water: 16.77 ft**	**Pump Type: Peri Pump** **Tubing Type: Poly** **Pump Intake From TOC: 28 ft** **Estimated Total Volume Pumped: 3.6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 120 ml/min** **Final Draw Down: 12.4 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Sampled at 1347 on 8-30-22. Cloudy, 84. FB-09 here at 1325.

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	+/- 5	
8/30/2022 1:19 PM	00:00	3.61 pH	35.05 °C	0.07 µS/cm	6.90 mg/L	10.00 NTU	166.0 mV	16.77 ft	120.00 ml/min
8/30/2022 1:25 PM	05:49	4.69 pH	25.33 °C	88.13 µS/cm	0.59 mg/L	2.64 NTU	163.4 mV	17.40 ft	120.00 ml/min
8/30/2022 1:30 PM	10:49	4.70 pH	24.38 °C	86.64 µS/cm	0.27 mg/L	1.70 NTU	207.4 mV	17.50 ft	120.00 ml/min
8/30/2022 1:35 PM	15:49	4.71 pH	23.98 °C	86.36 µS/cm	0.21 mg/L	1.36 NTU	225.1 mV	17.60 ft	120.00 ml/min
8/30/2022 1:40 PM	20:49	4.71 pH	23.81 °C	86.16 µS/cm	0.17 mg/L	2.20 NTU	232.6 mV	17.70 ft	120.00 ml/min
8/30/2022 1:45 PM	25:49	4.71 pH	23.65 °C	87.71 µS/cm	0.15 mg/L	1.92 NTU	233.9 mV	17.70 ft	120.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/30/2022 11:05:40 AM
Project: Plant McIntosh LF3
Operator Name: Hunter Auld

Location Name: GWA-4 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 24.16 ft** **Total Depth: 29.16 ft** **Initial Depth to Water: 16.72 ft**	**Pump Type: Peri Pump** **Tubing Type: Poly** **Pump Intake From TOC: 26 ft** **Estimated Total Volume Pumped: 2.3 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 50 ml/min** **Final Draw Down: 20.2 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Sampled at 1135 on 8-30-22. Partly sunny, 81.

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	+/- 5	
8/30/2022 11:05 AM	00:00	4.85 pH	25.69 °C	0.09 µS/cm	8.14 mg/L	10.00 NTU	113.0 mV	16.72 ft	100.00 ml/min
8/30/2022 11:10 AM	05:00	4.75 pH	23.87 °C	39.24 µS/cm	3.40 mg/L	1.70 NTU	181.7 mV	17.30 ft	100.00 ml/min
8/30/2022 11:15 AM	10:00	4.73 pH	23.10 °C	39.55 µS/cm	3.25 mg/L	1.33 NTU	193.8 mV	17.90 ft	100.00 ml/min
8/30/2022 11:20 AM	15:00	4.73 pH	23.08 °C	40.00 µS/cm	3.28 mg/L	0.87 NTU	205.0 mV	18.30 ft	100.00 ml/min
8/30/2022 11:25 AM	20:00	4.72 pH	23.38 °C	39.71 µS/cm	3.36 mg/L	0.93 NTU	209.3 mV	18.40 ft	50.00 ml/min
8/30/2022 11:30 AM	25:00	4.72 pH	23.66 °C	40.27 µS/cm	3.32 mg/L	1.15 NTU	211.0 mV	18.50 ft	50.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/30/2022 9:36:10 AM
Project: Plant McIntosh LF3
Operator Name: Hunter Auld

Location Name: GWA-5 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 23 ft** **Total Depth: 33 ft** **Initial Depth to Water: 15.86 ft**	**Pump Type: Peri Pump** **Tubing Type: Poly** **Pump Intake From TOC: 28 ft** **Estimated Total Volume Pumped: 4.4 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 60 ml/min** **Final Draw Down: 40.1 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Sampled at 1033 on 8-30-22. Cloudy, 77.

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	+/- 5	
8/30/2022 9:36 AM	00:00	6.97 pH	24.95 °C	111.99 µS/cm	8.38 mg/L	10.00 NTU	222.9 mV	15.86 ft	100.00 ml/min
8/30/2022 9:41 AM	05:00	4.53 pH	23.00 °C	88.20 µS/cm	0.79 mg/L	3.80 NTU	168.5 mV	16.80 ft	100.00 ml/min
8/30/2022 9:46 AM	10:00	4.50 pH	22.58 °C	87.08 µS/cm	0.53 mg/L	3.10 NTU	174.5 mV	17.30 ft	100.00 ml/min
8/30/2022 9:51 AM	15:00	4.51 pH	22.53 °C	84.58 µS/cm	0.41 mg/L	3.10 NTU	177.0 mV	18.00 ft	100.00 ml/min
8/30/2022 9:56 AM	20:00	4.51 pH	22.44 °C	82.72 µS/cm	0.51 mg/L	3.20 NTU	180.0 mV	18.50 ft	60.00 ml/min
8/30/2022 10:01 AM	25:00	4.50 pH	22.66 °C	82.29 µS/cm	0.87 mg/L	3.30 NTU	183.7 mV	18.60 ft	60.00 ml/min
8/30/2022 10:06 AM	30:00	4.50 pH	22.68 °C	82.49 µS/cm	1.04 mg/L	4.40 NTU	186.3 mV	18.70 ft	60.00 ml/min
8/30/2022 10:11 AM	35:00	4.50 pH	22.63 °C	83.70 µS/cm	1.14 mg/L	4.50 NTU	189.7 mV	18.80 ft	60.00 ml/min
8/30/2022 10:16 AM	40:00	4.50 pH	22.85 °C	84.24 µS/cm	1.26 mg/L	4.95 NTU	191.3 mV	18.90 ft	60.00 ml/min
8/30/2022 10:21 AM	45:00	4.50 pH	22.94 °C	83.94 µS/cm	1.05 mg/L	4.80 NTU	251.1 mV	19.00 ft	60.00 ml/min
8/30/2022 10:26 AM	50:00	4.50 pH	22.76 °C	84.14 µS/cm	0.98 mg/L	4.50 NTU	198.7 mV	19.10 ft	60.00 ml/min
8/30/2022 10:31 AM	55:00	4.51 pH	22.85 °C	84.59 µS/cm	0.94 mg/L	4.60 NTU	199.1 mV	19.20 ft	60.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/30/2022 10:45:09 AM
Project: Plant McIntosh LF3
Operator Name: A. Schnittker

Location Name: GWA-7A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 36.94 ft** **Total Depth: 46.94 ft** **Initial Depth to Water: 23.69 ft**	**Pump Type: Peristaltic Pump** **Tubing Type: Poly** **Pump Intake From TOC: 41 ft** **Estimated Total Volume Pumped: 3.9 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 130 ml/min** **Final Draw Down: 11 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Sample time 1120. Sunny 80s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 5	
8/30/2022 10:45 AM	00:00	5.07 pH	22.40 °C	173.83 µS/cm	0.33 mg/L	3.40 NTU	76.3 mV	23.69 ft	130.00 ml/min
8/30/2022 10:50 AM	05:00	5.06 pH	22.45 °C	171.62 µS/cm	0.28 mg/L	2.73 NTU	75.2 mV	24.60 ft	130.00 ml/min
8/30/2022 10:55 AM	10:00	5.05 pH	22.00 °C	171.54 µS/cm	0.24 mg/L	2.35 NTU	62.0 mV	24.60 ft	130.00 ml/min
8/30/2022 11:00 AM	15:00	5.03 pH	22.00 °C	172.44 µS/cm	0.22 mg/L	2.28 NTU	62.9 mV	24.60 ft	130.00 ml/min
8/30/2022 11:05 AM	20:00	5.02 pH	22.16 °C	173.11 µS/cm	0.21 mg/L	2.21 NTU	58.4 mV	24.60 ft	130.00 ml/min
8/30/2022 11:10 AM	25:00	5.01 pH	22.49 °C	173.06 µS/cm	0.19 mg/L	2.36 NTU	58.9 mV	24.60 ft	130.00 ml/min
8/30/2022 11:15 AM	30:00	5.00 pH	22.55 °C	174.41 µS/cm	0.18 mg/L	2.08 NTU	58.4 mV	24.60 ft	130.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/31/2022 9:20:06 AM
Project: Plant McIntosh LF3
Operator Name: A. Schnittker

Location Name: GWC-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 25.95 ft** **Total Depth: 35.95 ft** **Initial Depth to Water: 21.6 ft**	**Pump Type: Peristaltic Pump** **Tubing Type: Poly** **Pump Intake From TOC: 30 ft** **Estimated Total Volume Pumped: 4.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 1 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Sample time 0955. Sunny 80s. FB-10 here at 0945.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 5	
8/31/2022 9:20 AM	00:00	5.05 pH	24.02 °C	62.21 µS/cm	1.63 mg/L	1.75 NTU	153.1 mV	21.60 ft	150.00 ml/min
8/31/2022 9:25 AM	05:00	4.70 pH	22.14 °C	54.97 µS/cm	0.62 mg/L	1.37 NTU	123.0 mV	21.70 ft	150.00 ml/min
8/31/2022 9:30 AM	10:00	4.68 pH	21.92 °C	52.41 µS/cm	0.49 mg/L	1.40 NTU	109.2 mV	21.70 ft	150.00 ml/min
8/31/2022 9:35 AM	15:00	4.70 pH	21.91 °C	51.31 µS/cm	0.42 mg/L	0.99 NTU	110.0 mV	21.70 ft	150.00 ml/min
8/31/2022 9:40 AM	20:00	4.69 pH	21.91 °C	51.23 µS/cm	0.38 mg/L	1.08 NTU	99.9 mV	21.70 ft	150.00 ml/min
8/31/2022 9:45 AM	25:00	4.69 pH	21.91 °C	50.71 µS/cm	0.36 mg/L	1.03 NTU	94.8 mV	21.70 ft	150.00 ml/min
8/31/2022 9:50 AM	30:00	4.69 pH	21.82 °C	50.45 µS/cm	0.35 mg/L	0.96 NTU	91.8 mV	21.70 ft	150.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/30/2022 3:25:16 PM
Project: Plant McIntosh LF3
Operator Name: A. Schnittker

Location Name: GWC-1A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.37 ft** **Total Depth: 47.37 ft** **Initial Depth to Water: 21.69 ft**	**Pump Type: Peristaltic Pump** **Tubing Type: Poly** **Pump Intake From TOC: 42 ft** **Estimated Total Volume Pumped: 4.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 19 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Sample time 1600. Sunny 80s. EB-11 here at 1620.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 5	
8/30/2022 3:25 PM	00:00	4.45 pH	26.06 °C	74.09 µS/cm	0.77 mg/L	1.78 NTU	56.6 mV	21.69 ft	150.00 ml/min
8/30/2022 3:30 PM	05:00	4.44 pH	24.15 °C	77.06 µS/cm	0.57 mg/L	1.55 NTU	53.5 mV	23.20 ft	150.00 ml/min
8/30/2022 3:35 PM	10:00	4.43 pH	23.68 °C	77.30 µS/cm	0.52 mg/L	1.30 NTU	53.2 mV	23.20 ft	150.00 ml/min
8/30/2022 3:40 PM	15:00	4.44 pH	23.43 °C	76.38 µS/cm	0.49 mg/L	1.29 NTU	53.1 mV	23.20 ft	150.00 ml/min
8/30/2022 3:45 PM	20:00	4.42 pH	23.34 °C	77.27 µS/cm	0.46 mg/L	1.17 NTU	53.4 mV	23.20 ft	150.00 ml/min
8/30/2022 3:50 PM	25:00	4.42 pH	23.03 °C	75.93 µS/cm	0.47 mg/L	0.98 NTU	53.8 mV	23.30 ft	150.00 ml/min
8/30/2022 3:55 PM	30:00	4.43 pH	22.94 °C	77.02 µS/cm	0.44 mg/L	0.73 NTU	53.5 mV	23.30 ft	150.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/30/2022 2:27:24 PM
Project: Plant McIntosh LF3
Operator Name: Hunter Auld

Location Name: GWC-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 9.3 ft** **Top of Screen: 27.5 ft** **Total Depth: 36.79 ft** **Initial Depth to Water: 20.56 ft**	**Pump Type: Peri Pump** **Tubing Type: Poly** **Pump Intake From TOC: 31.5 ft** **Estimated Total Volume Pumped: 4.6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 175 ml/min** **Final Draw Down: 1.1 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Sampled at 1453 on 8-30-22. Cloudy, 84.

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	+/- 5	
8/30/2022 2:27 PM	00:00	3.46 pH	32.41 °C	0.00 µS/cm	7.39 mg/L	10.00 NTU	173.7 mV	20.56 ft	175 ml/min
8/30/2022 2:32 PM	05:00	4.98 pH	26.40 °C	39.36 µS/cm	0.70 mg/L	2.70 NTU	291.1 mV	20.65 ft	175 ml/min
8/30/2022 2:37 PM	10:00	4.99 pH	26.20 °C	39.46 µS/cm	0.43 mg/L	1.70 NTU	351.9 mV	20.65 ft	175 ml/min
8/30/2022 2:42 PM	15:00	4.97 pH	25.71 °C	38.59 µS/cm	0.33 mg/L	1.60 NTU	386.8 mV	20.65 ft	175 ml/min
8/30/2022 2:47 PM	20:00	4.95 pH	25.51 °C	38.56 µS/cm	0.25 mg/L	1.80 NTU	397.1 mV	20.65 ft	175 ml/min
8/30/2022 2:52 PM	25:00	4.96 pH	25.40 °C	38.41 µS/cm	0.22 mg/L	1.73 NTU	411.2 mV	20.65 ft	175 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/30/2022 3:26:30 PM
Project: Plant McIntosh LF3
Operator Name: Hunter Auld

Location Name: GWC-4A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 26.96 ft** **Total Depth: 36.96 ft** **Initial Depth to Water: 22.64 ft**	**Pump Type: Peri Pump** **Tubing Type: Poly** **Pump Intake From TOC: 31.5 ft** **Estimated Total Volume Pumped: 2.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 4.9 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Sampled at 1552 on 8-30-22. Partly cloudy, 88.

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	+/- 5	
8/30/2022 3:26 PM	00:00	5.61 pH	37.07 °C	0.00 µS/cm	6.80 mg/L	10.00 NTU	156.2 mV	22.64 ft	100.00 ml/min
8/30/2022 3:31 PM	05:00	4.67 pH	29.54 °C	26.26 µS/cm	1.06 mg/L	3.50 NTU	356.1 mV	22.90 ft	100.00 ml/min
8/30/2022 3:36 PM	10:00	4.70 pH	27.48 °C	26.71 µS/cm	0.69 mg/L	2.40 NTU	439.6 mV	22.90 ft	100.00 ml/min
8/30/2022 3:41 PM	15:00	4.72 pH	26.80 °C	26.71 µS/cm	0.57 mg/L	1.80 NTU	505.2 mV	23.00 ft	100.00 ml/min
8/30/2022 3:46 PM	20:00	4.72 pH	26.88 °C	26.78 µS/cm	0.52 mg/L	1.60 NTU	534.4 mV	23.00 ft	100.00 ml/min
8/30/2022 3:51 PM	25:00	4.71 pH	26.52 °C	26.43 µS/cm	0.45 mg/L	1.57 NTU	549.0 mV	23.05 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/31/2022 9:20:11 AM
Project: Plant McIntosh LF3
Operator Name: Hunter Auld

Location Name: GWC-5 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21 ft** **Total Depth: 31 ft** **Initial Depth to Water: 22.71 ft**	**Pump Type: Peri Pump** **Tubing Type: Poly** **Pump Intake From TOC: 29 ft** **Estimated Total Volume Pumped: 14.7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 81.5 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Well purged dry on 8-31-22, allow overnight recharge.

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	+/- 5	
8/31/2022 9:20 AM	00:00	4.42 pH	23.93 °C	147.00 µS/cm	0.37 mg/L	10.00 NTU	138.3 mV	22.71 ft	200.00 ml/min
8/31/2022 9:25 AM	05:00	4.41 pH	23.60 °C	143.14 µS/cm	0.29 mg/L	6.10 NTU	144.5 mV	23.80 ft	200.00 ml/min
8/31/2022 9:30 AM	10:00	4.42 pH	23.71 °C	143.15 µS/cm	0.27 mg/L	5.20 NTU	150.1 mV	24.60 ft	200.00 ml/min
8/31/2022 9:35 AM	15:00	4.44 pH	23.43 °C	138.39 µS/cm	0.20 mg/L	5.50 NTU	181.6 mV	24.90 ft	200.00 ml/min
8/31/2022 9:40 AM	20:00	4.44 pH	23.14 °C	138.03 µS/cm	0.17 mg/L	4.70 NTU	194.5 mV	25.30 ft	200.00 ml/min
8/31/2022 9:45 AM	25:00	4.47 pH	22.96 °C	134.47 µS/cm	0.14 mg/L	4.70 NTU	206.1 mV	25.80 ft	200.00 ml/min
8/31/2022 9:50 AM	30:00	4.55 pH	23.08 °C	128.48 µS/cm	0.12 mg/L	4.40 NTU	215.0 mV	26.30 ft	200.00 ml/min
8/31/2022 9:55 AM	35:00	4.56 pH	23.29 °C	130.09 µS/cm	0.11 mg/L	4.30 NTU	180.4 mV	26.90 ft	200.00 ml/min
8/31/2022 10:00 AM	40:00	4.50 pH	23.12 °C	131.67 µS/cm	0.09 mg/L	2.90 NTU	232.8 mV	27.40 ft	200.00 ml/min
8/31/2022 10:05 AM	45:00	4.47 pH	23.52 °C	135.70 µS/cm	0.14 mg/L	1.40 NTU	241.6 mV	27.60 ft	100.00 ml/min
8/31/2022 10:10 AM	50:00	4.46 pH	23.76 °C	136.89 µS/cm	0.14 mg/L	1.30 NTU	250.0 mV	27.90 ft	100.00 ml/min
8/31/2022 10:15 AM	55:00	4.48 pH	23.66 °C	136.24 µS/cm	0.12 mg/L	1.60 NTU	259.3 mV	28.40 ft	200.00 ml/min
8/31/2022 10:20 AM	01:00:00	4.47 pH	23.26 °C	138.24 µS/cm	0.15 mg/L	1.50 NTU	269.5 mV	28.90 ft	200.00 ml/min
8/31/2022 10:25 AM	01:05:00	4.47 pH	23.18 °C	138.82 µS/cm	0.15 mg/L	1.40 NTU	278.0 mV	28.90 ft	200.00 ml/min

Low-Flow Test Report:

Test Date / Time: 9/1/2022 9:40:15 AM
Project: Plant McIntosh LF3
Operator Name: A. Schnittker

Location Name: GWC-5 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21 ft** **Total Depth: 31 ft** **Initial Depth to Water: 22.72 ft**	**Pump Type: Peristaltic Pump** **Tubing Type: Poly** **Pump Intake From TOC: 26 ft** **Estimated Total Volume Pumped: 15.8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 75 ml/min** **Final Draw Down: 20 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Sample Time 1000. 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 %	+/- 10	+/- 100	+/- 5	
9/1/2022 9:40 AM	00:00	4.31 pH	24.27 °C	144.18 µS/cm	1.43 mg/L	1.94 NTU	184.8 mV	22.72 ft	75.00 ml/min
9/1/2022 9:45 AM	05:00	4.29 pH	23.26 °C	145.49 µS/cm	0.55 mg/L	1.88 NTU	216.4 mV	23.40 ft	75.00 ml/min
9/1/2022 9:50 AM	10:00	4.28 pH	22.89 °C	139.74 µS/cm	0.41 mg/L	1.76 NTU	149.0 mV	23.90 ft	75.00 ml/min
9/1/2022 9:55 AM	15:00	4.29 pH	22.81 °C	137.54 µS/cm	0.35 mg/L	1.73 NTU	199.7 mV	24.40 ft	75.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/31/2022 11:13:35 AM
Project: Plant McIntosh LF3
Operator Name: Hunter Auld

Location Name: GWC-5A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 32.6 ft** **Total Depth: 42.6 ft** **Initial Depth to Water: 24.09 ft**	**Pump Type: Peri Pump** **Tubing Type: Poly** **Pump Intake From TOC: 37.5 ft** **Estimated Total Volume Pumped: 4.1 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 2.5 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Sampled at 1140 on 8-31-22. Partly cloudy 88. EB-12 here at 1135.

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	+/- 5	
8/31/2022 11:13 AM	00:00	4.99 pH	28.51 °C	0.11 µS/cm	7.23 mg/L	10.00 NTU	132.5 mV	24.09 ft	150.00 ml/min
8/31/2022 11:18 AM	05:00	5.01 pH	27.98 °C	31.11 µS/cm	3.36 mg/L	3.40 NTU	180.2 mV	24.30 ft	150.00 ml/min
8/31/2022 11:23 AM	10:00	4.97 pH	25.42 °C	28.11 µS/cm	0.48 mg/L	1.93 NTU	211.5 mV	24.30 ft	150.00 ml/min
8/31/2022 11:28 AM	15:00	4.97 pH	24.79 °C	28.24 µS/cm	0.36 mg/L	1.60 NTU	225.7 mV	24.30 ft	150.00 ml/min
8/31/2022 11:33 AM	20:00	4.96 pH	24.53 °C	28.19 µS/cm	0.34 mg/L	1.40 NTU	237.6 mV	24.30 ft	150.00 ml/min
8/31/2022 11:38 AM	25:00	4.97 pH	24.74 °C	28.31 µS/cm	0.31 mg/L	1.80 NTU	242.7 mV	24.30 ft	150.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/31/2022 10:20:03 AM
Project: Plant McIntosh LF3
Operator Name: A. Schnittker

Location Name: GWC-6 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 27.6 ft** **Total Depth: 32.64 ft** **Initial Depth to Water: 23.11 ft**	**Pump Type: Peristaltic Pump** **Tubing Type: Poly** **Pump Intake From TOC: 30 ft** **Estimated Total Volume Pumped: 3.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 50 ml/min** **Final Draw Down: 33 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Sample time 1135. 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 %	+/- 10	+/- 100	+/- 5	
8/31/2022 10:20 AM	00:00	4.84 pH	24.49 °C	34.80 µS/cm	2.95 mg/L	1.48 NTU	112.5 mV	23.11 ft	50.00 ml/min
8/31/2022 10:25 AM	05:00	4.86 pH	23.80 °C	35.36 µS/cm	1.75 mg/L	1.31 NTU	92.4 mV	24.30 ft	50.00 ml/min
8/31/2022 10:30 AM	10:00	4.87 pH	24.15 °C	35.49 µS/cm	1.75 mg/L	1.53 NTU	88.2 mV	24.70 ft	50.00 ml/min
8/31/2022 10:35 AM	15:00	4.87 pH	24.35 °C	35.51 µS/cm	1.77 mg/L	1.94 NTU	87.2 mV	25.00 ft	50.00 ml/min
8/31/2022 10:40 AM	20:00	4.89 pH	24.53 °C	35.75 µS/cm	1.85 mg/L	2.50 NTU	86.3 mV	25.30 ft	50.00 ml/min
8/31/2022 10:45 AM	25:00	4.95 pH	24.89 °C	36.29 µS/cm	2.31 mg/L	2.33 NTU	86.8 mV	25.40 ft	50.00 ml/min
8/31/2022 10:50 AM	30:00	4.99 pH	25.10 °C	36.26 µS/cm	2.72 mg/L	1.96 NTU	85.2 mV	25.70 ft	50.00 ml/min
8/31/2022 10:55 AM	35:00	5.05 pH	25.05 °C	37.22 µS/cm	5.57 mg/L	1.15 NTU	97.1 mV	25.80 ft	50.00 ml/min
8/31/2022 11:00 AM	40:00	5.32 pH	25.69 °C	36.16 µS/cm	6.81 mg/L	1.26 NTU	100.5 mV	25.90 ft	50.00 ml/min
8/31/2022 11:05 AM	45:00	5.49 pH	26.24 °C	35.99 µS/cm	7.10 mg/L	1.63 NTU	100.2 mV	25.90 ft	50.00 ml/min
8/31/2022 11:10 AM	50:00	5.33 pH	26.66 °C	35.90 µS/cm	6.30 mg/L	1.48 NTU	95.9 mV	25.90 ft	50.00 ml/min
8/31/2022 11:15 AM	55:00	4.86 pH	24.26 °C	34.76 µS/cm	1.80 mg/L	1.15 NTU	84.8 mV	25.90 ft	50.00 ml/min
8/31/2022 11:20 AM	01:00:00	4.86 pH	23.77 °C	35.12 µS/cm	1.53 mg/L	1.27 NTU	80.8 mV	25.90 ft	50.00 ml/min
8/31/2022 11:25 AM	01:05:00	4.86 pH	23.66 °C	34.92 µS/cm	1.45 mg/L	2.36 NTU	79.5 mV	25.90 ft	50.00 ml/min
8/31/2022 11:30 AM	01:10:00	4.85 pH	23.48 °C	35.48 µS/cm	1.47 mg/L	2.70 NTU	78.9 mV	25.90 ft	50.00 ml/min

Low-Flow Test Report:

Test Date / Time: 8/31/2022 12:02:08 PM
Project: Plant McIntosh LF3
Operator Name: A. Schnittker

Location Name: GWC-6A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 32.43 ft** **Total Depth: 42.43 ft** **Initial Depth to Water: 24.22 ft**	**Pump Type: Peristaltic Pump** **Tubing Type: Poly** **Pump Intake From TOC: 37 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 9 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Sample time 1235. Sunny 80s. FD-06 here.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 5	
8/31/2022 12:02 PM	00:00	5.11 pH	23.75 °C	58.21 µS/cm	0.30 mg/L	2.86 NTU	92.6 mV	24.22 ft	200.00 ml/min
8/31/2022 12:07 PM	05:00	5.11 pH	23.75 °C	57.36 µS/cm	0.24 mg/L	2.83 NTU	77.9 mV	24.70 ft	200.00 ml/min
8/31/2022 12:12 PM	10:00	5.11 pH	23.79 °C	57.09 µS/cm	0.23 mg/L	2.37 NTU	71.3 mV	24.90 ft	200.00 ml/min
8/31/2022 12:17 PM	15:00	5.10 pH	23.50 °C	56.60 µS/cm	0.21 mg/L	2.26 NTU	66.9 mV	25.00 ft	200.00 ml/min
8/31/2022 12:22 PM	20:00	5.11 pH	23.30 °C	56.67 µS/cm	0.19 mg/L	1.52 NTU	63.4 mV	25.00 ft	200.00 ml/min
8/31/2022 12:27 PM	25:00	5.10 pH	23.42 °C	56.27 µS/cm	0.19 mg/L	1.94 NTU	61.2 mV	25.00 ft	200.00 ml/min
8/31/2022 12:32 PM	30:00	5.07 pH	23.39 °C	55.81 µS/cm	0.18 mg/L	1.58 NTU	60.9 mV	25.00 ft	200.00 ml/min

Samples

Sample ID:	Description:

ATLANTIC COAST CONSULTING, INC.

Daily Instrument Calibration Log

SITE: Plant McIntosh LF3

TECHNICIAN: H. Auld

WATER LEVEL: Solinst

WATER LEVEL S/N: 48832

INSTRUMENT S/N: 883530

INSTRUMENT TYPE: AquaTroll

CAL. SOLUTION/S:

ID	LOT #	EXP. DATE
pH 4	2GE870	05/24
pH 7	21010066	09/22
pH 10	20080056	04/23
1,413	2GB1062	02/23
ORP 228	2114O143	04/23

Midday pH check

Must be less that .10

(6.90-7.10 range)

Recalibrate if not within range

Calibration Date: 8/30/22

RDO: 100% sat. = 100.7%

PH: 4.00 = 4.00 7.00 = 7.04 10.00 = 10.06

Midday pH check 7.0 = 7.01

PH Recal (if needed): 4.00 = 7.00 = 10.00 = 7.0= post recal check

CONDUCTIVITY: 1413 = 1486

ORP (mV) 228 = 218

Calibration Date: 8/31/22

RDO: 100% sat. = 106.8 %

PH: 4.00 = 4.01 7.00 = 6.96 10.00 = 9.98

Midday pH check 7.0 =

PH Recal (if needed): 4.00 = 7.00 = 10.00 = 7.0= post recal check

CONDUCTIVITY: 1413 = 1376

ORP (mV) 228 = 223

Calibration Date:

RDO: 100% sat. =

PH: 4.00 = 7.00 = 10.00 =

Midday pH check 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. =

PH: 4.00 = 7.00 = 10.00 =

Midday pH check 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. =

PH: 4.00 = 7.00 = 10.00 =

Midday pH check 7.0 =

PH Recal (if needed): 4.00 = 7.00 = 10.00 = 7.0= post recal check

CONDUCTIVITY: =

ORP (mV) =

ATLANTIC COAST CONSULTING, INC.

Daily Instrument Calibration Log

SITE: Plant McIntosh LF3
TECHNICIAN: ASchnitker

WATER LEVEL: Solinst
WATER LEVEL S/N: 377060

INSTRUMENT S/N: 728566
INSTRUMENT TYPE: AquaTroll

CAL. SOLUTION/S:

ID: pH 4	LOT #: 16K617	EXP. DATE: 11/23	
ID: pH 7	LOT #: 20C169	EXP. DATE: 3/24	
ID: pH 10	LOT #: 16G429	EXP. DATE: 7/23	
ID: Con	LOT #: 20F806	EXP. DATE: 6/23	
ID: ORP	LOT #: 21L401143	EXP. DATE: 4/23	
ID:	LOT #:	EXP. DATE:	
ID:	LOT #:	EXP. DATE:	

Midday pH check
Must be less that .10
(6.90-7.10 range)
Recalibrate if not within range

Calibration Date: 8/30/22

RDO: 100% sat. = 98.32
PH: 4.00 = 3.98 | 7.00 = 7.01 | 10.00 = 9.93 | *Midday pH check* 7.0 = 7.00
PH Recal (if needed): 4.00 = NA | 7.00 = NA | 10.00 = NA | 7.0= NA post recal check
CONDUCTIVITY: 1413 = 1503.8
ORP (mV) 228 = 229.4

Calibration Date: 8/31/22

RDO: 100% sat. = 100.83
PH: 4.00 = 4.01 | 7.00 = 7.03 | 10.00 = 9.99 | *Midday pH check* 7.0 = 7.00
PH Recal (if needed): 4.00 = NA | 7.00 = NA | 10.00 = NA | 7.0= NA post recal check
CONDUCTIVITY: 1413 = 1392.2
ORP (mV) 228 = 226.4

Calibration Date: 9/1/22

RDO: 100% sat. = 102.27
PH: 4.00 = 4.03 | 7.00 = 7.05 | 10.00 = 9.95 | *Midday pH check* 7.0 = 7.00
PH Recal (if needed): 4.00 = | 7.00 = | 10.00 = | 7.0= post recal check
CONDUCTIVITY: 1413 = 1456.5
ORP (mV) 228 = 227.3

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) =

ATLANTIC COAST CONSULTING, INC.

Daily Instrument Calibration Log

SITE: Plant McIntosh

TECHNICIAN: A Schmittler

INSTRUMENT S/N: 11090C12353

INSTRUMENT TYPE: Hach 2100Q

CAL. SOLUTION:
0 NTU - LOT # NA EXP. DATE: NA Fresh DI Water
10 NTU - LOT # A2122 EXP. DATE: 8/23
20 NTU - LOT # A2124 EXP. DATE: 8/23

Calibration Date: 8/30/22

Calibation Solution	Instrument Reading	
0.0	0.15	NTU
10.0	9.95	NTU
20.0	18.9	NTU

Calibration Date: 8/31/22

Calibation Solution	Instrument Reading	
0.0	0.17	NTU
10.0	9.87	NTU
20.0	21.2	NTU

Calibration Date: 9/1/22

Calibation Solution	Instrument Reading	
0.0	0.22	NTU
10.0	10.0	NTU
20.0	19.7	NTU

Calibration Date:

Calibation Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibation Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibation Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

ATLANTIC COAST CONSULTING, INC.

Daily Instrument Calibration Log

SITE: Plant McIntosh

TECHNICIAN: H. Auld

INSTRUMENT S/N: 12050C017705

INSTRUMENT TYPE: Hach 2100Q

CAL. SOLUTION:

0 NTU - LOT # —	EXP. DATE: —
10 NTU - LOT # A1074	EXP. DATE: 09/24
20 NTU - LOT # A1075	EXP. DATE: 09/24

Calibration Date: 8-30-22

Calibation Solution	Instrument Reading	
0.0	0.2	NTU
10.0	10.2	NTU
20.0	19.7	NTU

Calibration Date: 8-31-22

Calibation Solution	Instrument Reading	
0.0	0.2	NTU
10.0	9.97	NTU
20.0	20.1	NTU

Calibration Date:

Calibation Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibation Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibation Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibation Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Plant McIntosh Landfill No. 3
August 2022 Well Inspection Form

Permit No.: 051-008D(LI)

ATLANTIC COAST CONSULTING, INC.

1 - Location/Identification		GWA-1A	GWA-1B	GWA-2B	GWA-3A	GWA-4	GWA-5	GWA-7A	GWC-1	GWC-1A	GWC-2	GWC-4A
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 Landfill No. 3
August 2022 Well Inspection Form

Permit No.: 051-008D(LI)

ATLANTIC COAST CONSULTING, INC.

2 - Protective Outer Casing		GWA-1A	GWA-1B	GWA-2B	GWA-3A	GWA-4	GWA-5	GWA-7A	GWC-1	GWC-1A	GWC-2	GWC-4A
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 Landfill No. 3
August 2022 Well Inspection Form

Permit No.: 051-008D(LI)

ATLANTIC COAST CONSULTING, INC.

3 - Surface Pad		GWA-1A	GWA-1B	GWA-2B	GWA-3A	GWA-4	GWA-5	GWA-7A	GWC-1	GWC-1A	GWC-2	GWC-4A
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 Landfill No. 3
August 2022 Well Inspection Form

Permit No.: 051-008D(LI)

ATLANTIC COAST CONSULTING, INC.

4 - Internal Well Casing		GWA-1A	GWA-1B	GWA-2B	GWA-3A	GWA-4	GWA-5	GWA-7A	GWC-1	GWC-1A	GWC-2	GWC-4A
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 Landfill No. 3
August 2022 Well Inspection Form

Permit No.: 051-008D(LI)

ATLANTIC COAST CONSULTING, INC.

5 - Sampling (Groundwater Monitoring Wells Only):

		GWA-1A	GWA-1B	GWA-2B	GWA-3A	GWA-4	GWA-5	GWA-7A	GWC-1	GWC-1A	GWC-2	GWC-4A
a	Does the well recharge adequately when purged?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	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	No	No	No	No	No	No	No	No

Note: N/A - Not Applicable

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

	GWA-1A	GWA-1B	GWA-2B	GWA-3A	GWA-4	GWA-5	GWA-7A	GWC-1	GWC-1A	GWC-2	GWC-4A
1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

7 - Corrective actions completed and Notes:

Staff: A. Schnittker
Date: 8/30/2022

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

Plant McIntosh Landfill No. 3
August 2022 Well Inspection Form

Permit No.: 051-008D(LI)

ATLANTIC COAST CONSULTING, INC.

1 - Location/Identification		GWC-5	GWC-5A	GWC-6	GWC-6A	PZ-1	PZ-2	PZ-3	PZ-4	PZ-5
a	Is the well visible and accessible?	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	No	No
c	Does the well require protection from traffic?	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

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

Plant McIntosh Landfill No. 3
August 2022 Well Inspection Form

Permit No.: 051-008D(LI)

ATLANTIC COAST CONSULTING, INC.

2 - Protective Outer Casing		GWC-5	GWC-5A	GWC-6	GWC-6A	PZ-1	PZ-2	PZ-3	PZ-4	PZ-5
a	Is the protective casing free from apparent damage?	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
c	Does the casing have a functioning weep hole?	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
e	Is the well locked, and is the lock in good working condition?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

Plant McIntosh Landfill No. 3
August 2022 Well Inspection Form

Permit No.: 051-008D(LI)

ATLANTIC COAST CONSULTING, INC.

3 - Surface Pad		GWC-5	GWC-5A	GWC-6	GWC-6A	PZ-1	PZ-2	PZ-3	PZ-4	PZ-5
a	Is the well pad in good condition? (Not cracked or broken)	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
c	Is the well pad in complete contact with the protective casing?	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
e	Is the pad surface clean? (Not covered by soil or debris)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

Plant McIntosh Landfill No. 3
August 2022 Well Inspection Form

Permit No.: 051-008D(LI)

ATLANTIC COAST CONSULTING, INC.

4 - Internal Well Casing		GWC-5	GWC-5A	GWC-6	GWC-6A	PZ-1	PZ-2	PZ-3	PZ-4	PZ-5
a	Does the well cap prevent entry of foreign material into the well?	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
c	Does the well have a venting hole near the top of casing?	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
e	Is the depth of the well consistent with the original well log?	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

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

Plant McIntosh Landfill No. 3
August 2022 Well Inspection Form

Permit No.: 051-008D(LI)

ATLANTIC COAST CONSULTING, INC.

5 - Sampling (Groundwater Monitoring Wells Only):

		GWC-5	GWC-5A	GWC-6	GWC-6A	PZ-1	PZ-2	PZ-3	PZ-4	PZ-5
a	Does the well recharge adequately when purged?	Yes	Yes	Yes	Yes	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
c	Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	No	No	No	No	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:

	GWC-5	GWC-5A	GWC-6	GWC-6A	PZ-1	PZ-2	PZ-3	PZ-4	PZ-5
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

7 - Corrective actions completed and Notes:

Staff: A. Schnittker
Date: 8/30/2022

NOTE: Form Derived from "Georgia EPD's Groundwater Monitoring Well Integrity Form".

APPENDIX C

STATISTICAL ANALYSES

GROUNDWATER STATS CONSULTING

February 28, 2023

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

Re: Plant McIntosh Landfill #3
Statistical Analysis – August/September 2022 Semi-Annual Sample Event

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of the August/September 2022 semi-annual sample event for Georgia Power Company's Plant McIntosh Landfill #3. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) 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 at the majority of wells began for the CCR program in 2016, and for the state program in accordance with the Georgia EPD's Solid Waste Permit in 1999. Semi-annual sampling for select constituents has been performed for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations; and all available data from upgradient wells are screened in this report.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GWA-1A, GWA-1B, GWA-2B, GWA-3A, GWA-4, GWA-5, and GWA-7A
- **Downgradient wells:** GWC-1, GWC-1A, GWC-2, GWC-4A, GWC-5, GWC-5A, GWC-6, and GWC-6A

A minimum of 8 samples have been collected at each of the wells with few exceptions. New upgradient well GWA-1B and new downgradient wells GWC-1A, GWC-5A, and GWC-6A currently have been sampled a total of 4 times for Appendix I and III constituents. Therefore, data from downgradient wells GWC-1A, GWC-5A, and GWC-6A are included on time series and box plots, and will be statistically analyzed when a minimum of 8 sample are available. Since upgradient well GWA-1B has a minimum of four samples, data from this well are incorporated into the interwell prediction limits which are constructed from pooled upgradient well data, but has insufficient samples for the trend test analyses.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting. The analysis is prepared according to the recommended interwell statistical methodology as presented in the USEPA Unified Guidance. The original screening was conducted in the Fall 2017 by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance. During the initial screening both intrawell and interwell statistical methods were recommended. However, further studies conducted by Southern Company Services of waste placement with respect to when groundwater monitoring began suggested interwell methods for all constituents should be used as the will be the primary statistical method.

The following constituents were evaluated in this report:

- **CCR Appendix III -** boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Georgia EPD Appendix I -** barium, beryllium, chromium, cobalt, copper, lead, vanadium, and zinc

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of downgradient Appendix I well/constituent pairs with 100% non-detects follows this letter.

Due to varying detection limits in background data sets as a result of improved laboratory practices, a substitution of the most recent reporting limit is used for all non-detects.

Time series plots for reported CCR Appendix III and Georgia EPD Appendix I constituents are provided for all 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.

Data at all wells were evaluated during the initial background screening in 2019, as described below, for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for constituents based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Because groundwater sampling began after waste was placed, interwell prediction limits were determined to be the most appropriate statistical method. Power curves were provided during previous analyses and demonstrated that the interwell methods for all constituents comply with the USEPA Unified Guidance recommendations as discussed below. 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. Power curves were based on the following statistical methods:

CCR Appendix III Constituents:

- Semi-Annual Sampling
- Interwell Prediction Limits with 1-of-2 resample plan
- # Constituents: 7
- # Downgradient wells: 5

Georgia EPD Appendix I Constituents:

- Semi-Annual Sampling
- Interwell Prediction Limits with 1-of-2 resample plan
- # Constituents: 8
- # Downgradient wells: 5

Summary of Statistical Methods – All Constituents

Based on the earlier evaluation discussed above, the following methods were selected:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- Interwell prediction limits, combined with a 1-of-2 resample plan for barium, beryllium, chromium, cobalt, copper, lead, vanadium, and zinc

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. 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. Non-detects are handled as follows:

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits will be necessary to accommodate these types of changes. In the interwell case, newer data are included during each sample event after careful screening for new outliers in upgradient wells. While this step was not necessary, in some cases the earlier portion of data may require deselection prior to construction of limits in order to provide sensitive limits that will rapidly detect 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, and a summary of any truncated records will be provided.

Summary of Initial Background Screening (2019) – All Constituents

Outlier Analysis

The original background screening for the CCR and Georgia EPD state programs was conducted in 2019 and the results were submitted at that time. Several values were identified and flagged as outliers in both upgradient and downgradient wells for all constituents. Suspected outliers at upgradient wells for all constituents were formally tested using Tukey's box plot method and, when confirmed, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

When suspected outliers were evaluated using the Tukey box plot method, several outliers were identified. As a general rule, when the most recent values are identified as outliers,

values are not flagged in the database (except in cases where statistical limits would be elevated) as the concentrations may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Note that for some well/constituent pairs, the test identified multiple outliers. However, in many of those cases, only the highest value(s) were flagged as outliers as the remaining values were similar to other measurements within the same well or neighboring wells. In other cases, the test did not identify an outlier; however, the highest measurement(s) did not appear to represent the population and were flagged as outliers in the database to establish limits that are conservative from a regulatory perspective.

During this analysis, only upgradient well data were re-evaluated through time series graphs for new outliers, or extreme values in background that would result in limits that are not conservative from a regulatory perspective, prior to construction of interwell prediction limits. Values flagged in downgradient wells from previous analyses remain flagged but have no impact on calculations of interwell prediction limits. No new outliers were flagged during this analysis. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A list of all flagged values follows this letter (Figure C).

Seasonality

No seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

Trend Tests

Time series plots were also used to identify any visually trending patterns in upgradient well data. None were observed except for increasing low-level concentrations of chloride in upgradient well GWA-3A. However, because the more recent observations are similar to those historically reported in upgradient well GWA-5, no adjustments were required at this time.

In the future, if statistically significant increasing or decreasing trends are identified in the pooled upgradient well data, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically

significant decreasing trends are present, earlier data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. A list of the adjusted background date ranges will be provided if this step is required in future analyses.

Statistical Analysis of Appendix III Parameters – August/September 2022

Interwell Prediction Limits

For all Appendix III parameters, interwell prediction limits combined with a 1-of-2 resample plan were constructed using all upgradient historical data through September 2022 (Figure D). Data from upgradient wells were screened for new outliers, and no new measurements were flagged. The reported measurement of 0.51 mg/L for fluoride in upgradient well GWA-1B was slightly higher than historical measurements but well below the Groundwater Protection Standard of 4.0 mg/L. This measurement will be re-evaluated during the next statistical analysis. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The August/September 2022 sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no exceedance is noted, and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. Summary tables of the Appendix III prediction limits follow this letter. No exceedances were noted for Appendix III parameters; therefore, no further action was required.

Trend Test Evaluation

When data from downgradient well/constituent pairs are found to exceed their respective prediction limit, however, data will be further evaluated using the Sen's Slope/Mann Kendall trend test along with upgradient wells for the same constituents. 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. Such patterns are an indication of natural variability in groundwater unrelated to practices at the site. Typically, when changes in concentrations are present upgradient of the facility, it is an indication of naturally changing groundwater quality.

Statistical Analysis of Georgia EPD Appendix I Parameters – August/September 2022

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all available data from upgradient wells through September 2022 (Figure E). As previously discussed, no statistical analyses were included for downgradient well/constituent pairs containing 100% non-detects. A summary table of the prediction limits and exceedances follows this letter, along with the complete prediction limits results. The following prediction limit exceedances were noted for the Appendix I parameters:

- Barium: GWC-5

Trend Test Evaluation

As mentioned above, data from downgradient well/constituent pairs found to exceed their respective prediction limit were further evaluated using the Sen's Slope/Mann Kendall trend test along with upgradient wells for the same constituents (Figure F). Upgradient wells, with the exception of GWA-1B which does not have sufficient samples for trend test analyses, were included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells. The following statistically significant trends were identified:

Increasing
- Barium: GWA-3A, GWA-4 (both upgradient), and GWC-5

Decreasing
- Barium: GWA-1A (upgradient)

Typically, when changes in concentrations are present upgradient of the facility, it is an indication of naturally changing groundwater quality. A summary of the trend test results follows this letter.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for McIntosh Landfill #3. 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

Analysis Run 11/3/2022 12:52 PM View: PLs Interwell State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Beryllium (mg/L)
GWC-5A

Chromium (mg/L)
GWC-1A, GWC-6A

Copper (mg/L)
GWC-4A, GWC-5A, GWC-6A

Lead (mg/L)
GWC-1A, GWC-4A, GWC-6A

Vanadium (mg/L)
GWC-5A, GWC-6A

Interwell Prediction Limit Appendix III - All Results (No Significant)

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/5/2022, 3:56 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)	GWC-1	1.9	n/a	8/31/2022	0.08ND	No	93	n/a	n/a	43.01	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-2	1.9	n/a	8/30/2022	0.085	No	93	n/a	n/a	43.01	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-4A	1.9	n/a	8/30/2022	0.08ND	No	93	n/a	n/a	43.01	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-5	1.9	n/a	9/1/2022	0.08ND	No	93	n/a	n/a	43.01	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-6	1.9	n/a	8/31/2022	0.08ND	No	93	n/a	n/a	43.01	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-1	20	n/a	8/31/2022	0.31J	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-2	20	n/a	8/30/2022	1.4	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-4A	20	n/a	8/30/2022	0.39J	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-5	20	n/a	9/1/2022	5.2	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-6	20	n/a	8/31/2022	1.5	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-1	26	n/a	8/31/2022	12	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-2	26	n/a	8/30/2022	4.8	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-4A	26	n/a	8/30/2022	4.8	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-5	26	n/a	9/1/2022	7	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-6	26	n/a	8/31/2022	7.3	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GWC-1	0.51	n/a	8/31/2022	0.1ND	No	93	n/a	n/a	58.06	n/a	n/a	0.0002244	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GWC-2	0.51	n/a	8/30/2022	0.1ND	No	93	n/a	n/a	58.06	n/a	n/a	0.0002244	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GWC-4A	0.51	n/a	8/30/2022	0.1ND	No	93	n/a	n/a	58.06	n/a	n/a	0.0002244	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GWC-5	0.51	n/a	9/1/2022	0.1ND	No	93	n/a	n/a	58.06	n/a	n/a	0.0002244	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GWC-6	0.51	n/a	8/31/2022	0.1ND	No	93	n/a	n/a	58.06	n/a	n/a	0.0002244	NP Inter (NDs) 1 of 2
pH (S.U.)	GWC-1	5.834	4.041	8/31/2022	4.69	No	173	4.937	0.5015	0	None	No	0.000752	Param Inter 1 of 2
pH (S.U.)	GWC-2	5.834	4.041	8/30/2022	4.96	No	173	4.937	0.5015	0	None	No	0.000752	Param Inter 1 of 2
pH (S.U.)	GWC-4A	5.834	4.041	8/30/2022	4.71	No	173	4.937	0.5015	0	None	No	0.000752	Param Inter 1 of 2
pH (S.U.)	GWC-5	5.834	4.041	9/1/2022	4.29	No	173	4.937	0.5015	0	None	No	0.000752	Param Inter 1 of 2
pH (S.U.)	GWC-6	5.834	4.041	8/31/2022	4.85	No	173	4.937	0.5015	0	None	No	0.000752	Param Inter 1 of 2
Sulfate (mg/L)	GWC-1	110	n/a	8/31/2022	1ND	No	93	n/a	n/a	30.11	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-2	110	n/a	8/30/2022	1.1	No	93	n/a	n/a	30.11	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-4A	110	n/a	8/30/2022	1ND	No	93	n/a	n/a	30.11	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-5	110	n/a	9/1/2022	1ND	No	93	n/a	n/a	30.11	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-6	110	n/a	8/31/2022	0.41J	No	93	n/a	n/a	30.11	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-1	166.2	n/a	8/31/2022	37	No	92	7.688	2.879	2.174	None	sqrt(x)	0.001504	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-2	166.2	n/a	8/30/2022	38	No	92	7.688	2.879	2.174	None	sqrt(x)	0.001504	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-4A	166.2	n/a	8/30/2022	21	No	92	7.688	2.879	2.174	None	sqrt(x)	0.001504	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-5	166.2	n/a	9/1/2022	140	No	92	7.688	2.879	2.174	None	sqrt(x)	0.001504	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-6	166.2	n/a	8/31/2022	61	No	92	7.688	2.879	2.174	None	sqrt(x)	0.001504	Param Inter 1 of 2

Interwell Prediction Limit Appendix I - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/5/2022, 4:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Barium (mg/L)	**GWC-5**	**0.33**	**n/a**	**9/1/2022**	**0.36**	**Yes**	**277**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limit Appendix I - All Results

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/5/2022, 4:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Barium (mg/L)	GWC-1	0.33	n/a	8/31/2022	0.03	No	277	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Barium (mg/L)	GWC-2	0.33	n/a	8/30/2022	0.058	No	277	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Barium (mg/L)	GWC-4A	0.33	n/a	8/30/2022	0.035	No	277	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Barium (mg/L)	**GWC-5**	**0.33**	**n/a**	**9/1/2022**	**0.36**	**Yes**	**277**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Barium (mg/L)	GWC-6	0.33	n/a	8/31/2022	0.043	No	277	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Beryllium (mg/L)	GWC-1	0.0041	n/a	8/31/2022	0.0025ND	No	277	n/a	n/a	73.29	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Beryllium (mg/L)	GWC-2	0.0041	n/a	8/30/2022	0.00038J	No	277	n/a	n/a	73.29	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Beryllium (mg/L)	GWC-4A	0.0041	n/a	8/30/2022	0.0025ND	No	277	n/a	n/a	73.29	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Beryllium (mg/L)	GWC-5	0.0041	n/a	9/1/2022	0.0018J	No	277	n/a	n/a	73.29	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Beryllium (mg/L)	GWC-6	0.0041	n/a	8/31/2022	0.00049J	No	277	n/a	n/a	73.29	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Chromium (mg/L)	GWC-1	0.097	n/a	8/31/2022	0.002ND	No	276	n/a	n/a	40.22	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chromium (mg/L)	GWC-2	0.097	n/a	8/30/2022	0.005	No	276	n/a	n/a	40.22	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chromium (mg/L)	GWC-4A	0.097	n/a	8/30/2022	0.002ND	No	276	n/a	n/a	40.22	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chromium (mg/L)	GWC-5	0.097	n/a	9/1/2022	0.014	No	276	n/a	n/a	40.22	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chromium (mg/L)	GWC-6	0.097	n/a	8/31/2022	0.002ND	No	276	n/a	n/a	40.22	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Cobalt (mg/L)	GWC-1	0.017	n/a	8/31/2022	0.00036J	No	276	n/a	n/a	57.61	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	GWC-2	0.017	n/a	8/30/2022	0.0012J	No	276	n/a	n/a	57.61	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	GWC-4A	0.017	n/a	8/30/2022	0.00048J	No	276	n/a	n/a	57.61	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	GWC-5	0.017	n/a	9/1/2022	0.012	No	276	n/a	n/a	57.61	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	GWC-6	0.017	n/a	8/31/2022	0.00058J	No	276	n/a	n/a	57.61	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Copper (mg/L)	GWC-1	0.0055	n/a	8/31/2022	0.002ND	No	251	n/a	n/a	84.86	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Copper (mg/L)	GWC-2	0.0055	n/a	8/30/2022	0.002ND	No	251	n/a	n/a	84.86	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Copper (mg/L)	GWC-5	0.0055	n/a	9/1/2022	0.0012J	No	251	n/a	n/a	84.86	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Copper (mg/L)	GWC-6	0.0055	n/a	8/31/2022	0.002ND	No	251	n/a	n/a	84.86	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Lead (mg/L)	GWC-1	0.044	n/a	8/31/2022	0.001ND	No	277	n/a	n/a	78.7	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Lead (mg/L)	GWC-2	0.044	n/a	8/30/2022	0.001ND	No	277	n/a	n/a	78.7	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Lead (mg/L)	GWC-5	0.044	n/a	9/1/2022	0.00031J	No	277	n/a	n/a	78.7	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Lead (mg/L)	GWC-6	0.044	n/a	8/31/2022	0.001ND	No	277	n/a	n/a	78.7	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	GWC-1	0.11	n/a	8/31/2022	0.0011	No	255	n/a	n/a	71.37	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	GWC-2	0.11	n/a	8/30/2022	0.001ND	No	255	n/a	n/a	71.37	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	GWC-4A	0.11	n/a	8/30/2022	0.001ND	No	255	n/a	n/a	71.37	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	GWC-5	0.11	n/a	9/1/2022	0.001ND	No	255	n/a	n/a	71.37	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	GWC-6	0.11	n/a	8/31/2022	0.0013	No	255	n/a	n/a	71.37	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Zinc (mg/L)	GWC-1	0.11	n/a	8/31/2022	0.005ND	No	256	n/a	n/a	29.3	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Zinc (mg/L)	GWC-2	0.11	n/a	8/30/2022	0.012	No	256	n/a	n/a	29.3	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Zinc (mg/L)	GWC-4A	0.11	n/a	8/30/2022	0.0046J	No	256	n/a	n/a	29.3	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Zinc (mg/L)	GWC-5	0.11	n/a	9/1/2022	0.035	No	256	n/a	n/a	29.3	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Zinc (mg/L)	GWC-6	0.11	n/a	8/31/2022	0.0073	No	256	n/a	n/a	29.3	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2

Trend Tests (Appendix I Prediction Limit Exceedance) - All Results

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/5/2022, 4:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Barium (mg/L)	**GWA-1A (bg)**	**-0.002091**	**-4.785**	**-2.58**	**Yes**	**53**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	GWA-2B (bg)	-0.0006992	-9	-30	No	10	0	n/a	n/a	0.01	NP
Barium (mg/L)	**GWA-3A (bg)**	**0.00149**	**7.317**	**2.58**	**Yes**	**55**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	**GWA-4 (bg)**	**0.0009886**	**6.411**	**2.58**	**Yes**	**54**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	GWA-5 (bg)	0.0006216	0.9536	2.58	No	53	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-7A (bg)	-0.01546	-26	-30	No	10	0	n/a	n/a	0.01	NP
Barium (mg/L)	**GWC-5**	**0.01113**	**2.842**	**2.58**	**Yes**	**53**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests (Appendix I Prediction Limit Exceedance) - Significant Results

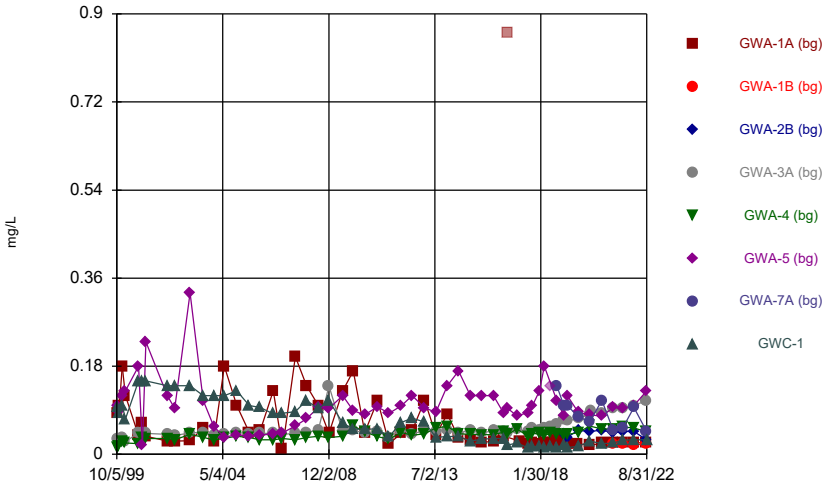
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/5/2022, 4:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Barium (mg/L)	**GWA-1A (bg)**	**-0.002091**	**-4.785**	**-2.58**	**Yes**	**53**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	**GWA-3A (bg)**	**0.00149**	**7.317**	**2.58**	**Yes**	**55**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	**GWA-4 (bg)**	**0.0009886**	**6.411**	**2.58**	**Yes**	**54**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	**GWC-5**	**0.01113**	**2.842**	**2.58**	**Yes**	**53**	**0**	**n/a**	**n/a**	**0.01**	**NP**

FIGURE A.

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

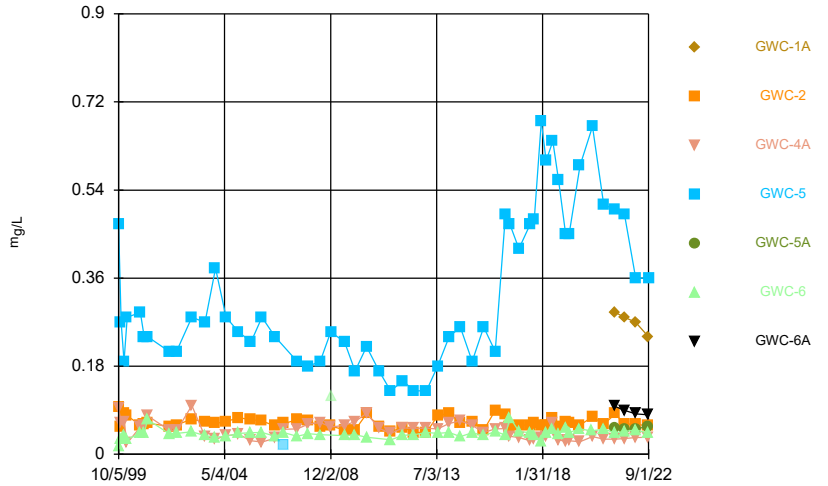
Time Series



Constituent: Barium Analysis Run 11/3/2022 1:03 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Time Series



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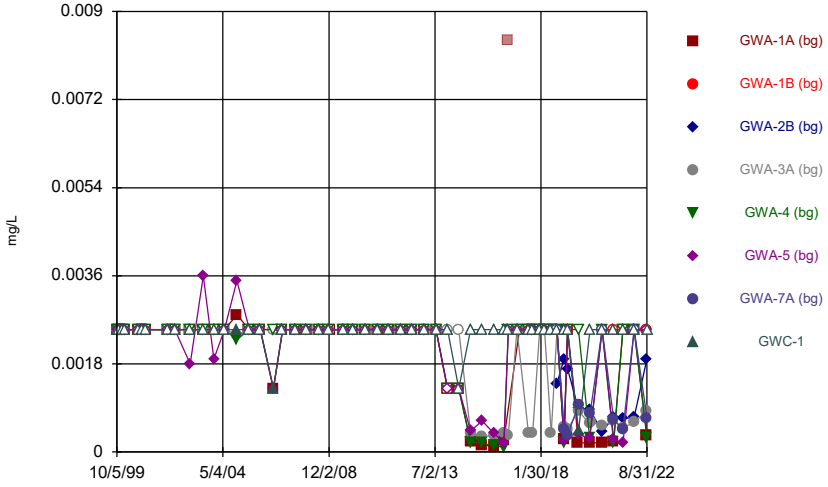
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Beryllium Analysis Run 11/3/2022 1:03 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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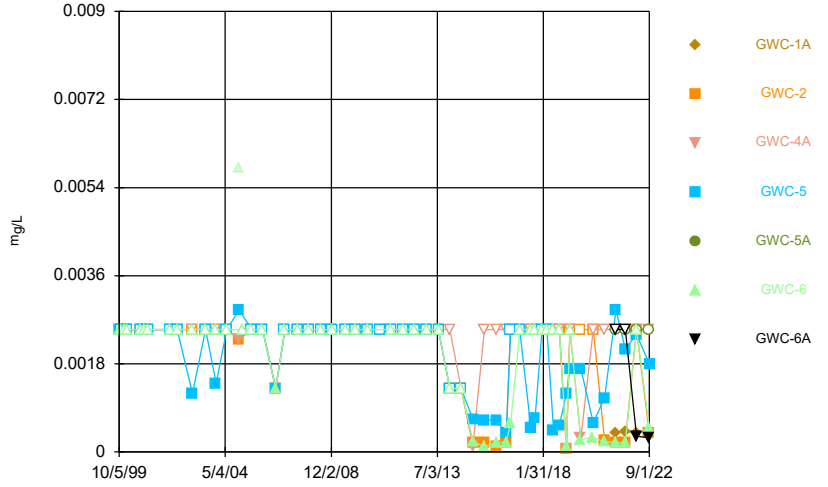

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Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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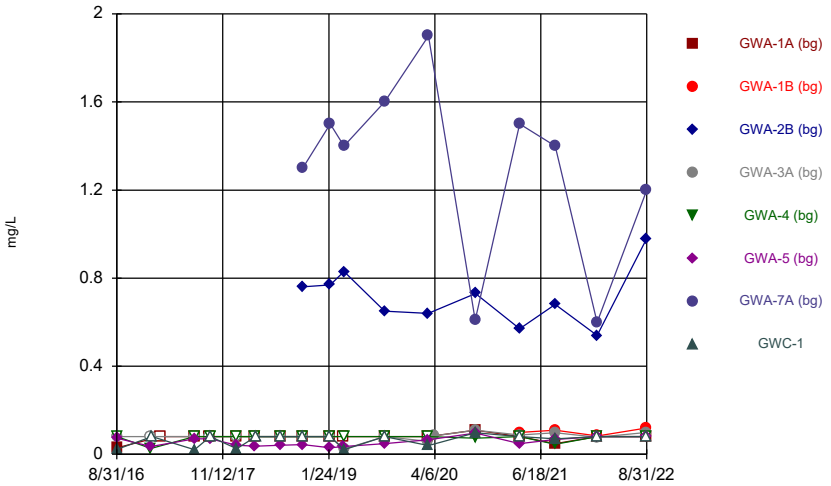

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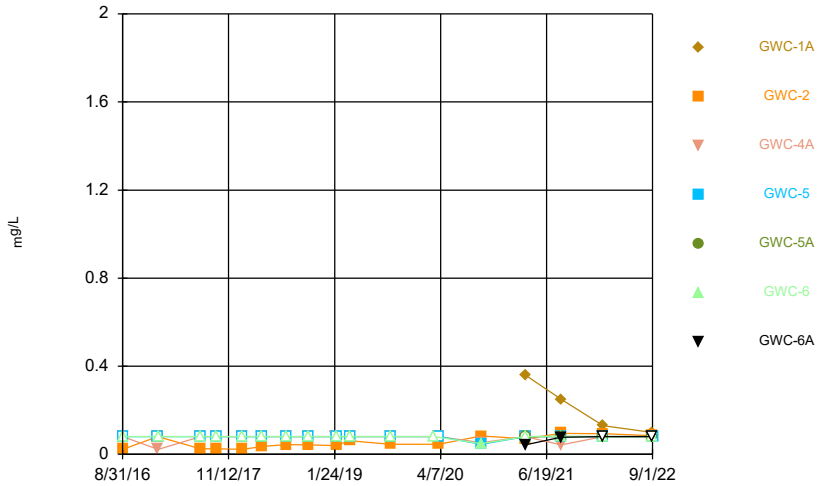
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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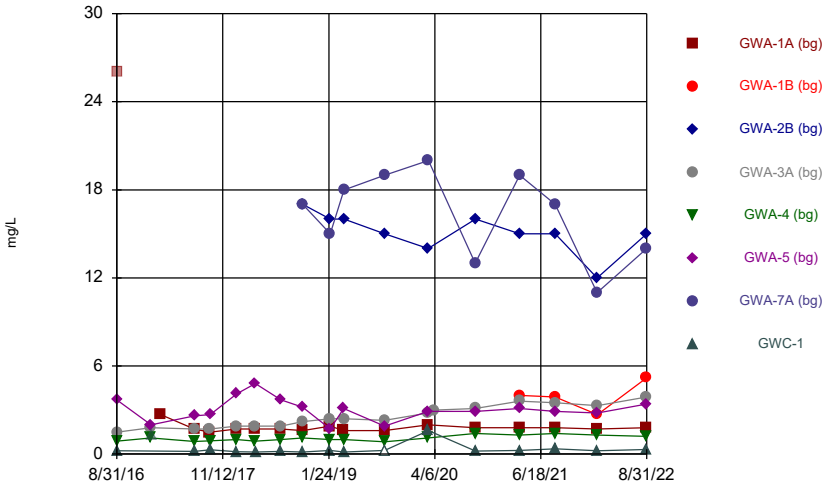
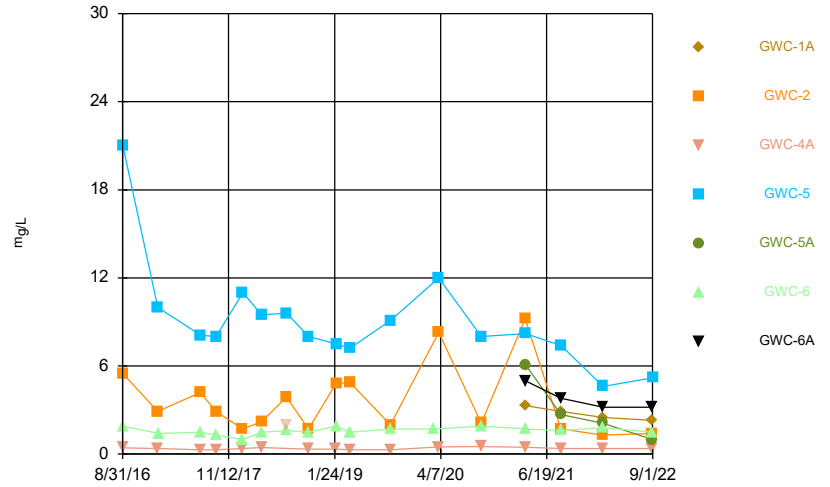


Constituent: Calcium Analysis Run 11/3/2022 1:03 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

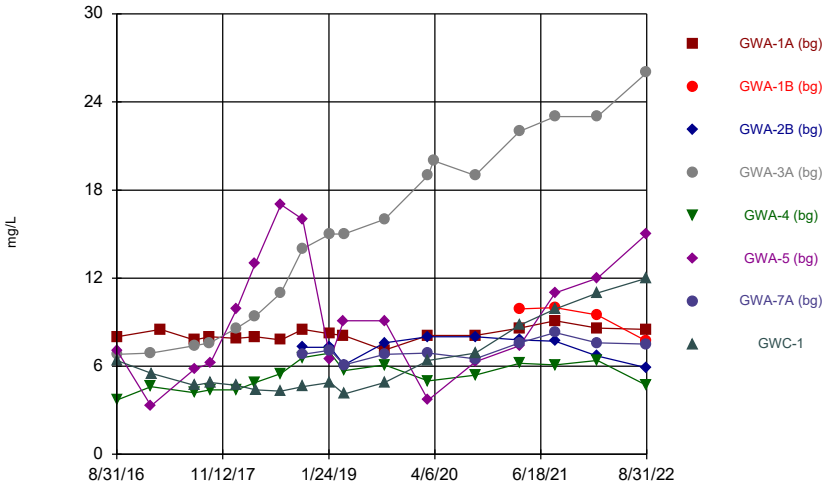
Time Series



Constituent: Calcium Analysis Run 11/3/2022 1:03 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

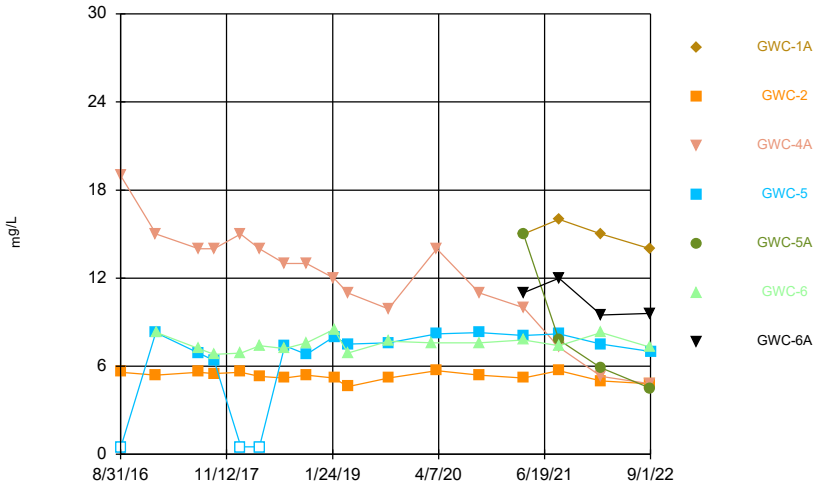
Time Series



Constituent: Chloride Analysis Run 11/3/2022 1:03 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Chloride Analysis Run 11/3/2022 1:03 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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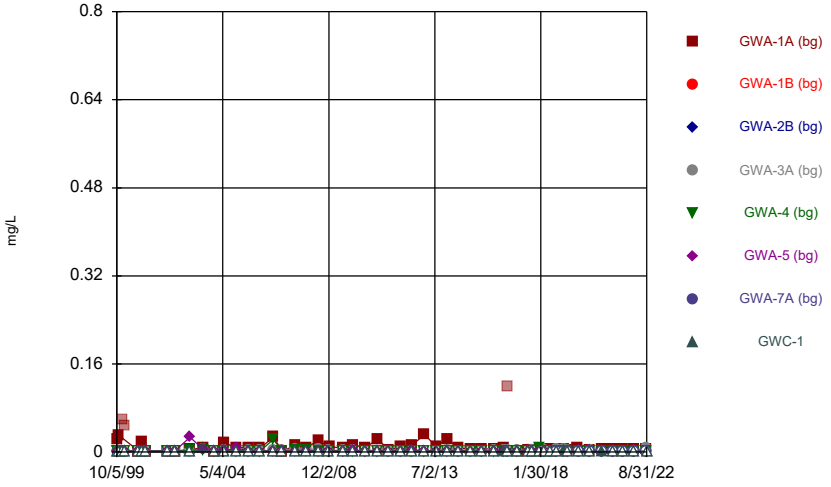
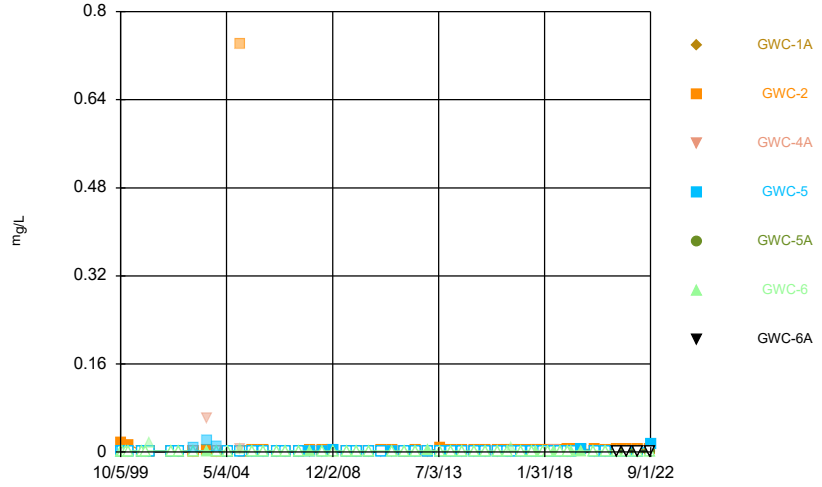


Constituent: Chromium Analysis Run 11/3/2022 1:03 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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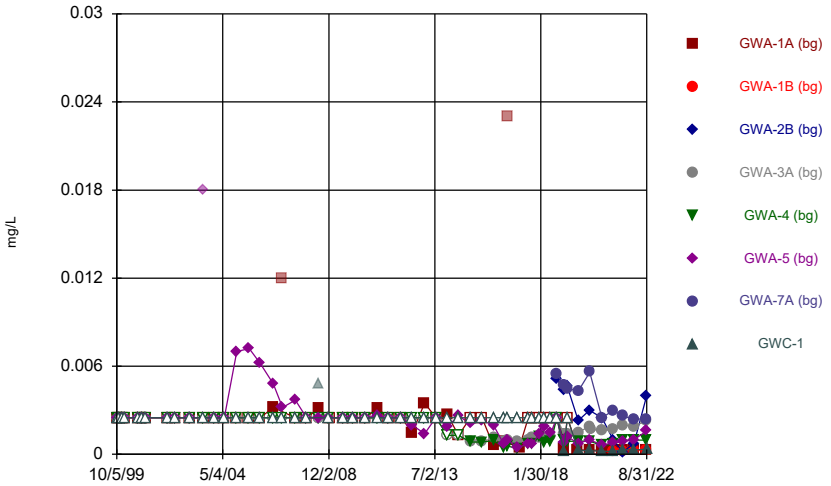
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 11/3/2022 1:03 PM View: Descriptive
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Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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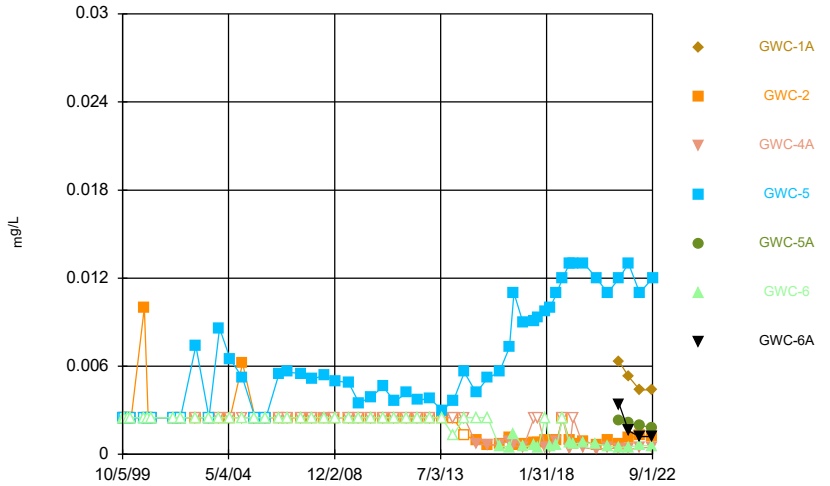

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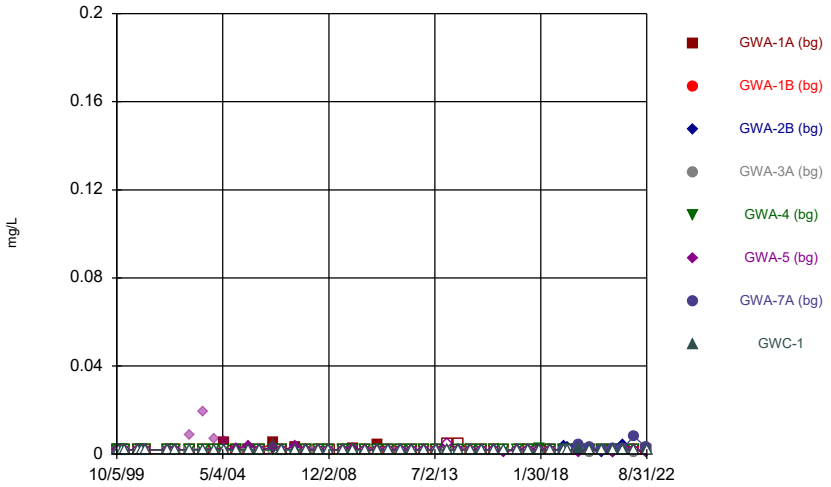
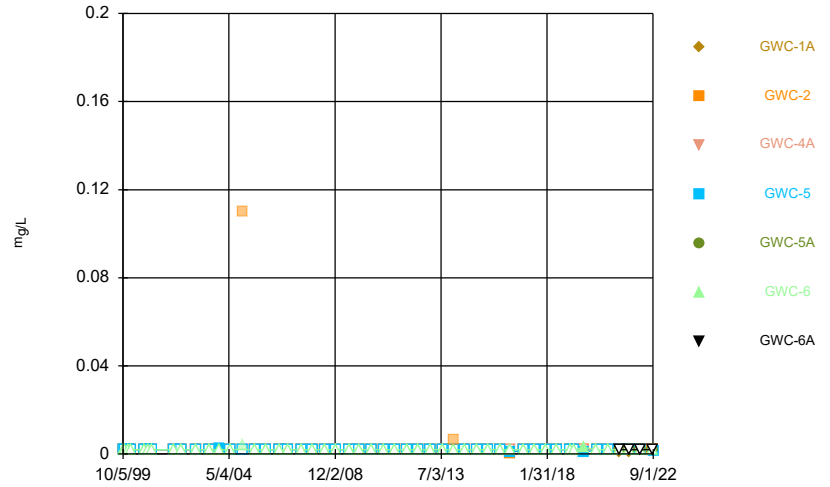


Constituent: Copper Analysis Run 11/3/2022 1:03 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
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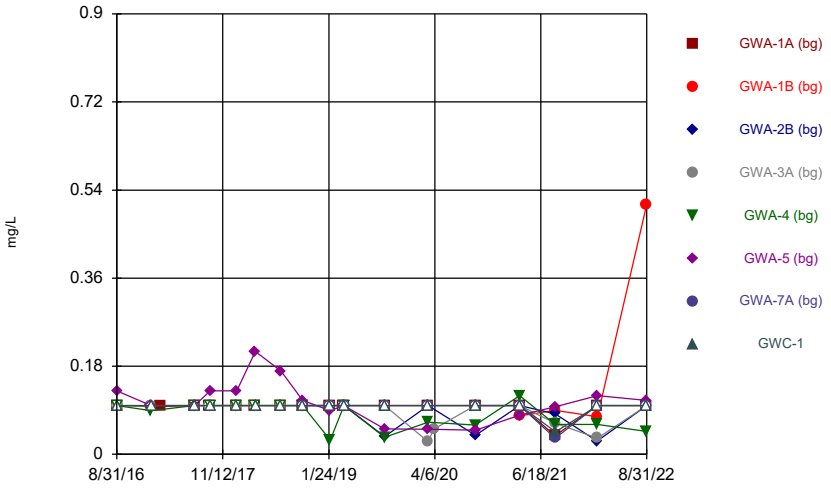
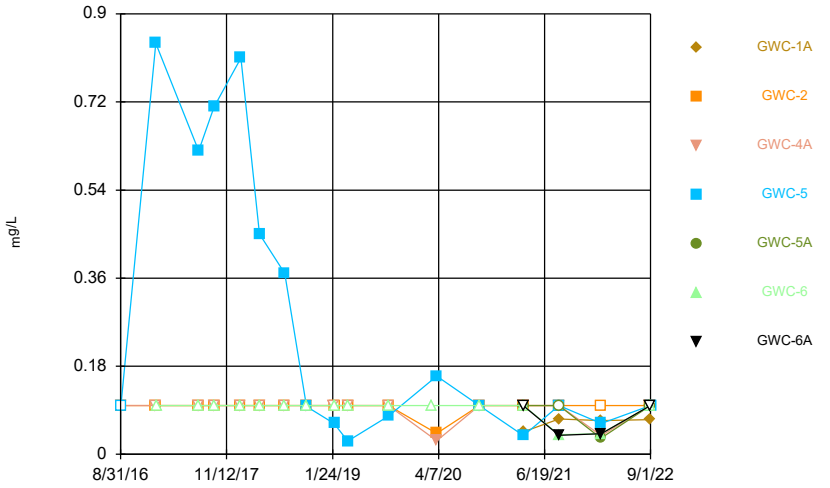


Constituent: Fluoride Analysis Run 11/3/2022 1:04 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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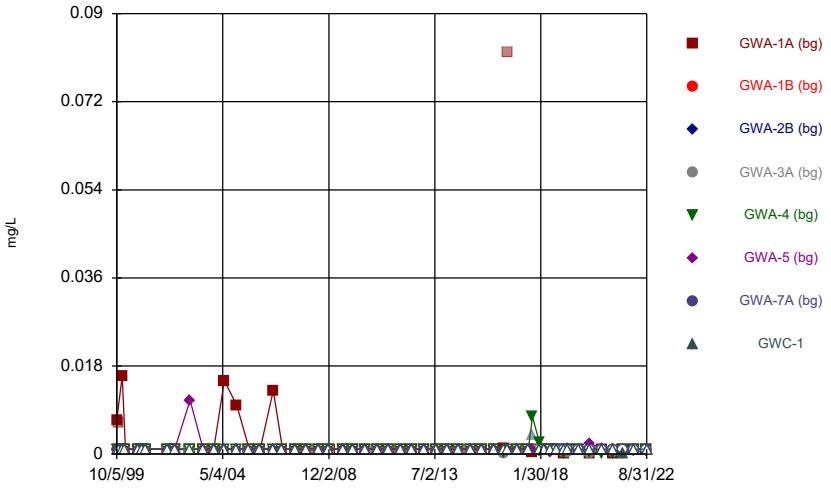

Constituent: Lead Analysis Run 11/3/2022 1:04 PM View: Descriptive
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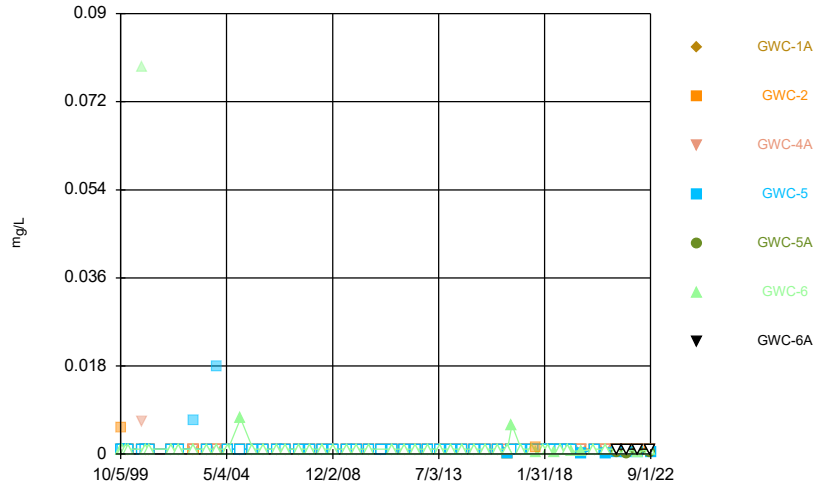

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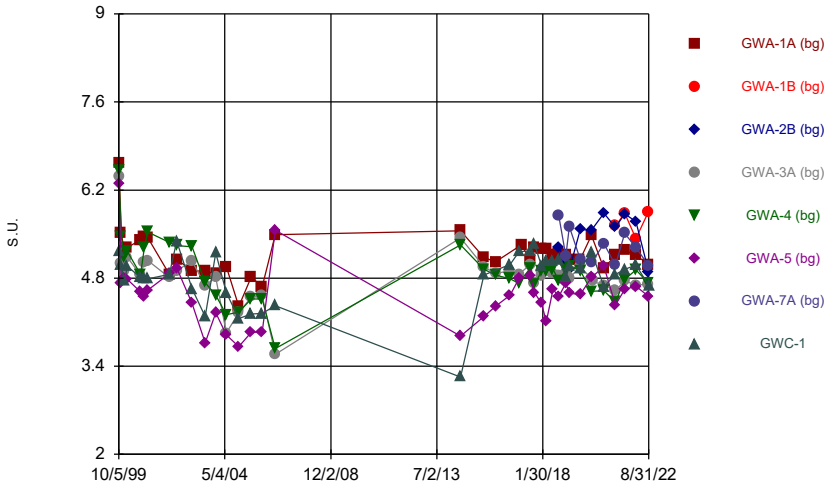
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

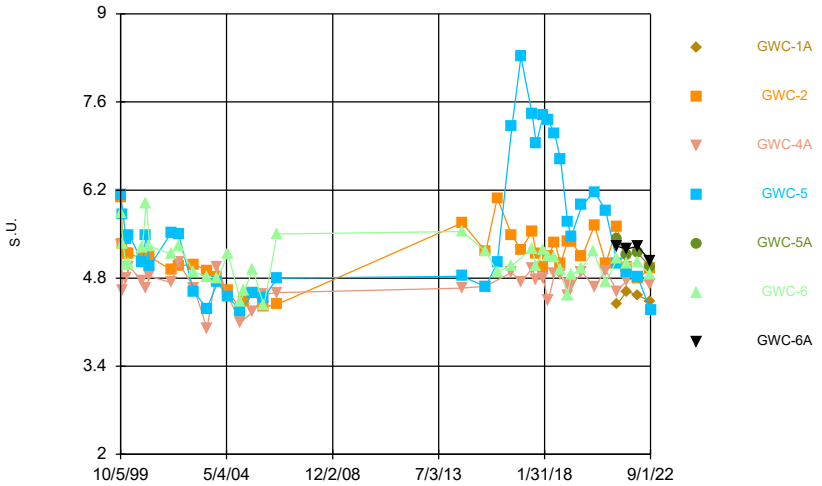
Time Series



Constituent: pH Analysis Run 11/3/2022 1:04 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

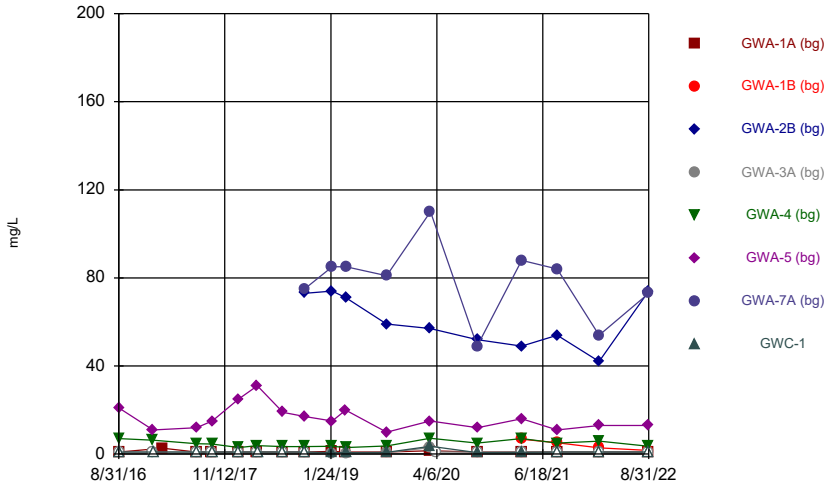
Time Series



Constituent: pH Analysis Run 11/3/2022 1:04 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

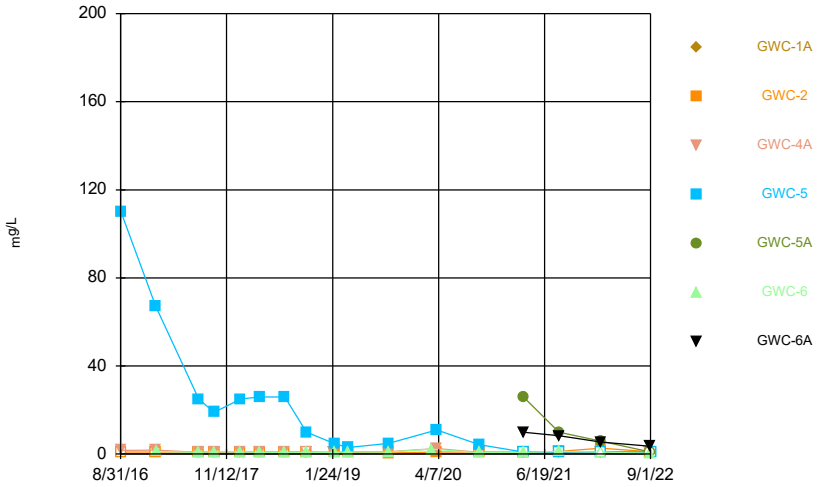
Time Series



Constituent: Sulfate Analysis Run 11/3/2022 1:04 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

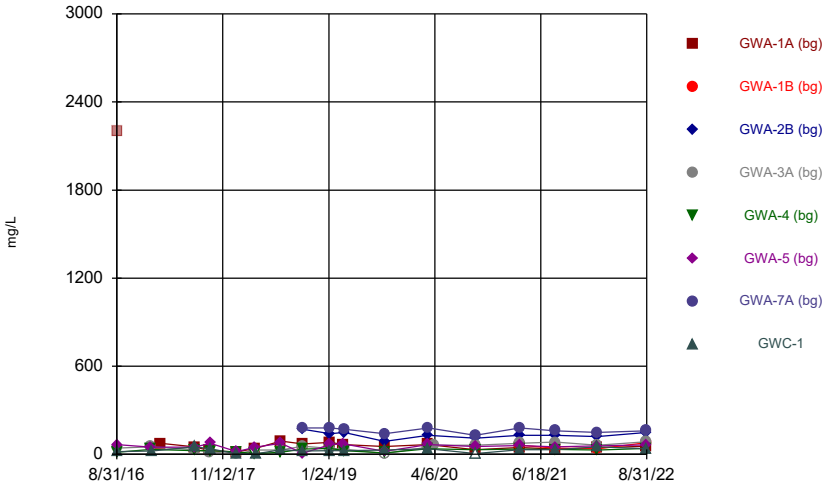
Time Series



Constituent: Sulfate Analysis Run 11/3/2022 1:04 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

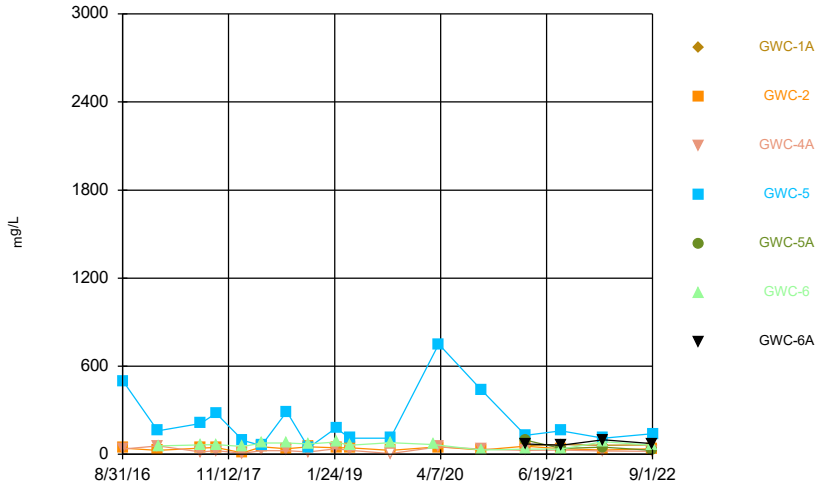
Time Series



Constituent: Total Dissolved Solids Analysis Run 11/3/2022 1:04 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

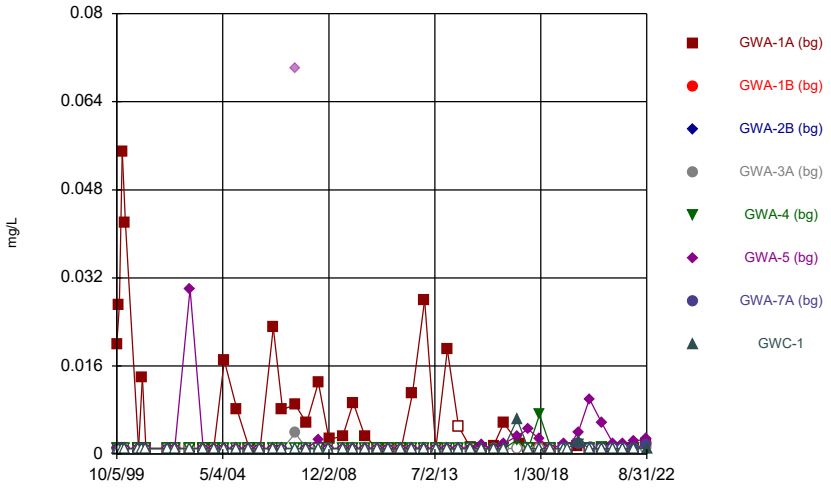
Time Series



Constituent: Total Dissolved Solids Analysis Run 11/3/2022 1:04 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

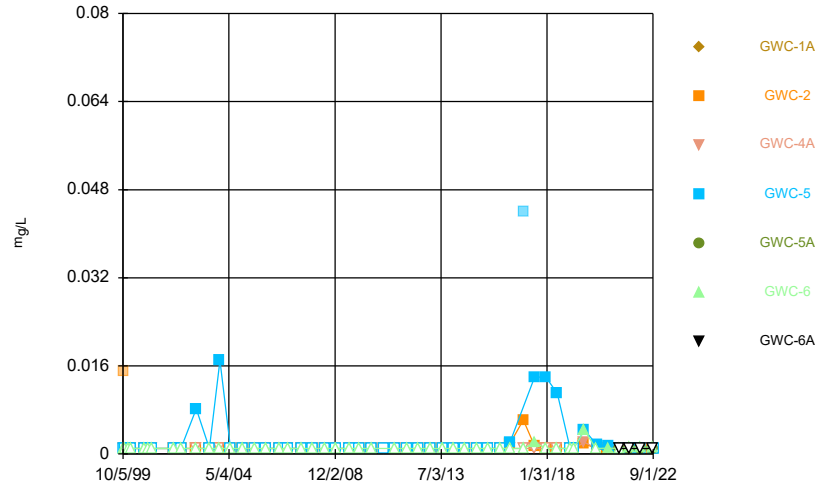
Time Series



Constituent: Vanadium Analysis Run 11/3/2022 1:04 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

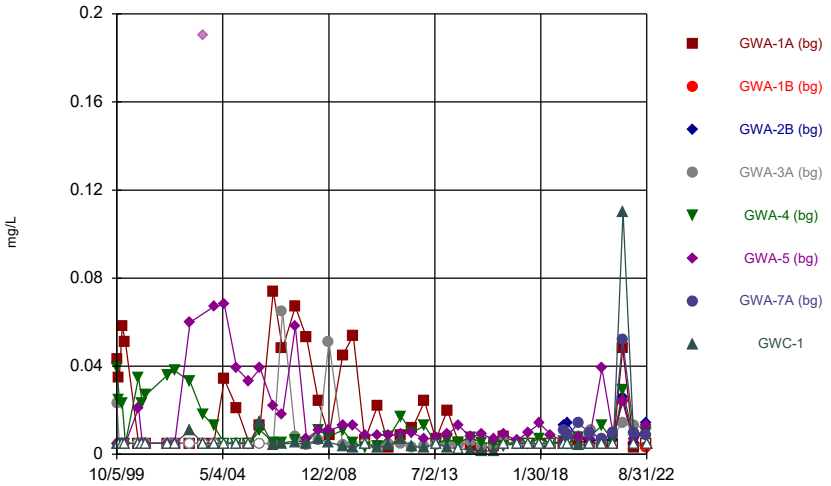
Time Series



Constituent: Vanadium Analysis Run 11/3/2022 1:04 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

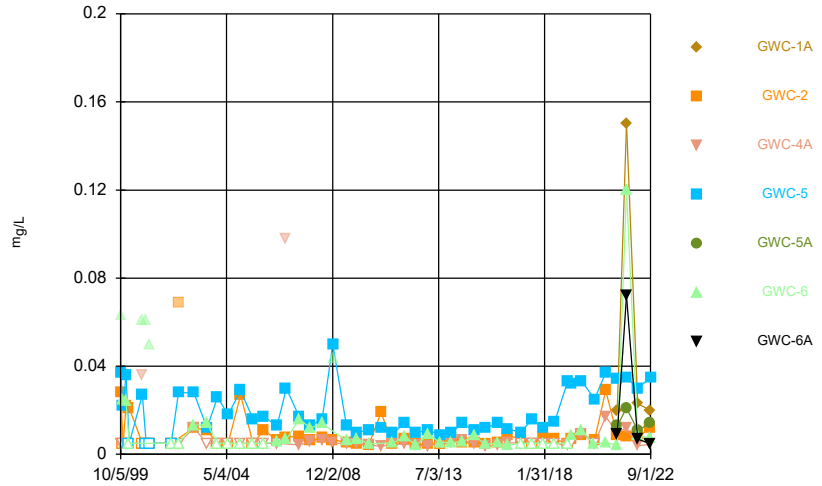
Time Series



Constituent: Zinc Analysis Run 11/3/2022 1:04 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 11/3/2022 1:04 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Time Series

Constituent: Barium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
10/5/1999	0.084			0.031	0.013	0.1		0.096
11/12/1999	0.099			0.023	0.017	0.086		0.085
12/29/1999	0.18			0.033	0.027	0.12		0.1
2/17/2000	0.12			0.026	0.023	0.13		0.072
9/13/2000	0.038			0.044	0.022	0.18		0.15
11/10/2000	0.065			0.044	0.035	0.018		0.15
1/4/2001	0.037			0.043	0.032	0.23		0.15
12/11/2001	0.027			0.041	0.032	0.12		0.14
4/4/2002	0.027			0.038	0.03	0.094		0.14
12/6/2002	0.028			0.044	0.041	0.33		0.14
6/28/2003	0.054			0.045	0.035	0.11		0.12
12/13/2003	0.027			0.039	0.029	0.057		0.12
5/28/2004	0.18			0.042	0.033	0.035		0.12
12/10/2004	0.1			0.045	0.037	0.04		0.13
6/24/2005	0.045			0.042	0.034	0.037		0.1
12/13/2005	0.048			0.043	0.03	0.039		0.096
7/12/2006	0.13			0.043	0.03	0.042		0.083
12/1/2006	0.012			0.041	0.032	0.044		0.084
6/21/2007	0.2			0.043	0.03	0.058		0.087
12/15/2007	0.14			0.045	0.034	0.073		0.11
6/21/2008					0.037			0.093
6/22/2008	0.1			0.05		0.096		
12/6/2008				0.14	0.034	0.094		0.11
12/7/2008	0.043							
7/10/2009				0.046				
7/11/2009	0.13				0.037	0.12		0.064
12/22/2009						0.089		
12/23/2009	0.17			0.049	0.058			0.052
6/23/2010				0.043	0.046	0.081		0.051
6/24/2010	0.045							
1/8/2011				0.047	0.036	0.097		0.052
1/9/2011	0.11							
7/10/2011				0.035	0.031	0.084		0.036
7/11/2011	0.022							
1/19/2012				0.05	0.045			
1/20/2012	0.043					0.099		0.065
7/12/2012				0.042	0.039	0.12		0.074
7/13/2012	0.05							
1/21/2013	0.11			0.048	0.042	0.095		0.066
7/20/2013	0.04			0.047	0.054	0.086		0.035
1/17/2014	0.082			0.049	0.057	0.14		0.036
7/12/2014	0.034			0.043	0.042	0.17		0.037
1/15/2015				0.05	0.041			
1/16/2015	0.029					0.12		0.027
7/15/2015	0.025			0.044	0.04	0.12		0.031
1/16/2016	0.026			0.048	0.04	0.12		0.032
6/22/2016	0.0374 (D)			0.0471 (D)	0.0453	0.0839		0.0323
8/31/2016				0.043	0.041	0.093		0.019
9/1/2016	0.86 (o)							
1/19/2017				0.052	0.052	0.079		
1/23/2017								0.023
2/28/2017	0.027							

Time Series

Constituent: Barium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
7/17/2017	0.022							
7/18/2017				0.046	0.037			
7/19/2017						0.085		0.013
9/20/2017	0.023			0.053				
9/21/2017					0.042	0.1		0.016
1/8/2018	0.022							
1/9/2018				0.05	0.043	0.13		0.016
3/27/2018	0.023			0.054	0.039	0.18		
3/28/2018								0.014
7/10/2018	0.024			0.056	0.043	0.14 (o)		
7/11/2018								0.016
10/8/2018	0.03		0.049		0.042	0.11	0.14	
10/9/2018				0.061				0.015
1/30/2019	0.024		0.041	0.071	0.04	0.079	0.1	0.018
3/27/2019	0.021					0.12		
3/28/2019			0.035	0.068	0.041		0.1	0.014
9/11/2019	0.022							
9/12/2019			0.049	0.073	0.044	0.086	0.077	0.016
3/10/2020	0.018		0.047	0.082	0.058	0.081		
3/11/2020							0.067	0.027
4/2/2020				0.088				
9/21/2020	0.023			0.083	0.052		0.11	
9/22/2020			0.049			0.078		0.022
3/23/2021	0.023	0.021	0.044	0.093			0.048	
3/24/2021					0.052	0.096		0.023
8/17/2021	0.025	0.022	0.047	0.095	0.056	0.094	0.054	
8/18/2021								0.029
2/7/2022			0.047				0.096	
2/8/2022	0.024	0.019		0.1	0.054	0.1		
2/9/2022								0.03
8/30/2022	0.023	0.022	0.03	0.11	0.046	0.13	0.047	
8/31/2022								0.03

Time Series

Constituent: Barium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
10/5/1999		0.097	0.095	0.47		0.017	
11/12/1999		0.057	0.063	0.27		0.031	
12/29/1999		0.084	0.066	0.19		0.039	
2/17/2000		0.079	0.023	0.28		0.031	
9/13/2000		0.06	0.056	0.29		0.043	
11/10/2000		0.062	0.059	0.24		0.044	
1/4/2001		0.064	0.079	0.24		0.071	
12/11/2001		0.057	0.049	0.21		0.042	
4/4/2002		0.06	0.048	0.21		0.043	
12/6/2002		0.072	0.1	0.28		0.046	
6/28/2003		0.066	0.036	0.27		0.038	
12/13/2003		0.063	0.031	0.38		0.035	
5/28/2004		0.067	0.038	0.28		0.037	
12/10/2004		0.075	0.041	0.25		0.043	
6/24/2005		0.071	0.028	0.23		0.044	
12/13/2005		0.068	0.025	0.28		0.045	
7/12/2006		0.058	0.033	0.24		0.037	
12/1/2006		0.063	0.051	0.019 (o)		0.044	
6/21/2007		0.071	0.052	0.19		0.037	
12/15/2007		0.068	0.062	0.18		0.042	
6/21/2008			0.065	0.19			
6/22/2008		0.057				0.04	
12/6/2008		0.058	0.056				
12/7/2008				0.25		0.12 (o)	
7/11/2009		0.05	0.059	0.23		0.038	
12/23/2009		0.05	0.067	0.17		0.04	
6/23/2010		0.083	0.084	0.22			
6/24/2010						0.035	
1/8/2011		0.057	0.053	0.17			
7/10/2011		0.046	0.043	0.13			
7/11/2011						0.03	
1/20/2012		0.055	0.054	0.15		0.039	
7/12/2012		0.045	0.053	0.13			
7/13/2012						0.04	
1/21/2013		0.045	0.053	0.13		0.045	
7/20/2013		0.079	0.052	0.18		0.043	
1/17/2014		0.084	0.063	0.24		0.045	
7/11/2014			0.068	0.26			
7/12/2014		0.065				0.036	
1/15/2015		0.067					
1/16/2015			0.059	0.19		0.044	
7/15/2015		0.049	0.045	0.26		0.038	
1/16/2016				0.21		0.047	
1/17/2016		0.09	0.052				
6/22/2016		0.0806	0.0528				
6/23/2016				0.491		0.0393	
8/31/2016		0.057	0.037				
9/1/2016				0.47		0.075	
1/24/2017		0.06		0.42			
1/25/2017			0.034				
1/27/2017						0.046	
7/19/2017		0.06					

Time Series

Constituent: Barium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
7/20/2017			0.028	0.47		0.045	
9/21/2017		0.063	0.032	0.48			
9/22/2017						0.04	
1/9/2018		0.059	0.033				
1/10/2018				0.68		0.027	
3/28/2018			0.037	0.6			
3/29/2018		0.06				0.044	
7/10/2018		0.073	0.065				
7/11/2018				0.64		0.051	
10/9/2018		0.057	0.029	0.56		0.041	
1/30/2019			0.027				
1/31/2019		0.067		0.45		0.053	
3/28/2019		0.064	0.028	0.45		0.045	
9/12/2019		0.06	0.026	0.59		0.052	
3/11/2020						0.048	
3/31/2020		0.077	0.036	0.67			
9/22/2020		0.061	0.031	0.51		0.051	
3/23/2021		0.083					0.098
3/24/2021	0.29		0.031	0.5	0.055	0.044	
8/18/2021	0.28	0.062	0.032	0.49	0.052	0.047	0.09
2/8/2022		0.062			0.052		
2/9/2022	0.27		0.034	0.36		0.05	0.083
8/30/2022	0.24	0.058	0.035				
8/31/2022					0.057	0.043	0.081
9/1/2022				0.36			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
10/5/1999	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
11/12/1999	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
12/29/1999	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
2/17/2000	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
9/13/2000	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
11/10/2000	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
1/4/2001	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
12/11/2001	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
4/4/2002	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
12/6/2002	<0.0025			<0.0025	<0.0025	0.0018		<0.0025
6/28/2003	<0.0025			<0.0025	<0.0025	0.0036		<0.0025
12/13/2003	<0.0025			<0.0025	<0.0025	0.0019		<0.0025
5/28/2004	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
12/10/2004	0.0028			0.0024	0.0023	0.0035		0.0025
6/24/2005	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
12/13/2005	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
7/12/2006	0.0013			<0.0025	<0.0025	0.0013		0.0013
12/1/2006	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
6/21/2007	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
12/15/2007	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
6/21/2008					<0.0025			<0.0025
6/22/2008	<0.0025			<0.0025		<0.0025		
12/6/2008				<0.0025	<0.0025	<0.0025		<0.0025
12/7/2008	<0.0025							
7/10/2009				<0.0025				
7/11/2009	<0.0025				<0.0025	<0.0025		<0.0025
12/22/2009						<0.0025		
12/23/2009	<0.0025			<0.0025	<0.0025			<0.0025
6/23/2010				<0.0025	<0.0025	<0.0025		<0.0025
6/24/2010	<0.0025							
1/8/2011				<0.0025	<0.0025	<0.0025		<0.0025
1/9/2011	<0.0025							
7/10/2011				<0.0025	<0.0025	<0.0025		<0.0025
7/11/2011	<0.0025							
1/19/2012				<0.0025	<0.0025			
1/20/2012	<0.0025					<0.0025		<0.0025
7/12/2012				<0.0025	<0.0025	<0.0025		<0.0025
7/13/2012	<0.0025							
1/21/2013	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
7/20/2013	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
1/17/2014	<0.0013 (J)			<0.0025	<0.0013 (J)	<0.0013 (J)		<0.0025
7/12/2014	<0.0013 (J)			<0.0025	<0.0013 (J)	<0.0013 (J)		<0.0013 (J)
1/15/2015				0.00039 (J)	0.0002 (J)			
1/16/2015	0.00022 (J)					0.00043 (J)		<0.0025
7/15/2015	0.00015 (J)			0.00031 (J)	0.00018 (J)	0.00064 (J)		<0.0025
1/16/2016	0.00011 (J)			0.00034 (J)	0.00013 (J)	0.00039 (J)		<0.0025
6/22/2016	0.00025 (JD)			0.0004 (J)	0.0001 (J)	0.0002 (J)		<0.0025
8/31/2016				0.00035 (J)	<0.0025	<0.0025		<0.0025
9/1/2016	0.0084 (o)							
1/19/2017				<0.0025	<0.0025	<0.0025		
1/23/2017								<0.0025
2/28/2017	<0.0025							

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
7/17/2017	<0.0025							
7/18/2017				0.00038 (J)	<0.0025			
7/19/2017						<0.0025		<0.0025
9/20/2017	<0.0025			0.00039 (J)				
9/21/2017					<0.0025	<0.0025		<0.0025
1/8/2018	<0.0025							
1/9/2018				<0.0025	<0.0025	<0.0025		<0.0025
3/27/2018	<0.0025			<0.0025	<0.0025	<0.0025		
3/28/2018								<0.0025
7/10/2018	<0.0025			0.00038 (J)	<0.0025	<0.0025		
7/11/2018								<0.0025
10/8/2018	<0.0025		0.0014 (J)		<0.0025	<0.0025	<0.0025	
10/9/2018				<0.0025				<0.0025
1/30/2019	0.00026 (J)		0.0019 (J)	0.00051 (J)	0.00019 (J)	0.00024 (J)	0.00047 (J)	<0.0025
3/27/2019	<0.0025					<0.0025		
3/28/2019			0.0017 (J)	0.00046 (J)	<0.0025		0.00034 (J)	<0.0025
9/11/2019	0.00019 (J)							
9/12/2019			0.00088 (J)	0.00084 (J)	<0.0025	0.00036 (J)	0.00097 (J)	0.00043 (J)
3/10/2020	0.00018 (J)		0.00087 (J)	0.00058 (J)	0.00029 (J)	0.00028 (J)		
3/11/2020							0.00078 (J)	<0.0025
4/2/2020				0.00062 (J)				
9/21/2020	0.0002 (J)			0.00054 (J)	<0.0025		<0.0025	
9/22/2020			0.00042 (J)			<0.0025		<0.0025
3/23/2021	0.00021 (J)	<0.0025	0.00071 (J)	0.00063 (J)			0.00066 (J)	
3/24/2021					0.00019 (J)	0.00026 (J)		<0.0025
8/17/2021	<0.0025	<0.0025	0.00068 (J)	0.00049 (J)	<0.0025	0.00018 (J)	0.00047 (J)	
8/18/2021								<0.0025
2/7/2022			0.00071 (J)				<0.0025	
2/8/2022	<0.0025	<0.0025		0.00061 (J)	<0.0025	<0.0025		
2/9/2022								<0.0025
8/30/2022	0.00035 (J)	<0.0025	0.0019 (J)	0.00083 (J)	0.00028 (J)	<0.0025	0.0007 (J)	
8/31/2022								<0.0025

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
10/5/1999		<0.0025	<0.0025	<0.0025		<0.0025	
11/12/1999		<0.0025	<0.0025	<0.0025		<0.0025	
12/29/1999		<0.0025	<0.0025	<0.0025		<0.0025	
2/17/2000		<0.0025	<0.0025	<0.0025		<0.0025	
9/13/2000		<0.0025	<0.0025	<0.0025		<0.0025	
11/10/2000		<0.0025	<0.0025	<0.0025		<0.0025	
1/4/2001		<0.0025	<0.0025	<0.0025		<0.0025	
12/11/2001		<0.0025	<0.0025	<0.0025		<0.0025	
4/4/2002		<0.0025	<0.0025	<0.0025		<0.0025	
12/6/2002		<0.0025	<0.0025	0.0012		<0.0025	
6/28/2003		<0.0025	<0.0025	<0.0025		<0.0025	
12/13/2003		<0.0025	<0.0025	0.0014		<0.0025	
5/28/2004		<0.0025	<0.0025	<0.0025		<0.0025	
12/10/2004		0.0023	0.0023	0.0029		0.0058 (o)	
2/5/2005						<0.0025	
6/24/2005		<0.0025	<0.0025	<0.0025		<0.0025	
12/13/2005		<0.0025	<0.0025	<0.0025		<0.0025	
7/12/2006		0.0013	0.0013	0.0013		0.0013	
12/1/2006		<0.0025	<0.0025	<0.0025		<0.0025	
6/21/2007		<0.0025	<0.0025	<0.0025		<0.0025	
12/15/2007		<0.0025	<0.0025	<0.0025		<0.0025	
6/21/2008			<0.0025	<0.0025			
6/22/2008		<0.0025				<0.0025	
12/6/2008		<0.0025	<0.0025				
12/7/2008				<0.0025		<0.0025	
7/11/2009		<0.0025	<0.0025	<0.0025		<0.0025	
12/23/2009		<0.0025	<0.0025	<0.0025		<0.0025	
6/23/2010		<0.0025	<0.0025	<0.0025			
6/24/2010						<0.0025	
1/8/2011		<0.0025	<0.0025	<0.0025			
7/10/2011		<0.0025	<0.0025	<0.0025			
7/11/2011						<0.0025	
1/20/2012		<0.0025	<0.0025	<0.0025		<0.0025	
7/12/2012		<0.0025	<0.0025	<0.0025			
7/13/2012						<0.0025	
1/21/2013		<0.0025	<0.0025	<0.0025		<0.0025	
7/20/2013		<0.0025	<0.0025	<0.0025		<0.0025	
1/17/2014		<0.0013 (J)	<0.0025	<0.0013 (J)		<0.0013 (J)	
7/11/2014			<0.0013 (J)	<0.0013 (J)			
7/12/2014		<0.0013 (J)				<0.0013 (J)	
1/15/2015		0.00019 (J)					
1/16/2015			0.00012 (J)	0.00067 (J)		0.00021 (J)	
7/15/2015		0.00018 (J)	<0.0025	0.00065 (J)		0.00011 (J)	
1/16/2016				0.00065 (J)		0.00019 (J)	
1/17/2016		0.00011 (J)	<0.0025				
6/22/2016		0.0002 (J)	<0.0025				
6/23/2016				0.0004 (J)		0.0002 (J)	
8/31/2016		<0.0025	<0.0025				
9/1/2016				<0.0025		0.0006 (J)	
1/24/2017		<0.0025		<0.0025			
1/25/2017			<0.0025				
1/27/2017						<0.0025	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
7/19/2017		<0.0025					
7/20/2017			<0.0025	0.00049 (J)		<0.0025	
9/21/2017		<0.0025	<0.0025	0.00068 (J)			
9/22/2017						<0.0025	
1/9/2018		<0.0025	<0.0025				
1/10/2018				<0.0025		<0.0025	
3/28/2018			<0.0025	<0.0025			
3/29/2018		<0.0025				<0.0025	
7/10/2018		<0.0025	<0.0025				
7/11/2018				0.00043 (J)		<0.0025	
10/9/2018		<0.0025	<0.0025	0.00054 (J)		<0.0025	
1/30/2019			7E-05 (J)				
1/31/2019		6.5E-05 (J)		0.0012 (J)		0.00012 (J)	
3/28/2019		<0.0025	<0.0025	0.0017 (J)		<0.0025	
9/12/2019		<0.0025	0.00028 (J)	0.0017		0.00025 (J)	
3/11/2020						0.0003 (J)	
3/31/2020		<0.0025	<0.0025	0.0006 (J)			
9/22/2020		0.00025 (J)	<0.0025	0.0011 (J)		0.00021 (J)	
3/23/2021		0.00018 (J)					<0.0025
3/24/2021	0.00039 (J)		<0.0025	0.0029	<0.0025	0.00019 (J)	
8/18/2021	0.00041 (J)	0.0002 (J)	<0.0025	0.0021 (J)	<0.0025	0.00018 (J)	<0.0025
2/8/2022		<0.0025			<0.0025		
2/9/2022	0.0004 (J)		<0.0025	0.0024 (J)		<0.0025	0.00032 (J)
8/30/2022	0.00042 (J)	0.00038 (J)	<0.0025				
8/31/2022					<0.0025	0.00049 (J)	0.00029 (J)
9/1/2022				0.0018 (J)			

Time Series

Constituent: Boron (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
8/31/2016				<0.08	<0.08	0.073		0.023 (J)
9/1/2016	0.029 (J)							
1/19/2017				<0.08	0.027 (J)	0.036 (J)		
1/23/2017								<0.08
2/28/2017	<0.08							
7/17/2017	<0.08							
7/18/2017				<0.08	<0.08			
7/19/2017						0.07		0.021 (J)
9/20/2017	<0.08			<0.08				
9/21/2017					<0.08	0.07		<0.08
1/8/2018	<0.08							
1/9/2018				<0.08	<0.08	0.042 (J)		0.025 (J)
3/27/2018	<0.08			<0.08	<0.08	0.037 (J)		
3/28/2018								<0.08
7/10/2018	<0.08			<0.08	<0.08	0.042 (J)		
7/11/2018								<0.08
10/8/2018	<0.08		0.76		<0.08	0.044 (J)	1.3	
10/9/2018				<0.08				<0.08
1/30/2019	<0.08		0.77	<0.08	<0.08	0.03 (J)	1.5	<0.08
3/27/2019	<0.08					0.036 (J)		
3/28/2019			0.83	0.024 (J)	<0.08		1.4	0.021 (J)
9/11/2019	<0.08							
9/12/2019			0.65	<0.08	<0.08	0.048 (J)	1.6	<0.08
3/10/2020	<0.08		0.64	0.059 (J)	<0.08	0.066 (J)		
3/11/2020							1.9	0.04 (J)
4/2/2020				0.084				
9/21/2020	0.11			0.11	0.073 (J)		0.61	
9/22/2020			0.73			0.097		0.098
3/23/2021	<0.08	0.1	0.57	0.088			1.5	
3/24/2021					<0.08	0.048 (J)		<0.08
8/17/2021	0.049 (J)	0.11	0.68	0.098	0.045 (J)	0.067 (J)	1.4	
8/18/2021								0.07 (J)
2/7/2022			0.54				0.6	
2/8/2022	<0.08	0.084		0.077 (J)	<0.08	<0.08		
2/9/2022								<0.08
8/30/2022	<0.08	0.12	0.98	0.1	<0.08	<0.08	1.2	
8/31/2022								<0.08

Time Series

Constituent: Boron (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
8/31/2016		0.023 (J)	<0.08				
9/1/2016				<0.08		<0.08	
1/24/2017		<0.08		<0.08			
1/25/2017			0.023 (J)				
1/27/2017						<0.08	
7/19/2017		0.026 (J)					
7/20/2017			<0.08	<0.08		<0.08	
9/21/2017		0.025 (J)	<0.08	<0.08			
9/22/2017						<0.08	
1/9/2018		0.023 (J)	<0.08				
1/10/2018				<0.08		<0.08	
3/28/2018			<0.08	<0.08			
3/29/2018		0.035 (J)				<0.08	
7/10/2018		0.044 (J)	<0.08				
7/11/2018				<0.08		<0.08	
10/9/2018		0.043 (J)	<0.08	<0.08		<0.08	
1/30/2019			<0.08				
1/31/2019		0.04 (J)		<0.08		<0.08	
3/28/2019		0.062	<0.08	<0.08		<0.08	
9/12/2019		0.045 (J)	<0.08	<0.08		<0.08	
3/11/2020						<0.08	
3/31/2020		0.046 (J)	<0.08	<0.08			
9/22/2020		0.083	0.053 (J)	0.045 (J)		0.048 (J)	
3/23/2021		0.07 (J)					0.043 (J)
3/24/2021	0.36		<0.08	<0.08	<0.08	<0.08	
8/18/2021	0.25	0.095	0.043 (J)	<0.08	<0.08	0.082	0.077 (J)
2/8/2022		0.094			<0.08		
2/9/2022	0.13		<0.08	<0.08		<0.08	<0.08
8/30/2022	0.099	0.085	<0.08				
8/31/2022					<0.08	<0.08	<0.08
9/1/2022				<0.08			

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
8/31/2016				1.5	0.88	3.7		0.22 (J)
9/1/2016	26 (o)							
1/19/2017				1.8	1.1	2		
1/23/2017								1.3 (o)
2/28/2017	2.7							
7/17/2017	1.7							
7/18/2017				1.7	0.86			
7/19/2017						2.6		0.19 (J)
9/20/2017	1.5			1.7				
9/21/2017					0.9	2.7		0.3
1/8/2018	1.7							
1/9/2018				1.9	1	4.1		0.16 (J)
3/27/2018	1.7			1.9	0.89	4.8		
3/28/2018								0.14 (J)
7/10/2018	1.7			1.9	0.99	3.7		
7/11/2018								0.18 (J)
10/8/2018	1.6		17		1.1	3.2	17	
10/9/2018				2.2				0.13 (J)
1/30/2019	1.9		16	2.4	1	1.7	15	0.24 (J)
3/27/2019	1.6					3.1		
3/28/2019			16	2.4	0.98		18	0.15 (J)
9/11/2019	1.6							
9/12/2019			15	2.3	0.84	1.9	19	<0.5 (D)
3/10/2020	2		14	2.8	1.1	2.9		
3/11/2020							20	1.6
4/2/2020				3				
9/21/2020	1.8			3.1	1.4		13	
9/22/2020			16			2.9		0.21 (J)
3/23/2021	1.8	4	15	3.6			19	
3/24/2021					1.3	3.1		0.25 (J)
8/17/2021	1.8	3.9	15	3.5	1.4	2.9	17	
8/18/2021								0.36 (J)
2/7/2022			12				11	
2/8/2022	1.7	2.7		3.3	1.3	2.8		
2/9/2022								0.23 (J)
8/30/2022	1.8	5.2	15	3.9	1.2	3.4	14	
8/31/2022								0.31 (J)

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
8/31/2016		5.5	0.42				
9/1/2016				21		1.9	
1/24/2017		2.9		10			
1/25/2017			0.37				
1/27/2017						1.4	
7/19/2017		4.2					
7/20/2017			0.29	8.1		1.5	
9/21/2017		2.9	0.3	8			
9/22/2017						1.3	
1/9/2018		1.7	0.38				
1/10/2018				11		1	
3/28/2018			0.44	9.5			
3/29/2018		2.2				1.5	
7/10/2018		3.9	2 (o)				
7/11/2018				9.6		1.6	
10/9/2018		1.7	0.34	8		1.5	
1/30/2019			0.34				
1/31/2019		4.8		7.5		1.9	
3/28/2019		4.9	0.3	7.2		1.5	
9/12/2019		2	0.3 (J)	9.1		1.7	
3/11/2020						1.7	
3/31/2020		8.3	0.48 (J)	12			
9/22/2020		2.1	0.51	8		1.9	
3/23/2021		9.2					5
3/24/2021	3.3		0.46 (J)	8.2	6.1	1.7	
8/18/2021	2.9	1.7	0.37 (J)	7.4	2.7	1.6	3.8
2/8/2022		1.3			2.1		
2/9/2022	2.5		0.39 (J)	4.6		1.8	3.2
8/30/2022	2.3	1.4	0.39 (J)				
8/31/2022					0.98	1.5	3.2
9/1/2022				5.2			

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
8/31/2016				6.8	3.7	7.1		6.4
9/1/2016	8							
1/19/2017				6.9	4.6	3.3		
1/23/2017								5.5
2/28/2017	8.5							
7/17/2017	7.8							
7/18/2017				7.4	4.2			
7/19/2017						5.8		4.7
9/20/2017	8			7.6				
9/21/2017					4.4	6.2		4.9
1/8/2018	7.9							
1/9/2018				8.6	4.4	9.9		4.7
3/27/2018	8			9.4	4.9	13		
3/28/2018								4.4
7/10/2018	7.8			11	5.5	17		
7/11/2018								4.3
10/8/2018	8.5		7.3		6.6	16	6.8	
10/9/2018				14				4.6
1/30/2019	8.2		7.3	15	6.9	6.5	7.1	4.9
3/27/2019	8.1					9.1		
3/28/2019			6.1	15	5.7		6.1	4.1
9/11/2019	7.1							
9/12/2019			7.6	16	6.1	9.1	6.8	4.9
3/10/2020	8.1		8	19	5	3.7		
3/11/2020							6.9	6.4
4/2/2020				20				
9/21/2020	8.1			19	5.4		6.5	
9/22/2020			8			6.3		6.9
3/23/2021	8.6	9.9	7.8	22			7.6	
3/24/2021					6.2	7.4		8.8
8/17/2021	9.1	10	7.7	23	6.1	11	8.3	
8/18/2021								9.9
2/7/2022			6.7				7.6	
2/8/2022	8.6	9.5		23	6.4	12		
2/9/2022								11
8/30/2022	8.5	7.7	5.9	26	4.7	15	7.5	
8/31/2022								12

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
8/31/2016		5.6	19				
9/1/2016				<1			
1/24/2017		5.4		8.3			
1/25/2017			15				
1/27/2017						8.3	
7/19/2017		5.6					
7/20/2017			14	6.9		7.2	
9/21/2017		5.5	14	6.4			
9/22/2017						6.8	
1/9/2018		5.6	15				
1/10/2018				<1		6.9	
3/28/2018			14	<1			
3/29/2018		5.3				7.4	
7/10/2018		5.2	13				
7/11/2018				7.4		7.2	
10/9/2018		5.4	13	6.8		7.6	
1/30/2019			12				
1/31/2019		5.2		8		8.5	
3/28/2019		4.6	11	7.5		6.9	
9/12/2019		5.2	9.9	7.6		7.7	
3/11/2020						7.6	
3/31/2020		5.7	14	8.2			
9/22/2020		5.4	11	8.3		7.6	
3/23/2021		5.2					11
3/24/2021	15		10	8.1	15	7.8	
8/18/2021	16	5.7	7.3	8.2	7.8	7.4	12
2/8/2022		5			5.9		
2/9/2022	15		5.3	7.5		8.3	9.5
8/30/2022	14	4.8	4.8				
8/31/2022					4.5	7.3	9.6
9/1/2022				7			

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
10/5/1999	0.023			<0.002	<0.002	<0.002		<0.002
11/12/1999	0.03			<0.002	<0.002	<0.002		<0.002
12/29/1999	0.059 (o)			<0.002	<0.002	<0.002		<0.002
2/17/2000	0.048 (o)			<0.002	<0.002	<0.002		<0.002
9/13/2000	<0.002			<0.002	<0.002	<0.002		<0.002
11/10/2000	0.018			<0.002	<0.002	<0.002		<0.002
1/4/2001	<0.002			<0.002	<0.002	<0.002		<0.002
12/11/2001	<0.002			<0.002	<0.002	<0.002		<0.002
4/4/2002	<0.002			<0.002	<0.002	<0.002		<0.002
12/6/2002	0.0046			<0.002	0.0037	0.027		<0.002
6/28/2003	0.0082			0.0053	0.0039	0.0051		0.007 (o)
12/13/2003	<0.002			<0.002	<0.002	<0.002		<0.002
5/28/2004	0.016			0.0027	<0.002	0.0031		<0.002
12/10/2004	0.0087			0.004	<0.002	0.0067		<0.002
6/24/2005	0.0069			0.0031	<0.002	<0.002		<0.002
12/13/2005	0.0075			0.0031	<0.002	<0.002		<0.002
7/12/2006	0.027			0.0025	0.023	<0.002		<0.002
12/1/2006	<0.002			0.0037	0.0017	<0.002		<0.002
6/21/2007	0.012			0.0053	0.0027	0.0021		<0.002
12/15/2007	0.0085			0.0044	0.0026	0.0022		<0.002
6/21/2008					0.0021			<0.002
6/22/2008	0.021			0.0059		0.0019		
12/6/2008				0.0031	<0.002	<0.002		<0.002
12/7/2008	0.01							
7/10/2009				0.0029				
7/11/2009	0.0073				<0.002	<0.002		<0.002
12/22/2009						0.0032		
12/23/2009	0.013			0.0025	<0.002			<0.002
6/23/2010				0.0013	<0.002	<0.002		<0.002
6/24/2010	0.0076							
1/8/2011				0.0017	<0.002	0.0019		<0.002
1/9/2011	0.023							
7/10/2011				<0.002	<0.002	<0.002		<0.002
7/11/2011	0.0042							
1/19/2012				<0.002	<0.002			
1/20/2012	0.009					<0.002		<0.002
7/12/2012				<0.002	<0.002	0.0044		<0.002
7/13/2012	0.013							
1/21/2013	0.032			0.0014	<0.002	<0.002		<0.002
7/20/2013	0.01			0.0021	<0.002	0.0017		<0.002
1/17/2014	0.024			0.0023	<0.002	<0.0013 (J)		<0.002
7/12/2014	0.0069			<0.0013 (J)	<0.002	0.0014		<0.002
1/15/2015				<0.002	<0.002			
1/16/2015	0.0064					0.0011 (J)		<0.002
7/15/2015	0.0051			<0.002	<0.002	0.0016		<0.002
1/16/2016	0.0066			0.0025	<0.002	<0.002		<0.002
6/22/2016	0.00815 (JD)			0.00255 (JD)	0.0005 (J)	0.002 (J)		0.0008 (J)
8/31/2016				0.0042	<0.002	0.002 (J)		<0.002
9/1/2016	0.12 (o)							
1/19/2017				0.0039	<0.002	0.002 (J)		
1/23/2017								<0.002
2/28/2017	0.0012 (J)							

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
7/17/2017	0.003							
7/18/2017				0.0018 (J)	<0.002			
7/19/2017						0.0017 (J)		<0.002
9/20/2017	0.0025			0.0026				
9/21/2017					<0.002	0.0021 (J)		<0.002
1/8/2018	0.0038							
1/9/2018				0.0038	0.0087	0.0019 (J)		<0.002
3/27/2018	0.0044			0.0037	<0.002	<0.002		
3/28/2018								<0.002
7/10/2018	0.0045			0.0022 (J)	<0.002	0.0012 (J)		
7/11/2018								<0.002
10/8/2018	0.0054		<0.002		<0.002	0.0015 (J)	<0.002	
10/9/2018				0.0047				<0.002
1/30/2019	0.0061		0.003	0.005	0.00088 (J)	0.0014 (J)	<0.002	0.0024 (J)
3/27/2019	0.0044					<0.002		
3/28/2019			0.0017 (J)	0.0037	<0.002		<0.002	<0.002
9/11/2019	0.0076							
9/12/2019			<0.002	<0.002	<0.002	0.0032	<0.002	<0.002
3/10/2020	0.0041		<0.002	<0.002	<0.002	0.0031		
3/11/2020							<0.002	<0.002
4/2/2020				0.0031				
9/21/2020	0.0049			<0.002	<0.002		<0.002	
9/22/2020			<0.002			0.0017 (J)		0.0017 (J)
3/23/2021	0.0047	<0.002	<0.002	0.0022			<0.002	
3/24/2021					<0.002	<0.002		<0.002
8/17/2021	0.0046	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
8/18/2021								<0.002
2/7/2022			<0.002				<0.002	
2/8/2022	0.0051	<0.002		<0.002	<0.002	0.003		
2/9/2022								<0.002
8/30/2022	0.0047	<0.002	0.0028	0.0084	<0.002	<0.002	<0.002	
8/31/2022								<0.002

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
10/5/1999		0.017	<0.002	<0.002		<0.002	
11/12/1999		<0.002	<0.002	<0.002		<0.002	
12/29/1999		0.011	<0.002	<0.002		<0.002	
2/17/2000		0.013	<0.002	<0.002		<0.002	
9/13/2000		<0.002	<0.002	<0.002		<0.002	
11/10/2000		<0.002	<0.002	<0.002		<0.002	
1/4/2001		<0.002	<0.002	<0.002		0.016 (o)	
12/11/2001		<0.002	<0.002	<0.002		<0.002	
4/4/2002		<0.002	<0.002	<0.002		<0.002	
12/6/2002		<0.002	<0.002	0.008 (o)		<0.002	
6/28/2003		0.0027	0.061 (o)	0.021 (o)		0.0021	
12/13/2003		<0.002	<0.002	0.011 (o)		<0.002	
5/28/2004		<0.002	<0.002	<0.002		<0.002	
12/10/2004		0.74 (o)	0.0059 (o)	<0.002		0.0046 (o)	
2/5/2005		<0.002					
6/24/2005		0.0023	<0.002	<0.002		<0.002	
12/13/2005		0.0031	<0.002	<0.002		<0.002	
7/12/2006		0.0016	<0.002	<0.002		<0.002	
12/1/2006		0.0022	<0.002	<0.002		<0.002	
6/21/2007		0.002	<0.002	<0.002		<0.002	
12/15/2007		0.0029	<0.002	0.002		0.0016	
6/21/2008			<0.002	0.0017			
6/22/2008		0.0023				<0.002	
12/6/2008		0.0023	<0.002				
12/7/2008				0.0025		<0.002	
7/11/2009		0.0015	<0.002	<0.002		<0.002	
12/23/2009		0.0014	<0.002	<0.002		<0.002	
6/23/2010		0.0018	<0.002	<0.002			
6/24/2010						<0.002	
1/8/2011		0.0033	<0.002	<0.002			
7/10/2011		0.0028	<0.002	0.0013			
7/11/2011						<0.002	
1/20/2012		<0.002	<0.002	<0.002		<0.002	
7/12/2012		0.0025	<0.002	<0.002			
7/13/2012						<0.002	
1/21/2013		0.0022	<0.002	<0.002		0.0025	
7/20/2013		0.0075	<0.002	<0.002		<0.002	
1/17/2014		0.0039	<0.002	<0.002		<0.002	
7/11/2014			<0.002	<0.002			
7/12/2014		0.0031				<0.002	
1/15/2015		0.0026					
1/16/2015			<0.002	<0.002		<0.002	
7/15/2015		0.0032	<0.002	<0.002		<0.002	
1/16/2016				<0.002		<0.002	
1/17/2016		0.0029	<0.002				
6/22/2016		0.0036 (J)	<0.002				
6/23/2016				<0.002		<0.002	
8/31/2016		0.0027	<0.002				
9/1/2016				<0.002		0.0069 (o)	
1/24/2017		0.0034		<0.002			
1/25/2017			<0.002 (D)				
1/27/2017						<0.002 (D)	

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
7/19/2017		0.0028					
7/20/2017			<0.002	<0.002		<0.002	
9/21/2017		0.0035	<0.002	<0.002			
9/22/2017						0.0015 (J)	
1/9/2018		0.003	<0.002				
1/10/2018				<0.002		<0.002	
3/28/2018			0.0019 (J)	<0.002			
3/29/2018		0.0032				<0.002	
7/10/2018		0.0033	0.0029				
7/11/2018				<0.002		0.0011 (J)	
10/9/2018		0.0039	<0.002	<0.002		<0.002	
1/30/2019			<0.002				
1/31/2019		0.0061		<0.002		<0.002	
3/28/2019		0.0049	<0.002	<0.002		0.0019 (J)	
9/12/2019		0.0048	0.0028	0.0051		0.0022	
3/11/2020						<0.002	
3/31/2020		0.005	<0.002	<0.002			
9/22/2020		0.0036	<0.002	<0.002		<0.002	
3/23/2021		0.0048					<0.002
3/24/2021	<0.002		<0.002	<0.002	<0.002	<0.002	
8/18/2021	<0.002	0.0064	<0.002	<0.002	<0.002	<0.002	<0.002
2/8/2022		0.0046			<0.002		
2/9/2022	<0.002		<0.002	<0.002		<0.002	<0.002
8/30/2022	<0.002	0.005	<0.002				
8/31/2022					0.0021	<0.002	<0.002
9/1/2022				0.014			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
10/5/1999	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
11/12/1999	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
12/29/1999	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
2/17/2000	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
9/13/2000	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
11/10/2000	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
1/4/2001	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
12/11/2001	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
4/4/2002	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
12/6/2002	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
6/28/2003	<0.0025			<0.0025	<0.0025	0.018 (o)		<0.0025
12/13/2003	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
5/28/2004	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
12/10/2004	<0.0025			<0.0025	<0.0025	0.007		<0.0025
6/24/2005	<0.0025			<0.0025	<0.0025	0.0072		<0.0025
12/13/2005	<0.0025			<0.0025	<0.0025	0.0062		<0.0025
7/12/2006	0.0032			<0.0025	<0.0025	0.0048		<0.0025
12/1/2006	0.012 (o)			<0.0025	<0.0025	0.0032		<0.0025
6/21/2007	<0.0025			0.0025	<0.0025	0.0037		<0.0025
12/15/2007	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
6/21/2008					<0.0025			0.0048 (o)
6/22/2008	0.0031			<0.0025		0.0025		
12/6/2008				<0.0025	<0.0025	0.0025		<0.0025
12/7/2008	<0.0025							
7/10/2009				<0.0025				
7/11/2009	<0.0025				<0.0025	<0.0025		<0.0025
12/22/2009						0.0025		
12/23/2009	<0.0025			<0.0025	<0.0025			<0.0025
6/23/2010				<0.0025	<0.0025	<0.0025		<0.0025
6/24/2010	<0.0025							
1/8/2011				<0.0025	<0.0025	0.0026		<0.0025
1/9/2011	0.0031							
7/10/2011				<0.0025	<0.0025	<0.0025		<0.0025
7/11/2011	<0.0025							
1/19/2012				<0.0025	<0.0025			
1/20/2012	<0.0025					<0.0025		<0.0025
7/12/2012				<0.0025	<0.0025	0.002		<0.0025
7/13/2012	0.0015							
1/21/2013	0.0035			<0.0025	<0.0025	0.0014		<0.0025
7/20/2013	<0.0025			<0.0025	<0.0025	<0.0025		<0.0025
1/17/2014	0.0027			<0.0013 (J)	<0.0013 (J)	0.0019		<0.0025
7/12/2014	<0.0013 (J)			<0.0013 (J)	<0.0013 (J)	0.0026		<0.0025
1/15/2015				0.00086 (J)	0.00084 (J)			
1/16/2015	<0.0025					0.0021		<0.0025
7/15/2015	<0.0025			0.00087 (J)	0.00083 (J)	0.0023		<0.0025
1/16/2016	0.00059 (J)			0.0011 (J)	0.00092 (J)	0.002		<0.0025
6/22/2016	0.00085 (JD)			0.0009 (J)	0.0005 (J)	0.0007 (J)		<0.0025
8/31/2016				0.00095 (J)	0.00055 (J)	0.001 (J)		<0.0025
9/1/2016	0.023 (o)							
1/19/2017				0.00087 (J)	0.00041 (J)	0.00046 (J)		
1/23/2017								<0.0025
2/28/2017	0.00048 (J)							

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
7/17/2017	<0.0025							
7/18/2017				0.001 (J)	0.0007 (J)			
7/19/2017						0.00069 (J)		<0.0025
9/20/2017	<0.0025			0.0011 (J)				
9/21/2017					0.00073 (J)	0.00073 (J)		<0.0025
1/8/2018	<0.0025							
1/9/2018				0.0011 (J)	0.0012 (J)	0.0014 (J)		<0.0025
3/27/2018	<0.0025			0.0011 (J)	0.00081 (J)	0.0019 (J)		
3/28/2018								<0.0025
7/10/2018	<0.0025			0.0012 (J)	0.00086 (J)	0.0015 (J)		
7/11/2018								<0.0025
10/8/2018	<0.0025		0.0051		<0.0025	<0.0025	0.0055	
10/9/2018				<0.0025				<0.0025
1/30/2019	0.00038 (J)		0.0044	0.0014 (J)	0.00092 (J)	0.00076 (J)	0.0047	0.00023 (J)
3/27/2019	<0.0025					0.0012 (J)		
3/28/2019			0.0046	0.0014 (J)	0.00089 (J)		0.0045	<0.0025
9/11/2019	0.00032 (J)							
9/12/2019			0.0023	0.0015	0.00091	0.00074	0.0043	0.00027 (J)
3/10/2020	0.00028 (J)		0.003	0.0019	0.0009	0.00099		
3/11/2020							0.0056	0.00026 (J)
4/2/2020				0.0017 (J)				
9/21/2020	0.0003 (J)			0.0016 (J)	0.00059 (J)		0.0025	
9/22/2020			<0.0025			0.00064 (J)		0.00021 (J)
3/23/2021	0.00028 (J)	0.00019 (J)	0.00096 (J)	0.0017 (J)			0.003	
3/24/2021					0.00069 (J)	0.00077 (J)		0.0002 (J)
8/17/2021	0.00032 (J)	0.00025 (J)	0.00016 (J)	0.002 (J)	0.00096 (J)	0.00085 (J)	0.0026	
8/18/2021								0.00031 (J)
2/7/2022			0.00073 (J)				0.0024 (J)	
2/8/2022	0.00029 (J)	0.00032 (J)		0.0019 (J)	0.00096 (J)	0.001 (J)		
2/9/2022								0.0003 (J)
8/30/2022	0.00031 (J)	0.00029 (J)	0.004	0.0023 (J)	0.00097 (J)	0.0016 (J)	0.0024 (J)	
8/31/2022								0.00036 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
10/5/1999		<0.0025	<0.0025	<0.0025		<0.0025	
11/12/1999		<0.0025	<0.0025	<0.0025		<0.0025	
12/29/1999		<0.0025	<0.0025	<0.0025		<0.0025	
2/17/2000		<0.0025	<0.0025	<0.0025		<0.0025	
9/13/2000		0.01	<0.0025	<0.0025		<0.0025	
11/10/2000		<0.0025	<0.0025	<0.0025		<0.0025	
1/4/2001		<0.0025	<0.0025	<0.0025		<0.0025	
12/11/2001		<0.0025	<0.0025	<0.0025		<0.0025	
4/4/2002		<0.0025	<0.0025	<0.0025		<0.0025	
12/6/2002		<0.0025	<0.0025	0.0074		<0.0025	
6/28/2003		<0.0025	<0.0025	<0.0025		<0.0025	
12/13/2003		<0.0025	<0.0025	0.0086		<0.0025	
5/28/2004		<0.0025	<0.0025	0.0065		<0.0025	
12/10/2004		0.0062	<0.0025	0.0052		<0.0025	
6/24/2005		<0.0025	<0.0025	<0.0025		<0.0025	
12/13/2005		<0.0025	<0.0025	<0.0025		<0.0025	
7/12/2006		<0.0025	<0.0025	0.0055		<0.0025	
12/1/2006		<0.0025	<0.0025	0.0056		<0.0025	
6/21/2007		<0.0025	<0.0025	0.0055		<0.0025	
12/15/2007		<0.0025	<0.0025	0.0051		<0.0025	
6/21/2008			0.0025	0.0054			
6/22/2008		<0.0025				<0.0025	
12/6/2008		<0.0025	<0.0025				
12/7/2008				0.005		<0.0025	
7/11/2009		<0.0025	<0.0025	0.0049		<0.0025	
12/23/2009		<0.0025	<0.0025	0.0035		<0.0025	
6/23/2010		<0.0025	<0.0025	0.0039			
6/24/2010						<0.0025	
1/8/2011		<0.0025	<0.0025	0.0046			
1/9/2011						<0.0025	
7/10/2011		<0.0025	<0.0025	0.0036			
7/11/2011						<0.0025	
1/20/2012		<0.0025	<0.0025	0.0042		<0.0025	
7/12/2012		<0.0025	<0.0025	0.0037			
7/13/2012						<0.0025	
1/21/2013		<0.0025	<0.0025	0.0038		<0.0025	
7/20/2013		<0.0025	<0.0025	0.003		<0.0025	
1/17/2014		<0.0025	<0.0025	0.0036		<0.0013 (J)	
7/11/2014			<0.0025	0.0056			
7/12/2014		<0.0013 (J)				<0.0025	
1/15/2015		0.00096 (J)					
1/16/2015			0.00071 (J)	0.0042		<0.0025	
7/15/2015		0.0006 (J)	0.00064 (J)	0.0052		<0.0025	
1/16/2016				0.0056		0.00055 (J)	
1/17/2016		0.00069 (J)	0.00066 (J)				
6/22/2016		0.0011 (J)	0.0009 (J)				
6/23/2016				0.0073 (J)		0.0005 (J)	
8/31/2016		0.0006 (J)	0.0006 (J)				
9/1/2016				0.011		0.0014 (J)	
1/24/2017		0.00067 (J)		0.009			
1/25/2017			0.00047 (J)				
1/27/2017						0.00052 (J)	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
7/19/2017		0.00079 (J)					
7/20/2017			<0.0025	0.0091		0.00062 (J)	
9/21/2017		0.00077 (J)	<0.0025	0.0093			
9/22/2017						0.00048 (J)	
1/9/2018		0.00092 (J)	0.00048 (J)				
1/10/2018				0.0097		<0.0025	
3/28/2018			0.00048 (J)	0.01			
3/29/2018		0.0008 (J)				0.00052 (J)	
7/10/2018		0.00097 (J)	0.00084 (J)				
7/11/2018				0.011		0.00064 (J)	
10/9/2018		<0.0025	<0.0025	0.012		<0.0025	
1/30/2019			0.00038 (J)				
1/31/2019		0.00092 (J)		0.013		0.00076 (J)	
3/28/2019		0.00072 (J)	<0.0025	0.013		0.0007 (J)	
9/12/2019		0.0009	0.00044 (J)	0.013		0.00077	
3/11/2020						0.00073	
3/31/2020		0.00061 (J)	0.00033 (J)	0.012			
9/22/2020		0.00092 (J)	0.00042 (J)	0.011		0.00058 (J)	
3/23/2021		0.00069 (J)					0.0034
3/24/2021	0.0063		0.00037 (J)	0.012	0.0023 (J)	0.00046 (J)	
8/18/2021	0.0053	0.0011 (J)	0.00034 (J)	0.013	0.0021 (J)	0.0005 (J)	0.0016 (J)
2/8/2022		0.0013 (J)			0.002 (J)		
2/9/2022	0.0044		0.00042 (J)	0.011		0.00059 (J)	0.0012 (J)
8/30/2022	0.0044	0.0012 (J)	0.00048 (J)				
8/31/2022					0.0018 (J)	0.00058 (J)	0.0012 (J)
9/1/2022				0.012			

Time Series

Constituent: Copper (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
10/5/1999	<0.002			<0.002	<0.002	<0.002		<0.002
11/12/1999	<0.002			<0.002	<0.002	<0.002		<0.002
12/29/1999	<0.002			<0.002	<0.002	<0.002		<0.002
2/17/2000	<0.002			<0.002	<0.002	<0.002		<0.002
9/13/2000	<0.002			<0.002	<0.002	<0.002		<0.002
11/10/2000	<0.002			<0.002	<0.002	<0.002		<0.002
1/4/2001	<0.002			<0.002	<0.002	<0.002		<0.002
12/11/2001	<0.002			<0.002	<0.002	<0.002		<0.002
4/4/2002	<0.002			<0.002	<0.002	<0.002		<0.002
12/6/2002	<0.002			<0.002	<0.002	0.0089 (o)		<0.002
6/28/2003	<0.002			<0.002	<0.002	0.019 (o)		<0.002
12/13/2003	<0.002			<0.002	<0.002	0.0067 (o)		<0.002
5/28/2004	0.0052			<0.002	<0.002	0.0057 (o)		<0.002
12/10/2004	<0.002			<0.002	<0.002	0.0027		<0.002
6/24/2005	<0.002			<0.002	<0.002	0.0038		<0.002
12/13/2005	<0.002			<0.002	<0.002	<0.002		<0.002
7/12/2006	0.0055			<0.002	<0.002	0.0033		0.0047 (o)
12/1/2006	<0.002			<0.002	<0.002	<0.002		<0.002
6/21/2007	0.0032			<0.002	<0.002	0.0035		<0.002
12/15/2007	<0.002			<0.002	<0.002	<0.002		<0.002
6/21/2008					<0.002			<0.002
6/22/2008	<0.002			<0.002		<0.002		
12/6/2008				<0.002	<0.002	<0.002		<0.002
12/7/2008	<0.002							
7/10/2009				<0.002				
7/11/2009	<0.002				<0.002	<0.002		<0.002
12/22/2009						0.0025		
12/23/2009	0.0025			<0.002	<0.002			<0.002
6/23/2010				<0.002	<0.002	<0.002		<0.002
6/24/2010	<0.002							
1/8/2011				<0.002	<0.002	<0.002		<0.002
1/9/2011	0.004							
7/10/2011				<0.002	<0.002	<0.002		<0.002
7/11/2011	<0.002							
1/19/2012				<0.002	<0.002			
1/20/2012	<0.002					<0.002		<0.002
7/12/2012				<0.002	<0.002	<0.002		<0.002
7/13/2012	<0.002							
1/21/2013	<0.002			<0.002	<0.002	<0.002		<0.002
7/20/2013	<0.002			<0.002	<0.002	<0.002		<0.002
1/17/2014	<0.005 (J)			<0.002	<0.002	<0.005 (J)		<0.002
7/12/2014	<0.005 (J)			<0.002	<0.002	<0.002		<0.002
1/15/2015				<0.002	<0.002			
1/16/2015	<0.002					<0.002		<0.002
7/15/2015	<0.002			<0.002	<0.002	<0.002		<0.002
1/16/2016	<0.002			<0.002	<0.002	<0.002		<0.002
6/22/2016	0.002 (JD)			0.00205 (JD)	<0.002	0.001		<0.002
1/19/2017				<0.002	<0.002	<0.002		
1/23/2017								<0.002
2/28/2017	<0.002							
7/17/2017	<0.002							
7/18/2017				<0.002	<0.002			

Time Series

Constituent: Copper (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
7/19/2017						<0.002		<0.002
1/8/2018	<0.002							
1/9/2018				<0.002	0.0025	<0.002		<0.002
7/10/2018	<0.002			<0.002	<0.002	<0.002		
7/11/2018								<0.002
1/30/2019	<0.002		0.0035	<0.002	<0.002	<0.002	0.0018 (J)	<0.002
3/27/2019	<0.002					<0.002		
3/28/2019			0.0031	<0.002	<0.002		<0.002	<0.002
9/11/2019	<0.002							
9/12/2019			0.0038	0.0024	0.0022	0.0011 (J)	0.0041	0.0024
3/10/2020	<0.002		0.0021	0.00082 (J)	<0.002	0.0019 (J)		
3/11/2020							0.0032	<0.002
4/2/2020				0.0019 (J)				
9/21/2020	<0.002			<0.002	<0.002		0.0018 (J)	
9/22/2020			0.00096 (J)			0.0013 (J)		<0.002
3/23/2021	<0.002	0.0015 (J)	0.0011 (J)	<0.002			0.0027	
3/24/2021					<0.002	0.00077 (J)		<0.002
8/17/2021	<0.002	<0.002	0.0043	<0.002	<0.002	<0.002	0.0025	
8/18/2021								<0.002
2/7/2022			0.0012 (J)				0.008	
2/8/2022	<0.002	<0.002		0.0011 (J)	<0.002	<0.002		
2/9/2022								<0.002
8/30/2022	<0.002	<0.002	0.0013 (J)	0.0029	0.0012 (J)	0.0011 (J)	0.0028	
8/31/2022								<0.002

Time Series

Constituent: Copper (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
10/5/1999		<0.002	<0.002	<0.002		<0.002	
11/12/1999		<0.002	<0.002	<0.002		<0.002	
12/29/1999		<0.002	<0.002	<0.002		<0.002	
2/17/2000		<0.002	<0.002	<0.002		<0.002	
9/13/2000		<0.002	<0.002	<0.002		<0.002	
11/10/2000		<0.002	<0.002	<0.002		<0.002	
1/4/2001		<0.002	<0.002	<0.002		<0.002	
12/11/2001		<0.002	<0.002	<0.002		<0.002	
4/4/2002		<0.002	<0.002	<0.002		<0.002	
12/6/2002		<0.002	<0.002	<0.002		<0.002	
6/28/2003		<0.002	<0.002	<0.002		<0.002	
12/13/2003		<0.002	<0.002	0.0026		<0.002	
5/28/2004		<0.002	<0.002	<0.002		<0.002	
12/10/2004		0.11 (o)	<0.002	<0.002		0.0044 (o)	
6/24/2005		<0.002	<0.002	<0.002		<0.002	
12/13/2005		<0.002	<0.002	<0.002		<0.002	
7/12/2006		<0.002	<0.002	<0.002		<0.002	
12/1/2006		<0.002	<0.002	<0.002		<0.002	
6/21/2007		<0.002	<0.002	<0.002		<0.002	
12/15/2007		<0.002	<0.002	<0.002		<0.002	
6/21/2008			<0.002	<0.002			
6/22/2008		<0.002				<0.002	
12/6/2008		<0.002	<0.002				
12/7/2008				<0.002		<0.002	
7/11/2009		<0.002	<0.002	<0.002		<0.002	
12/23/2009		<0.002	<0.002	<0.002		<0.002	
6/23/2010		<0.002	<0.002	<0.002			
6/24/2010						<0.002	
1/8/2011		<0.002	<0.002	<0.002			
1/9/2011						<0.002	
7/10/2011		<0.002	<0.002	<0.002			
7/11/2011						<0.002	
1/20/2012		<0.002	<0.002	<0.002		<0.002	
7/12/2012		<0.002	<0.002	<0.002			
7/13/2012						<0.002	
1/21/2013		<0.002	<0.002	<0.002		<0.002	
7/20/2013		<0.002	<0.002	<0.002		<0.002	
1/17/2014		0.0065 (o)	<0.002	<0.002		<0.002	
7/11/2014			<0.002	<0.002			
7/12/2014		<0.002				<0.002	
1/15/2015		<0.002					
1/16/2015			<0.002	<0.002		<0.002	
7/15/2015		<0.002	<0.002	<0.002		<0.002	
1/16/2016				<0.002		<0.002	
1/17/2016		<0.002	<0.002				
6/22/2016		0.0005 (J)	<0.002				
6/23/2016				0.0007 (J)		<0.002	
1/24/2017		<0.002		<0.002			
1/25/2017			<0.002				
1/27/2017						<0.002	
7/19/2017		<0.002					
7/20/2017			<0.002	<0.002		<0.002	

Time Series

Constituent: Copper (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
1/9/2018		<0.002	<0.002				
1/10/2018				<0.002		<0.002	
7/10/2018		<0.002	<0.002				
7/11/2018				<0.002		<0.002	
1/30/2019			<0.002				
1/31/2019		<0.002		<0.002		<0.002	
3/28/2019		<0.002	<0.002	<0.002		<0.002	
9/12/2019		0.002	<0.002	0.00084 (J)		0.003	
3/11/2020						<0.002	
3/31/2020		<0.002	<0.002	<0.002			
9/22/2020		<0.002	<0.002	<0.002		<0.002	
3/23/2021		<0.002					<0.002
3/24/2021	0.001 (J)		<0.002	<0.002	<0.002	<0.002	
8/18/2021	0.00085 (J)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
2/8/2022		0.0019 (J)			<0.002		
2/9/2022	<0.002		<0.002	<0.002		<0.002	<0.002
8/30/2022	0.0019 (J)	<0.002	<0.002				
8/31/2022					<0.002	<0.002	<0.002
9/1/2022				0.0012 (J)			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
8/31/2016				<0.1	<0.1	0.13 (J)		<0.1
9/1/2016	<0.1							
1/19/2017				<0.1	0.089 (J)	<0.1		
1/23/2017								<0.1
2/28/2017	0.098 (J)							
7/17/2017	<0.1							
7/18/2017				<0.1	<0.1			
7/19/2017						<0.1		<0.1
9/20/2017	<0.1			<0.1				
9/21/2017					<0.1	0.13 (J)		<0.1
1/8/2018	<0.1							
1/9/2018				<0.1	<0.1	0.13 (J)		<0.1
3/27/2018	<0.1			<0.1	<0.1	0.21		
3/28/2018								<0.1
7/10/2018	<0.1			<0.1	<0.1	0.17 (J)		
7/11/2018								<0.1
10/8/2018	<0.1		<0.1		<0.1	0.11 (J)	<0.1	
10/9/2018				<0.1				<0.1
1/30/2019	<0.1		<0.1	<0.1	0.029 (J)	0.089 (J)	<0.1	<0.1
3/27/2019	<0.1					0.1 (J)		
3/28/2019			<0.1	<0.1	<0.1		<0.1	<0.1
9/11/2019	<0.1							
9/12/2019			0.036 (J)	<0.1	0.035 (J)	0.052 (J)	<0.1	<0.1
3/10/2020	<0.1		<0.1	0.026 (J)	0.066 (J)	0.051 (J)		
3/11/2020							<0.1	<0.1
4/2/2020				0.051 (J)				
9/21/2020	<0.1			<0.1	0.06 (J)		<0.1	
9/22/2020			0.039 (J)			0.049 (J)		<0.1
3/23/2021	<0.1	0.079 (J)	<0.1	<0.1			<0.1	
3/24/2021					0.12	0.08 (J)		<0.1
8/17/2021	0.038 (J)	0.09 (J)	0.083 (J)	0.064 (J)	0.061 (J)	0.097 (J)	0.033 (J)	
8/18/2021								0.046 (J)
2/7/2022			0.027 (J)				<0.1	
2/8/2022	<0.1	0.077 (J)		0.033 (J)	0.061 (J)	0.12		
2/9/2022								<0.1
8/30/2022	<0.1	0.51	<0.1	<0.1	0.047 (J)	0.11	<0.1	
8/31/2022								<0.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
8/31/2016		<0.1	<0.1				
9/1/2016				<0.1			
1/24/2017		<0.1		0.84			
1/25/2017			<0.1				
1/27/2017						<0.1	
7/19/2017		<0.1					
7/20/2017			<0.1	0.62		<0.1	
9/21/2017		<0.1	<0.1	0.71			
9/22/2017						<0.1	
1/9/2018		<0.1	<0.1				
1/10/2018				0.81		<0.1	
3/28/2018			<0.1	0.45			
3/29/2018		<0.1				<0.1	
7/10/2018		<0.1	<0.1				
7/11/2018				0.37		<0.1	
10/9/2018		<0.1	<0.1	0.098 (J)		<0.1	
1/30/2019			<0.1				
1/31/2019		<0.1		0.063 (J)		<0.1	
3/28/2019		<0.1	<0.1	0.027 (J)		<0.1	
9/12/2019		<0.1	<0.1	0.078 (J)		<0.1	
3/11/2020						<0.1	
3/31/2020		0.043 (J)	0.028 (J)	0.16			
9/22/2020		<0.1	<0.1	0.1		<0.1	
3/23/2021		<0.1					<0.1
3/24/2021	0.046 (J)		<0.1	0.038 (J)	<0.1	<0.1	
8/18/2021	0.072 (J)	<0.1	<0.1	<0.1	<0.1	0.04 (J)	0.039 (J)
2/8/2022		<0.1			0.033 (J)		
2/9/2022	0.069 (J)		0.038 (J)	0.063 (J)		0.042 (J)	0.042 (J)
8/30/2022	0.071 (J)	<0.1	<0.1				
8/31/2022					<0.1	<0.1	<0.1
9/1/2022				<0.1			

Time Series

Constituent: Lead (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
10/5/1999	0.007			<0.001	<0.001	<0.001		<0.001
11/12/1999	0.0063 (o)			<0.001	<0.001	<0.001		<0.001
12/29/1999	0.016			<0.001	<0.001	<0.001		<0.001
2/17/2000	<0.001			<0.001	<0.001	<0.001		<0.001
9/13/2000	<0.001			<0.001	<0.001	<0.001		<0.001
11/10/2000	<0.001			<0.001	<0.001	<0.001		<0.001
1/4/2001	<0.001			<0.001	<0.001	<0.001		<0.001
12/11/2001	<0.001			<0.001	<0.001	<0.001		<0.001
4/4/2002	<0.001			<0.001	<0.001	<0.001		<0.001
12/6/2002	<0.001			<0.001	<0.001	0.011		<0.001
6/28/2003	<0.001			<0.001	<0.001	<0.001		<0.001
12/13/2003	<0.001			<0.001	<0.001	<0.001		<0.001
5/28/2004	0.015			<0.001	<0.001	<0.001		<0.001
12/10/2004	0.01			<0.001	<0.001	<0.001		<0.001
6/24/2005	<0.001			<0.001	<0.001	<0.001		<0.001
12/13/2005	<0.001			<0.001	<0.001	<0.001		<0.001
7/12/2006	0.013			<0.001	<0.001	<0.001		<0.001
12/1/2006	<0.001			<0.001	<0.001	<0.001		<0.001
6/21/2007	<0.001			<0.001	<0.001	<0.001		<0.001
12/15/2007	<0.001			<0.001	<0.001	<0.001		<0.001
6/21/2008					<0.001			<0.001
6/22/2008	<0.001			<0.001		<0.001		
12/6/2008				<0.001	<0.001	<0.001		<0.001
12/7/2008	<0.001							
7/10/2009				<0.001				
7/11/2009	<0.001				<0.001	<0.001		<0.001
12/22/2009						<0.001		
12/23/2009	<0.001			<0.001	<0.001			<0.001
6/23/2010				<0.001	<0.001	<0.001		<0.001
6/24/2010	<0.001							
1/8/2011				<0.001	<0.001	<0.001		<0.001
1/9/2011	<0.001							
7/10/2011				<0.001	<0.001	<0.001		<0.001
7/11/2011	<0.001							
1/19/2012				<0.001	<0.001			
1/20/2012	<0.001					<0.001		<0.001
7/12/2012				<0.001	<0.001	<0.001		<0.001
7/13/2012	<0.001							
1/21/2013	<0.001			<0.001	<0.001	<0.001		<0.001
7/20/2013	<0.001			<0.001	<0.001	<0.001		<0.001
1/17/2014	<0.001			<0.001	<0.001	<0.001		<0.001
7/12/2014	<0.001			<0.001	<0.001	<0.001		<0.001
1/15/2015				<0.001	<0.001			
1/16/2015	<0.001					<0.001		<0.001
7/15/2015	<0.001			<0.001	<0.001	<0.001		<0.001
1/16/2016	<0.001			<0.001	<0.001	<0.001		<0.001
6/22/2016	0.00125 (JD)			0.00025 (JD)	0.0003 (J)	0.001 (J)		<0.001
8/31/2016				<0.001	<0.001	0.00099 (J)		<0.001
9/1/2016	0.082 (o)							
1/19/2017				<0.001	<0.001	0.001 (J)		
1/23/2017								<0.001
2/28/2017	<0.001							

Time Series

Constituent: Lead (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
7/17/2017	<0.001							
7/18/2017				<0.001	<0.001			
7/19/2017						0.00081 (J)		<0.001
9/20/2017	0.00035 (J)			<0.001				
9/21/2017					0.0076	0.00086 (J)		0.004 (o)
1/8/2018	<0.001							
1/9/2018				<0.001	0.0023	0.00059 (J)		<0.001
3/27/2018	<0.001			<0.001	<0.001	<0.001		
3/28/2018								<0.001
7/10/2018	<0.001			<0.001	<0.001	0.00045 (J)		
7/11/2018								<0.001
10/8/2018	<0.001		<0.001		<0.001	<0.001	<0.001	
10/9/2018				<0.001				<0.001
1/30/2019	0.00021 (J)		0.00028 (J)	0.00034 (J)	0.00013 (J)	0.00064 (J)	<0.001	<0.001
3/27/2019	<0.001					0.0012 (J)		
3/28/2019			<0.001	0.00038 (J)	<0.001		<0.001	<0.001
9/11/2019	<0.001							
9/12/2019			<0.001	<0.001	<0.001	0.00082 (J)	<0.001	<0.001
3/10/2020	0.00015 (J)		<0.001	0.00013 (J)	0.00031 (J)	0.0022		
3/11/2020							<0.001	<0.001
4/2/2020				0.00062 (J)				
9/21/2020	<0.001			<0.001	0.00025 (J)		<0.001	
9/22/2020			<0.001			0.0012		<0.001
3/23/2021	0.00017 (J)	<0.001	<0.001	0.00029 (J)			<0.001	
3/24/2021					0.00021 (J)	0.00066 (J)		<0.001
8/17/2021	<0.001	<0.001	0.00073 (J)	0.00015 (J)	<0.001	0.00044 (J)	<0.001	
8/18/2021								0.00015 (J)
2/7/2022			<0.001				<0.001	
2/8/2022	<0.001	<0.001		<0.001	<0.001	0.00058 (J)		
2/9/2022								<0.001
8/30/2022	<0.001	<0.001	<0.001	<0.001	<0.001	0.00064 (J)	<0.001	
8/31/2022								<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
10/5/1999		0.0054 (o)	<0.001	<0.001		<0.001	
11/12/1999		<0.001	<0.001	<0.001		<0.001	
12/29/1999		<0.001	<0.001	<0.001		<0.001	
2/17/2000		<0.001	<0.001	<0.001		<0.001	
9/13/2000		<0.001	0.0067 (o)	<0.001		0.079 (o)	
11/10/2000		<0.001	<0.001	<0.001		<0.001	
1/4/2001		<0.001	<0.001	<0.001		<0.001	
12/11/2001		<0.001	<0.001	<0.001		<0.001	
4/4/2002		<0.001	<0.001	<0.001		<0.001	
12/6/2002		<0.001	<0.001	0.007 (o)		<0.001	
6/28/2003		<0.001	<0.001	<0.001		<0.001	
12/13/2003		<0.001	<0.001	0.018 (o)		<0.001	
5/28/2004		<0.001	<0.001	<0.001		<0.001	
12/10/2004		<0.001	<0.001	<0.001		0.0073	
6/24/2005		<0.001	<0.001	<0.001		<0.001	
12/13/2005		<0.001	<0.001	<0.001		<0.001	
7/12/2006		<0.001	<0.001	<0.001		<0.001	
12/1/2006		<0.001	<0.001	<0.001		<0.001	
6/21/2007		<0.001	<0.001	<0.001		<0.001	
12/15/2007		<0.001	<0.001	<0.001		<0.001	
6/21/2008			<0.001	<0.001			
6/22/2008		<0.001				<0.001	
12/6/2008		<0.001	<0.001				
12/7/2008				<0.001		<0.001	
7/11/2009		<0.001	<0.001	<0.001		<0.001	
12/23/2009		<0.001	<0.001	<0.001		<0.001	
6/23/2010		<0.001	<0.001	<0.001			
6/24/2010						<0.001	
1/8/2011		<0.001	<0.001	<0.001			
7/10/2011		<0.001	<0.001	<0.001			
7/11/2011						<0.001	
1/20/2012		<0.001	<0.001	<0.001		<0.001	
7/12/2012		<0.001	<0.001	<0.001			
7/13/2012						<0.001	
1/21/2013		<0.001	<0.001	<0.001		<0.001	
7/20/2013		<0.001	<0.001	<0.001		<0.001	
1/17/2014		<0.001	<0.001	<0.001		<0.001	
7/11/2014			<0.001	<0.001			
7/12/2014		<0.001				<0.001	
1/15/2015		<0.001					
1/16/2015			<0.001	<0.001		<0.001	
7/15/2015		<0.001	<0.001	<0.001		<0.001	
1/16/2016				<0.001		<0.001	
1/17/2016		<0.001	<0.001				
6/22/2016		0.0001 (J)	<0.001				
6/23/2016				0.0001 (J)		<0.001	
8/31/2016		<0.001	<0.001				
9/1/2016				<0.001		0.006	
1/24/2017		<0.001		<0.001			
1/25/2017			<0.001 (D)				
1/27/2017						<0.001 (D)	
7/19/2017		<0.001					

Time Series

Constituent: Lead (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
7/20/2017			<0.001	<0.001		<0.001	
9/21/2017		0.0014 (o)	<0.001	<0.001			
9/22/2017						0.00042 (J)	
1/9/2018		<0.001	<0.001				
1/10/2018				<0.001		<0.001	
3/28/2018			<0.001	<0.001			
3/29/2018		<0.001				<0.001	
7/10/2018		<0.001	<0.001				
7/11/2018				<0.001		0.00037 (J)	
10/9/2018		<0.001	<0.001	<0.001		<0.001	
1/30/2019			<0.001				
1/31/2019		<0.001		<0.001		<0.001	
3/28/2019		<0.001	<0.001	<0.001		0.00052 (J)	
9/12/2019		<0.001	<0.001	0.00024 (J)		0.00065 (J)	
3/11/2020						<0.001	
3/31/2020		<0.001	<0.001	<0.001			
9/22/2020		<0.001	<0.001	0.00013 (J)		<0.001	
3/23/2021		<0.001					<0.001
3/24/2021	<0.001		<0.001	0.00034 (J)	0.0003 (J)	<0.001	
8/18/2021	<0.001	<0.001	<0.001	0.00032 (J)	0.00021 (J)	<0.001	<0.001
2/8/2022		<0.001			0.00061 (J)		
2/9/2022	<0.001		<0.001	0.00033 (J)		0.00039 (J)	<0.001
8/30/2022	<0.001	<0.001	<0.001				
8/31/2022					0.00027 (J)	<0.001	<0.001
9/1/2022				0.00031 (J)			

Time Series

Constituent: pH (S.U.) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
10/5/1999	6.63			6.42	6.51	6.3		5.23
11/12/1999	5.51			5.03	5.46	4.72		5.02
12/29/1999	5.23			4.92	5.13	4.8		4.75
2/17/2000	5.29			5.13	5.22	4.78		4.99
9/13/2000	5.41			4.85	4.86	4.58		4.81
11/10/2000	5.47			5.05	5.29	4.5		4.79
1/4/2001	5.44			5.08	5.53	4.61		4.79
12/11/2001	4.86			4.81	5.37	4.87		4.86
4/4/2002	5.1			4.92	5.32	4.96		5.39
12/6/2002	4.917 (D)			5.07 (D)	5.3 (D)	4.4 (D)		4.63
6/28/2003	4.91			4.69	4.73	3.77		4.19
12/13/2003	4.87			4.81	4.53	4.25		5.2
5/28/2004	4.98			3.93	4.22	3.9		4.57
12/10/2004	4.35			4.25	4.26	3.71		4.16
6/24/2005	4.82			4.5	4.47	3.94		4.23
12/13/2005	4.66			4.52	4.47	3.94		4.24
7/12/2006	5.49			3.59	3.68	5.56		4.36
7/11/2014	5.55							
7/12/2014				5.44	5.33	3.88		3.23
7/15/2015	5.13			4.98	4.94	4.19		4.85
1/16/2016	5.06			4.87	4.85	4.35		
8/31/2016				4.92	4.79	4.53		5.02
1/19/2017				4.86	4.72	4.79		
1/23/2017								5.22
2/28/2017	5.33							
7/17/2017	5.09							
7/18/2017				5.02	4.96			
7/19/2017						4.83		5.23
9/20/2017	5.29			4.72				
9/21/2017					4.7	4.57		5.34
1/8/2018	5.26			4.92				
1/9/2018				4.83	4.91	4.4		5
3/27/2018	5.27			4.91	4.92	4.11		
3/28/2018								5.08
7/10/2018	5.17			4.87	4.94	4.62		
7/11/2018								5.07
10/8/2018	5.18		5.29	4.84	4.76	4.51	5.79	
10/9/2018								5.1
1/30/2019	5.17		5.08	4.88	4.94	4.72	5.15	4.81
3/27/2019	5.09					4.56		
3/28/2019			4.93	4.8	4.99		5.62	4.99
9/11/2019	5.1							
9/12/2019			5.57	4.99	4.92	4.54	5.1	4.95
3/10/2020	5.48		5.56	4.79	4.59	4.81		
3/11/2020							5.05	5.21
4/2/2020				4.75				
9/21/2020	4.95			4.69	4.6		5.35	
9/22/2020			5.83			4.99		4.66
3/23/2021	5.17	5.63	5.61	4.6			5.01	
3/24/2021					4.42	4.37		4.86
8/17/2021	5.24	5.83	5.82	4.76	4.78	4.62	5.51	
8/18/2021								4.94

Time Series

Constituent: pH (S.U.) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
2/7/2022			5.7				5.29	
2/8/2022	5.17	5.43		4.69	4.93	4.67		
2/9/2022								5.01
8/30/2022	5.01	5.86	4.9	4.71	4.72	4.51	5	
8/31/2022								4.69

Time Series

Constituent: pH (S.U.) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
10/5/1999		6.08	5.33	6.13		5.84	
11/12/1999		5.35	4.6	5.81		5.34	
12/29/1999		5.19	4.8	5.43		5.01	
2/17/2000		5.18	4.98	5.49		5.04	
9/13/2000		5.13	4.75	5.05		5.29	
11/10/2000		5.2	4.65	5.48		5.99	
1/4/2001		5.14	4.83	4.99		5.31	
12/11/2001		4.93	4.73	5.52		5.18	
4/4/2002		5	5.05	5.5		5.31	
12/6/2002		5.02	4.65 (D)	4.58 (D)		4.9 (D)	
6/28/2003		4.92	4	4.32		4.82	
12/13/2003		4.82	4.97	4.73		4.8	
5/28/2004		4.6	4.51	4.5		5.18	
12/10/2004		4.29	4.09	4.28		4.43	
2/5/2005		4.43				4.6	
6/24/2005		4.56	4.27	4.56		4.93	
12/13/2005		4.34	4.54	4.49		4.36	
7/12/2006		4.38	4.57	4.8		5.5	
7/11/2014			4.64	4.83		5.54	
7/12/2014		5.68					
7/15/2015		5.22	4.67	4.66		5.22	
1/16/2016				5.05		4.9	
1/17/2016		6.07					
8/31/2016		5.49	4.89				
9/1/2016				7.21		5	
1/24/2017		5.25		8.32			
1/25/2017			4.73				
7/19/2017		5.54				5.27	
7/20/2017			4.96	7.41			
9/21/2017		5.19	4.78	6.94		4.99	
1/9/2018		4.97	4.79	7.39		5.25	
3/28/2018			4.44	7.31		5.14	
3/29/2018		5.15					
7/10/2018		5.37	4.88			5.13	
7/11/2018				7.09			
10/9/2018		5.04	4.85	6.68		4.93	
1/29/2019			4.7				
1/30/2019			4.52			4.52	
1/31/2019		5.38		5.69		4.52	
3/28/2019		5.38	4.68	5.46		4.85	
9/12/2019		5.14	4.89	5.96		4.96	
3/11/2020						5.23	
3/31/2020		5.64	4.66	6.17			
9/22/2020		5.04	4.92	5.87		4.73	
3/23/2021		5.61					5.31
3/24/2021	4.38		4.59	5.04	5.42	5.11	
8/18/2021	4.59	4.98	4.76	4.9	5.17	5.03	5.26
2/8/2022		4.79			5.2		
2/9/2022	4.53		4.82	4.82		5.05	5.31
8/30/2022	4.43	4.96	4.71				
8/31/2022					4.97	4.85	5.07
9/1/2022				4.29			

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
8/31/2016				<1	7	21		<1
9/1/2016	<1							
1/19/2017				<1	6.3	11		
1/23/2017								<1
2/28/2017	2.7							
7/17/2017	<1							
7/18/2017				<1	4.7			
7/19/2017						12		<1
9/20/2017	<1			<1				
9/21/2017					4.5	15		<1
1/8/2018	<1							
1/9/2018				<1	3	25		<1
3/27/2018	<1			<1	3.8	31		
3/28/2018								<1
7/10/2018	<1			<1	3.4	19		
7/11/2018								<1
10/8/2018	<1		73		3.4	17	75	
10/9/2018				<1				<1
1/30/2019	1.2		74	0.41 (J)	3.5	15	85	0.58 (J)
3/27/2019	<1					20		
3/28/2019			71	0.44 (J)	3		85	0.67 (J)
9/11/2019	<1							
9/12/2019			59	0.69 (J)	3.7	10	81	0.78 (J)
3/10/2020	1.5		57	3	7.2	15		
3/11/2020							110	3.5
4/2/2020				<1				
9/21/2020	<1			<1	5		49	
9/22/2020			52			12		0.63 (J)
3/23/2021	<1	6.8	49	<1			88	
3/24/2021					7	16		0.77 (J)
8/17/2021	<1	5.2	54	<1	5	11	84	
8/18/2021								<1
2/7/2022			42				54	
2/8/2022	<1	2.8		<1	5.9	13		
2/9/2022								<1
8/30/2022	<1	1.6	74	<1	3.5	13	73	
8/31/2022								<1

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
8/31/2016		<1	1.7				
9/1/2016				110			
1/24/2017		<1		67			
1/25/2017			1.8				
1/27/2017						1.2	
7/19/2017		<1					
7/20/2017			0.83 (J)	25		0.84 (J)	
9/21/2017		<1	1.1	19			
9/22/2017						1.1	
1/9/2018		<1	0.79 (J)				
1/10/2018				25		0.95 (J)	
3/28/2018			0.79 (J)	26			
3/29/2018		<1				0.78 (J)	
7/10/2018		<1	0.76 (J)				
7/11/2018				26		0.78 (J)	
10/9/2018		<1	<1	10		0.79 (J)	
1/30/2019			0.9 (J)				
1/31/2019		0.57 (J)		4.8		0.86 (J)	
3/28/2019		<1	1.1	3		0.96 (J)	
9/12/2019		0.43 (J)	1.1	4.9		1	
3/11/2020						2.2	
3/31/2020		1	2.5	11			
9/22/2020		<1	0.76 (J)	4.3		0.59 (J)	
3/23/2021		0.8 (J)					10
3/24/2021	1		<1	<1	26	0.76 (J)	
8/18/2021	0.84 (J)	1.2	<1	<1	10	1.2	8.3
2/8/2022		2.7			5.9		
2/9/2022	<1		<1	<1		<1	5.4
8/30/2022	<1	1.1	<1				
8/31/2022					<1	0.41 (J)	3.5
9/1/2022				<1			

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
8/31/2016				42 (D)	14 (D)	66 (D)		18 (D)
9/1/2016	2200 (o)							
1/19/2017				52 (D)	34 (D)	48 (D)		
1/23/2017								22 (D)
2/28/2017	74 (D)							
7/17/2017	50							
7/18/2017				32	26			
7/19/2017						48		52
9/20/2017	26			16				
9/21/2017					24	76		38
1/8/2018	16							
1/9/2018				4 (J)	16	18		4 (J)
3/27/2018	40			30	<10	48		
3/28/2018								4 (J)
7/10/2018	90			30	14	76		
7/11/2018								32
10/8/2018	70		170		36	8	180	
10/9/2018				56				22
1/30/2019	82		140	41	40	67	180	24
3/27/2019	66					70		
3/28/2019			150	36	24		170	25
9/11/2019	53							
9/12/2019			89	<10	10	20	140	29
3/10/2020	67		130	49	39	67		
3/11/2020							180	37
4/2/2020				61				
9/21/2020	31			61	31		130	
9/22/2020			110			53		<10
3/23/2021	47	63	130	76			180	
3/24/2021					36	60		32
8/17/2021	36	43	130	83	33	50	160	
8/18/2021								32
2/7/2022			120				150	
2/8/2022	45	39		62	29	57		
2/9/2022								52
8/30/2022	55	79	150	87	40	64	160	
8/31/2022								37

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
8/31/2016		42 (D)	36 (D)				
9/1/2016				500 (D)			
1/24/2017		28 (D)		160 (D)			
1/25/2017			58 (D)				
1/27/2017						58 (D)	
7/19/2017		42					
7/20/2017			16	210		64	
9/21/2017		46	24	280			
9/22/2017						66	
1/9/2018		10	8				
1/10/2018				94		54	
3/28/2018			26	60			
3/29/2018		52				78	
7/10/2018		38	26				
7/11/2018				290		78	
10/9/2018		52	16	44		70	
1/30/2019			37				
1/31/2019		45		180		84	
3/28/2019		45	28	110		62	
9/12/2019		28	<10	110		80	
3/11/2020						67	
3/31/2020		50	52	750			
9/22/2020		30	36	440		30	
3/23/2021		56					71
3/24/2021	59		27	130	97	36	
8/18/2021	66	37	29	160	41	36	61
2/8/2022		30			48		
2/9/2022	62		22	110		86	100
8/30/2022	65	38	21				
8/31/2022					27	61	73
9/1/2022				140			

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
10/5/1999	0.02			<0.001	<0.001	<0.001		<0.001
11/12/1999	0.027			<0.001	<0.001	<0.001		<0.001
12/29/1999	0.055			<0.001	<0.001	<0.001		<0.001
2/17/2000	0.042			<0.001	<0.001	<0.001		<0.001
9/13/2000	<0.001			<0.001	<0.001	<0.001		<0.001
11/10/2000	0.014			<0.001	<0.001	<0.001		<0.001
1/4/2001	<0.001			<0.001	<0.001	<0.001		<0.001
12/11/2001	<0.001			<0.001	<0.001	<0.001		<0.001
4/4/2002	<0.001			<0.001	<0.001	<0.001		<0.001
12/6/2002	<0.001			<0.001	<0.001	0.03		<0.001
6/28/2003	<0.001			<0.001	<0.001	<0.001		<0.001
12/13/2003	<0.001			<0.001	<0.001	<0.001		<0.001
5/28/2004	0.017			<0.001	<0.001	<0.001		<0.001
12/10/2004	0.0082			<0.001	<0.001	<0.001		<0.001
6/24/2005	<0.001			<0.001	<0.001	<0.001		<0.001
12/13/2005	<0.001			<0.001	<0.001	<0.001		<0.001
7/12/2006	0.023			<0.001	<0.001	<0.001		<0.001
12/1/2006	0.0081			<0.001	<0.001	<0.001		<0.001
6/21/2007	0.009			0.0038	<0.001	0.07 (o)		<0.001
12/15/2007	0.0056			<0.001	<0.001	<0.001		<0.001
6/21/2008					<0.001			<0.001
6/22/2008	0.013			<0.001		0.0026		
12/6/2008				<0.001	<0.001	<0.001		<0.001
12/7/2008	0.0027							
7/10/2009				<0.001				
7/11/2009	0.0032				<0.001	<0.001		<0.001
12/22/2009						<0.001		
12/23/2009	0.0093			<0.001	<0.001			<0.001
6/23/2010				<0.001	<0.001	<0.001		<0.001
6/24/2010	0.0033							
1/8/2011				<0.001	<0.001	<0.001		<0.001
1/9/2011	<0.001							
7/10/2011				<0.001	<0.001	<0.001		<0.001
7/11/2011	<0.001							
1/19/2012				<0.001	<0.001			
1/20/2012	<0.001					<0.001		<0.001
7/12/2012				<0.001	<0.001	<0.001		<0.001
7/13/2012	0.011							
1/21/2013	0.028			<0.001	<0.001	<0.001		<0.001
7/20/2013	<0.001			<0.001	<0.001	<0.001		<0.001
1/17/2014	0.019			<0.001	<0.001	<0.001		<0.001
7/12/2014	<0.005 (J)			<0.001	<0.001	<0.001		<0.001
1/15/2015				<0.001	<0.001			
1/16/2015	0.0012 (J)					0.0011 (J)		<0.001
7/15/2015	<0.001			<0.001	<0.001	0.0016 (J)		<0.001
1/16/2016	0.0015 (J)			0.0011 (J)	0.00082 (J)	<0.001		<0.001
6/22/2016	0.0056 (JD)			<0.001	<0.001	0.0018 (J)		<0.001
1/19/2017				<0.001	0.0025	0.0033		
1/23/2017								0.0063
2/28/2017	0.0019 (J)							
7/17/2017	<0.001							
7/18/2017				<0.001	<0.001			

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
7/19/2017						0.0045		<0.001
1/8/2018	<0.001							
1/9/2018				<0.001	0.0072	0.0027		<0.001
7/10/2018	<0.001			<0.001	<0.001	<0.001		
7/11/2018								<0.001
1/30/2019	<0.001		<0.001	<0.001	<0.001	0.0019 (J)	<0.001	<0.001
3/27/2019	<0.001					<0.001		
3/28/2019			<0.001	<0.001	<0.001		<0.001	<0.001
9/11/2019	0.0014							
9/12/2019			0.0021	0.002	0.0017	0.004	0.002	0.0023
3/10/2020	<0.001		<0.001	<0.001	<0.001	0.01		
3/11/2020							<0.001	<0.001
4/2/2020				0.0013				
9/21/2020	<0.001			<0.001	0.0012		<0.001	
9/22/2020			<0.001			0.0056		<0.001
3/23/2021	<0.001	<0.001	<0.001	<0.001			<0.001	
3/24/2021					<0.001	0.0018		<0.001
8/17/2021	<0.001	<0.001	<0.001	<0.001	<0.001	0.0018	<0.001	
8/18/2021								<0.001
2/7/2022			<0.001				0.0011	
2/8/2022	<0.001	<0.001		<0.001	<0.001	0.0023		
2/9/2022								<0.001
8/30/2022	0.0019	0.0019	0.0016	<0.001	<0.001	0.0028	0.0016	
8/31/2022								0.0011

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
10/5/1999		0.015 (o)	<0.001	<0.001		<0.001	
11/12/1999		<0.001	<0.001	<0.001		<0.001	
12/29/1999		<0.001	<0.001	<0.001		<0.001	
2/17/2000		<0.001	<0.001	<0.001		<0.001	
9/13/2000		<0.001	<0.001	<0.001		<0.001	
11/10/2000		<0.001	<0.001	<0.001		<0.001	
1/4/2001		<0.001	<0.001	<0.001		<0.001	
12/11/2001		<0.001	<0.001	<0.001		<0.001	
4/4/2002		<0.001	<0.001	<0.001		<0.001	
12/6/2002		<0.001	<0.001	0.0082		<0.001	
6/28/2003		<0.001	<0.001	<0.001		<0.001	
12/13/2003		<0.001	<0.001	0.017		<0.001	
5/28/2004		<0.001	<0.001	<0.001		<0.001	
12/10/2004		<0.001	<0.001	<0.001		<0.001	
6/24/2005		<0.001	<0.001	<0.001		<0.001	
12/13/2005		<0.001	<0.001	<0.001		<0.001	
7/12/2006		<0.001	<0.001	<0.001		<0.001	
12/1/2006		<0.001	<0.001	<0.001		<0.001	
6/21/2007		<0.001	<0.001	<0.001		<0.001	
12/15/2007		<0.001	<0.001	<0.001		<0.001	
6/21/2008			<0.001	<0.001			
6/22/2008		<0.001				<0.001	
12/6/2008		<0.001	<0.001				
12/7/2008				<0.001		<0.001	
7/11/2009		<0.001	<0.001	<0.001		<0.001	
12/23/2009		<0.001	<0.001	<0.001		<0.001	
6/23/2010		<0.001	<0.001	<0.001			
6/24/2010						<0.001	
1/8/2011		<0.001	<0.001	<0.001			
7/10/2011		<0.001	<0.001	<0.001			
7/11/2011						<0.001	
1/20/2012		<0.001	<0.001	<0.001		<0.001	
7/12/2012		<0.001	<0.001	<0.001			
7/13/2012						<0.001	
1/21/2013		<0.001	<0.001	<0.001		<0.001	
7/20/2013		<0.001	<0.001	<0.001		<0.001	
1/17/2014		<0.001	<0.001	<0.001		<0.001	
7/11/2014			<0.001	<0.001			
7/12/2014		<0.001				<0.001	
1/15/2015		<0.001					
1/16/2015			<0.001	<0.001		<0.001	
7/15/2015		<0.001	<0.001	<0.001		<0.001	
1/16/2016				<0.001		<0.001	
1/17/2016		<0.001	<0.001				
6/22/2016		0.0019 (J)	<0.001				
6/23/2016				0.0021 (J)		<0.001	
1/24/2017		0.0062		0.044 (o)			
1/25/2017			<0.001				
1/27/2017						<0.001	
7/19/2017		0.0015 (J)					
7/20/2017			<0.001	0.014		0.0021 (J)	
1/9/2018		<0.001	<0.001				

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
1/10/2018				0.014		<0.001	
7/10/2018		<0.001	<0.001				
7/11/2018				0.011 (J)		<0.001	
1/30/2019			<0.001				
1/31/2019		<0.001		<0.001		<0.001	
3/28/2019		<0.001	<0.001	<0.001		<0.001	
9/12/2019		0.0018	0.0021	0.0044		0.0043	
3/11/2020						<0.001	
3/31/2020		<0.001	<0.001	0.0016			
9/22/2020		<0.001	<0.001	0.0015		0.0011	
3/23/2021		<0.001					<0.001
3/24/2021	<0.001		<0.001	<0.001	<0.001	<0.001	
8/18/2021	<0.001	<0.001	<0.001	<0.001	<0.001	0.0013	<0.001
2/8/2022		<0.001			<0.001		
2/9/2022	<0.001		<0.001	<0.001		0.0012	<0.001
8/30/2022	0.00087 (J)	<0.001	<0.001				
8/31/2022					<0.001	0.0013	<0.001
9/1/2022				<0.001			

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
10/5/1999	0.043			0.023	0.039	<0.005		<0.005
11/12/1999	0.035			<0.005	0.025	<0.005		<0.005
12/29/1999	0.058			<0.005	0.023	<0.005		<0.005
2/17/2000	0.051			<0.005	<0.005	<0.005		<0.005
9/13/2000	<0.005			<0.005	0.035	0.021		<0.005
11/10/2000	<0.005			<0.005	0.023	<0.005		<0.005
1/4/2001	<0.005			<0.005	0.027	<0.005		<0.005
12/11/2001	<0.005			<0.005	0.036	<0.005		<0.005
4/4/2002	<0.005			<0.005	0.038	<0.005		<0.005
12/6/2002	<0.005			<0.005	0.033	0.06		0.011
6/28/2003	<0.005			<0.005	0.018	0.19 (o)		<0.005
12/13/2003	<0.005			<0.005	0.013	0.067		<0.005
5/28/2004	0.034			<0.005	<0.005	0.068		<0.005
12/10/2004	0.021			<0.005	<0.005	0.039		<0.005
6/24/2005	<0.005			<0.005	<0.005	0.033		<0.005
12/13/2005	0.013			<0.005	0.011	0.039		0.015
7/12/2006	0.074			0.0047	0.0055	0.022		0.0042
12/1/2006	0.048			0.065	0.0052	0.018		0.0047
6/21/2007	0.067			0.008	0.0062	0.058		0.0052
12/15/2007	0.053			0.0043	0.0055	0.0072		0.0046
6/21/2008					0.011			0.0067
6/22/2008	0.024			0.0062		0.011		
12/6/2008				0.051	0.008	0.011		0.0054
12/7/2008	0.0087							
7/10/2009				0.0043				
7/11/2009	0.045				0.011	0.013		0.0038
12/22/2009						0.013		
12/23/2009	0.054			0.0039	0.0051			0.0029
6/23/2010				<0.005	0.0031	0.0084		<0.005
6/24/2010	0.0065							
1/8/2011				0.0037	0.0035	0.0089		0.0032
1/9/2011	0.022							
7/10/2011				0.0047	0.0081	0.0084		0.004
7/11/2011	0.0032							
1/19/2012				0.0045	0.017			
1/20/2012	0.0089					0.0094		0.0067
7/12/2012				0.0033	0.01	0.0098		0.0036
7/13/2012	0.012							
1/21/2013	0.024			0.0038	0.013	0.007		0.0031
7/20/2013	0.0068			0.004	<0.005	0.0074		<0.005
1/17/2014	0.02			0.005	0.0066	0.0092		0.0031
7/12/2014	0.0055			0.004	0.0054	0.013		<0.0025 (J)
1/15/2015				0.0056	0.0076			
1/16/2015	0.0043					0.0081		0.002 (J)
7/15/2015	0.0026			0.0034	0.0053	0.009		0.0015 (J)
1/16/2016	0.0035			0.0038	0.0048	0.007		0.0015 (J)
6/22/2016	0.00805 (JD)			0.00575 (JD)	0.0038 (J)	0.0091 (J)		<0.005
1/19/2017				<0.005	<0.005	0.0065 (J)		
1/23/2017								<0.005
2/28/2017	<0.005							
7/17/2017	<0.005							
7/18/2017				<0.005	<0.005			

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-1B (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7A (bg)	GWC-1
7/19/2017						0.0099 (J)		<0.005
1/8/2018	<0.005							
1/9/2018				<0.005	0.0072 (J)	0.014 (J)		<0.005
7/10/2018	<0.005			<0.005	<0.005	0.0089 (J)		
7/11/2018								<0.005
1/30/2019	<0.005		0.013 (J)	0.0058 (J)	0.006 (J)	0.0057 (J)	0.011 (J)	<0.005
3/27/2019	<0.005					0.01 (J)		
3/28/2019			0.014 (J)	<0.005	<0.005		0.0086 (J)	<0.005
9/11/2019	0.0062							
9/12/2019			0.0075	0.0081	0.0073	0.0074	0.014	0.0039 (J)
3/10/2020	<0.005		0.0061	0.0079	0.0079	0.0071		
3/11/2020							0.0099	<0.005
4/2/2020				0.011				
9/21/2020	<0.005			0.0055	0.013		0.007	
9/22/2020			0.0066			0.039		<0.005
3/23/2021	<0.005	0.0098	0.0066	0.0092			0.0096	
3/24/2021					0.0058	0.0085		<0.005
8/17/2021	0.048	0.024	0.026	0.014	0.029	0.024	0.052	
8/18/2021								0.11
2/7/2022			0.0046 (J)				0.0098	
2/8/2022	0.0031 (J)	0.0048 (J)		0.013	0.007	0.007		
2/9/2022								<0.005
8/30/2022	<0.005	0.003 (J)	0.014	0.012	0.01	0.013	0.0089	
8/31/2022								<0.005

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
10/5/1999		0.028	<0.005	0.037		0.063 (o)	
11/12/1999		<0.005	<0.005	0.022		0.025	
12/29/1999		0.022	<0.005	0.036		0.024	
2/17/2000		0.021	<0.005	<0.005		<0.005	
9/13/2000		<0.005	0.036 (o)	0.027		0.061 (o)	
11/10/2000		<0.005	<0.005	<0.005		0.061 (o)	
1/4/2001		<0.005	<0.005	<0.005		0.05 (o)	
12/11/2001		<0.005	<0.005	<0.005		<0.005	
4/4/2002		0.069 (o)	<0.005	0.028		<0.005	
12/6/2002		0.012	0.012	0.028		0.013	
6/28/2003		0.011	<0.005	0.012		0.014	
12/13/2003		<0.005	<0.005	0.026		<0.005	
5/28/2004		<0.005	<0.005	0.018		<0.005	
12/10/2004		0.027	<0.005	0.029		<0.005	
6/24/2005		<0.005	<0.005	0.016		<0.005	
12/13/2005		0.011	<0.005	0.017		<0.005	
7/12/2006		0.0064	<0.005	0.013		0.0057	
12/1/2006		0.0077	0.098 (o)	0.03		0.0068	
6/21/2007		0.0082	0.0043	0.017		0.016	
12/15/2007		0.0063	0.0057	0.013		0.012	
6/21/2008			0.0064	0.016			
6/22/2008		0.0074				0.014	
12/6/2008		0.0066	0.0052				
12/7/2008				0.05		0.044 (o)	
7/11/2009		0.0054	0.0049	0.013		0.0062	
12/23/2009		0.0046	0.005	0.01		0.007	
6/23/2010		0.0041	0.0044	0.011			
6/24/2010						0.0049	
1/8/2011		0.019	0.0036	0.012			
7/10/2011		0.005	0.0046	0.0096			
7/11/2011						0.0052	
1/20/2012		0.007	0.0045	0.014		0.0081	
7/12/2012		0.0045	0.0041	0.01			
7/13/2012						0.004	
1/21/2013		0.0045	0.0038	0.011		0.0093	
7/20/2013		<0.005	0.0047	0.0089		0.0054	
1/17/2014		0.0075	0.0051	0.0098		0.0054	
7/11/2014			0.0066	0.014			
7/12/2014		0.0051				0.0057	
1/15/2015		0.0054					
1/16/2015			0.0046	0.011		0.0084	
7/15/2015		0.0049	0.0036	0.012		0.0046	
1/16/2016				0.014		0.0051	
1/17/2016		0.0051	0.004				
6/22/2016		0.0087 (J)	0.0053 (J)				
6/23/2016				0.0116		0.0041 (J)	
1/24/2017		0.0071 (J)		0.01 (J)			
1/25/2017			<0.005				
1/27/2017						<0.005	
7/19/2017		<0.005					
7/20/2017			<0.005	0.016 (J)		<0.005	
1/9/2018		0.0079 (J)	<0.005				

Time Series

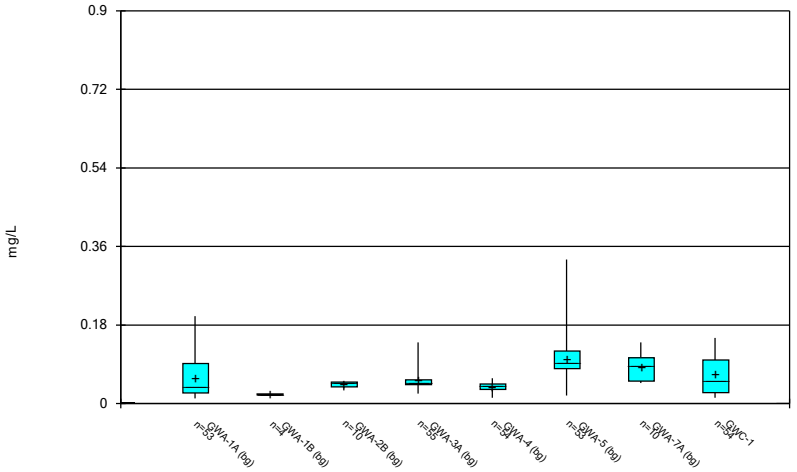
Constituent: Zinc (mg/L) Analysis Run 11/3/2022 1:05 PM View: Descriptive

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
1/10/2018				0.012 (J)		<0.005	
7/10/2018		0.0067 (J)	<0.005				
7/11/2018				0.015 (J)		<0.005	
1/30/2019			0.0042 (J)				
1/31/2019		<0.005		0.033		<0.005	
3/28/2019		0.0069 (J)	<0.005	0.032		0.0084 (J)	
9/12/2019		0.0089	0.0093	0.033		0.011	
3/11/2020						0.0047 (J)	
3/31/2020		0.0065	<0.005	0.025			
9/22/2020		0.029	0.017	0.037		0.0053	
3/23/2021		0.0085					0.0091
3/24/2021	0.02		0.01	0.034	0.013	0.0043 (J)	
8/18/2021	0.15	0.0081	0.012	0.035	0.021	0.12	0.072
2/8/2022		0.0078			0.011		
2/9/2022	0.023		0.0039 (J)	0.03		0.0087	0.0069
8/30/2022	0.02	0.012	0.0046 (J)				
8/31/2022					0.014	0.0073	0.0049 (J)
9/1/2022				0.035			

FIGURE B.

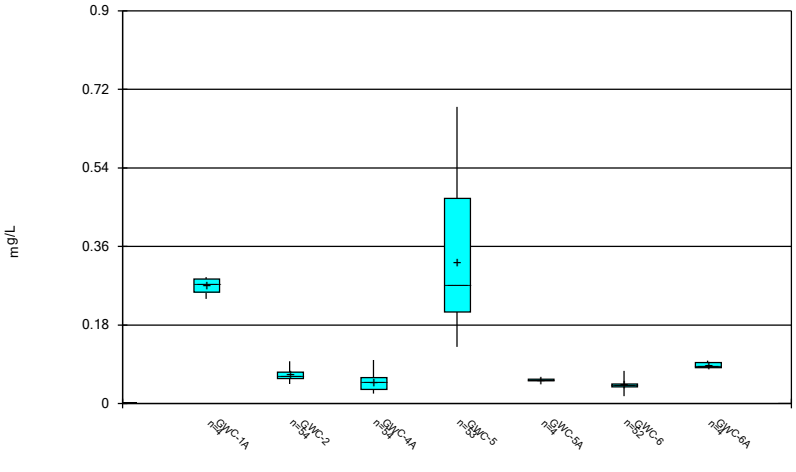
Box & Whiskers Plot



Constituent: Barium Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

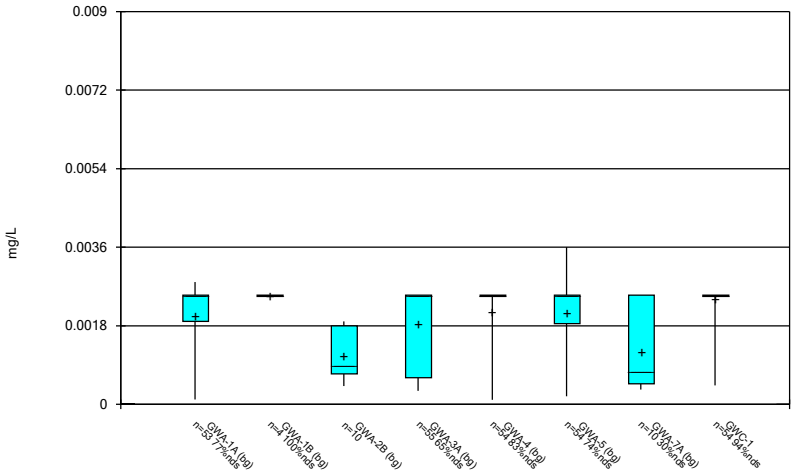
Box & Whiskers Plot



Constituent: Barium Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

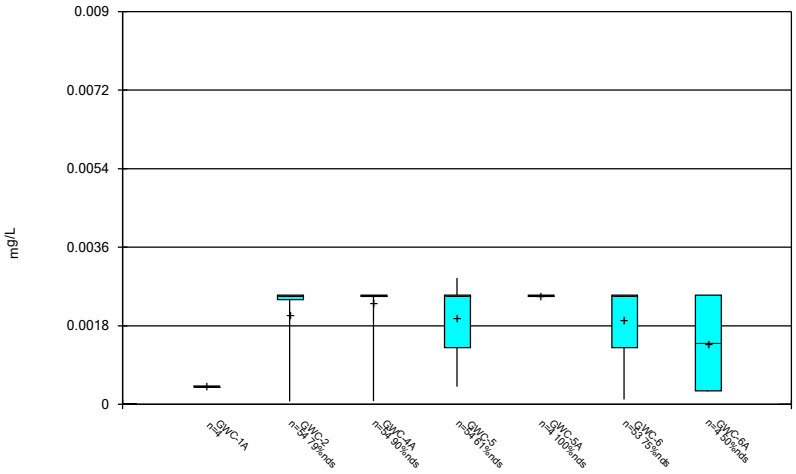
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

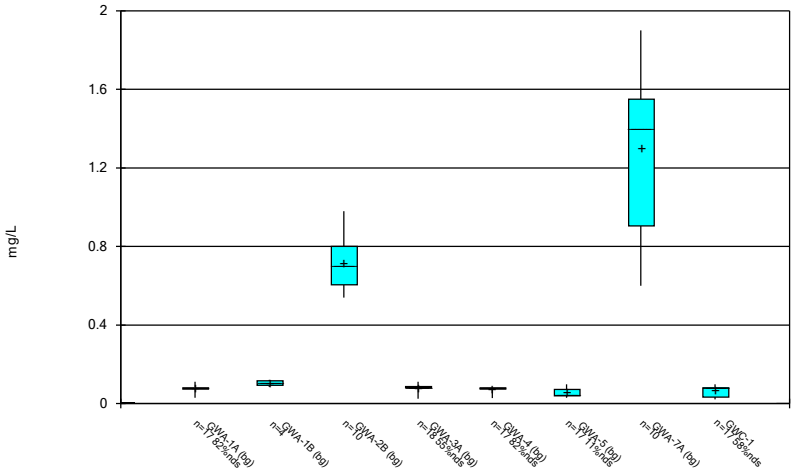
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

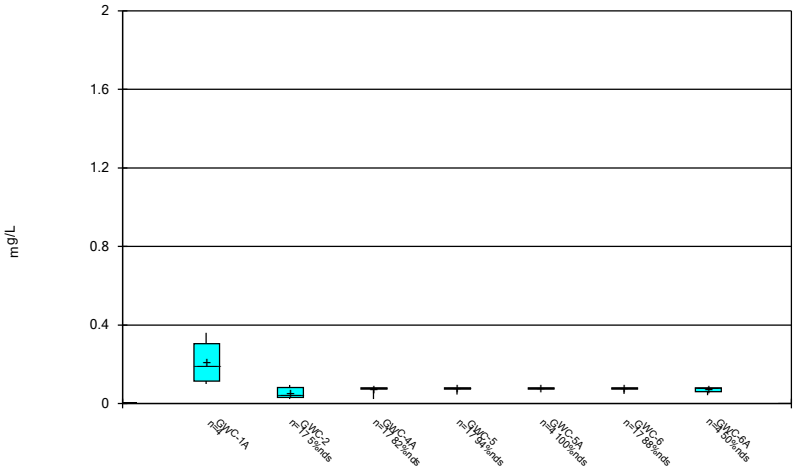
Box & Whiskers Plot



Constituent: Boron Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

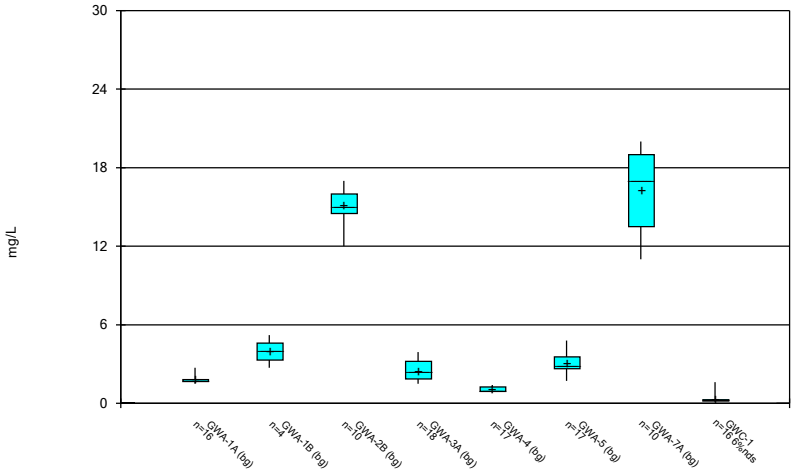
Box & Whiskers Plot



Constituent: Boron Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

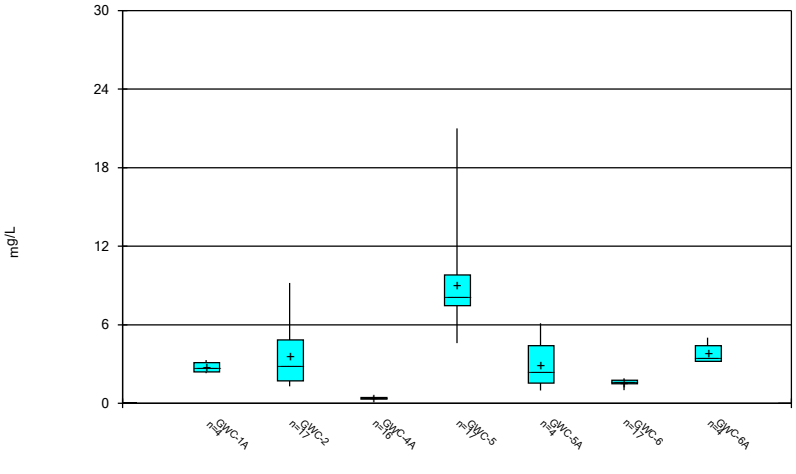
Box & Whiskers Plot



Constituent: Calcium Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

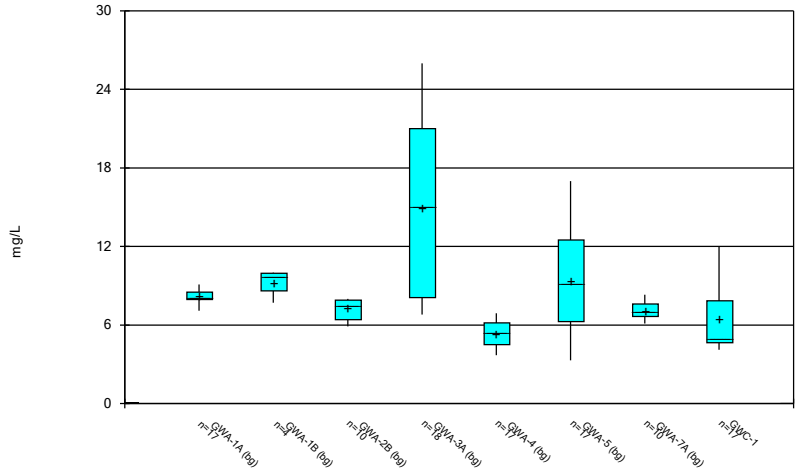
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Calcium Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

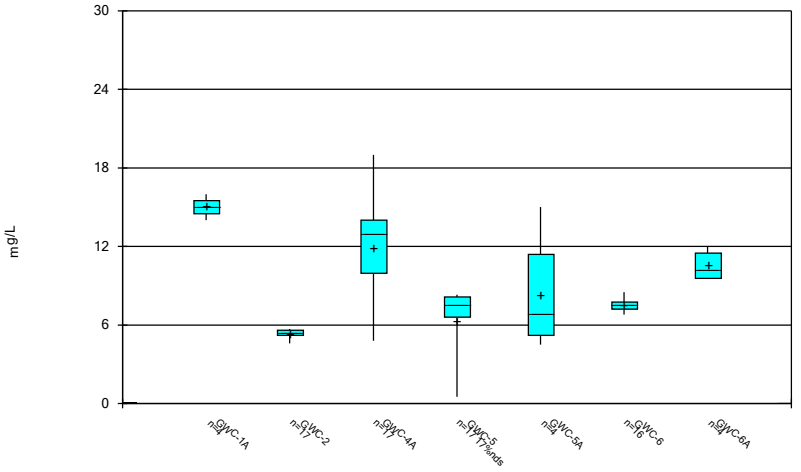
Box & Whiskers Plot



Constituent: Chloride Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

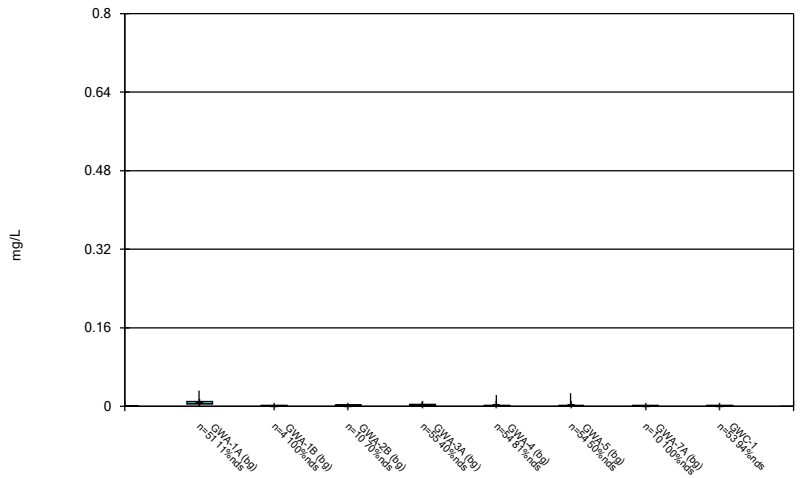
Box & Whiskers Plot



Constituent: Chloride Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

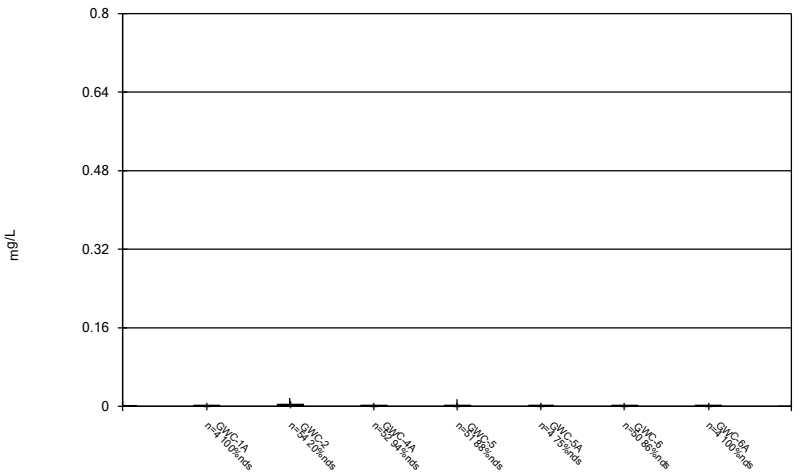
Box & Whiskers Plot



Constituent: Chromium Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

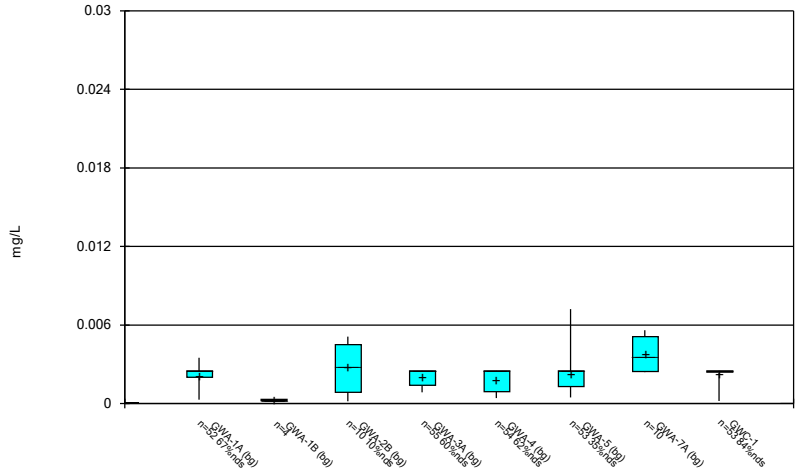
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chromium Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

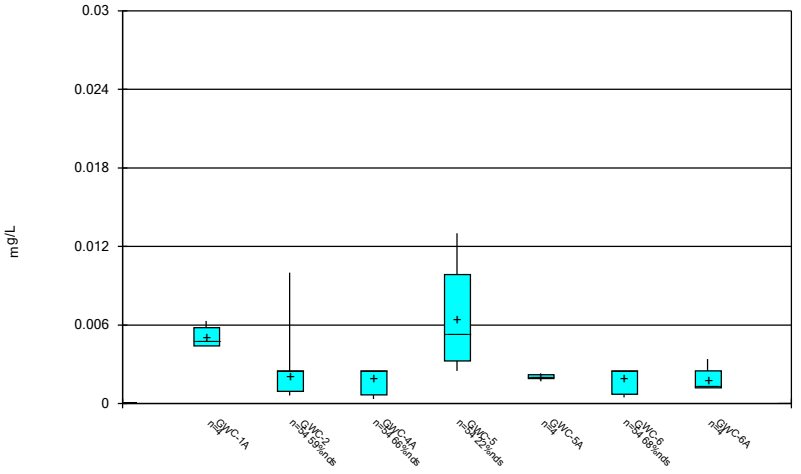
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

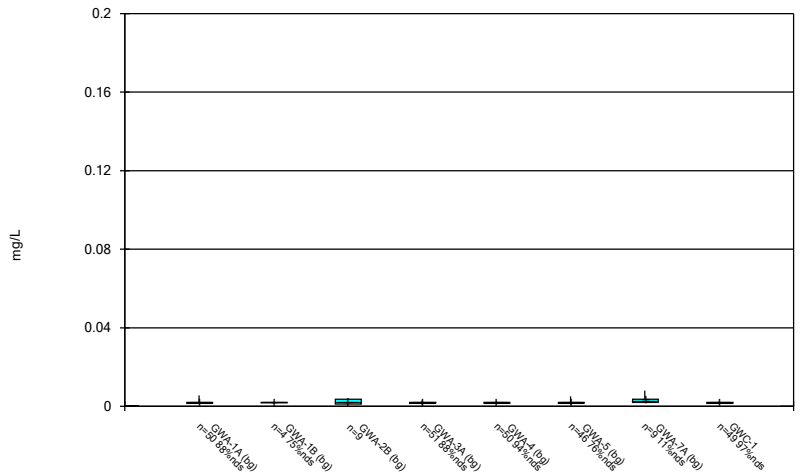
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

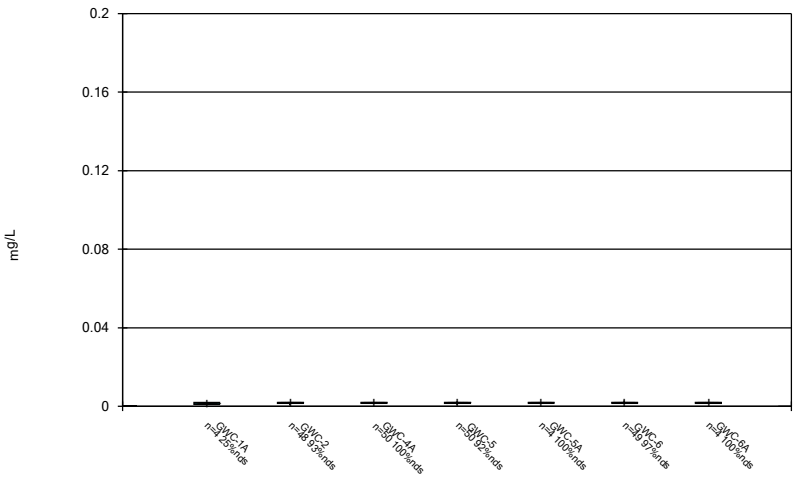
Box & Whiskers Plot



Constituent: Copper Analysis Run 11/3/2022 1:11 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

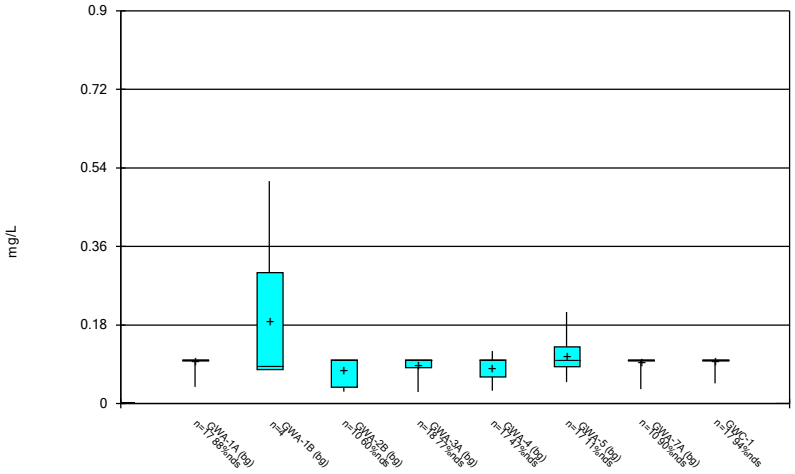
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Copper Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

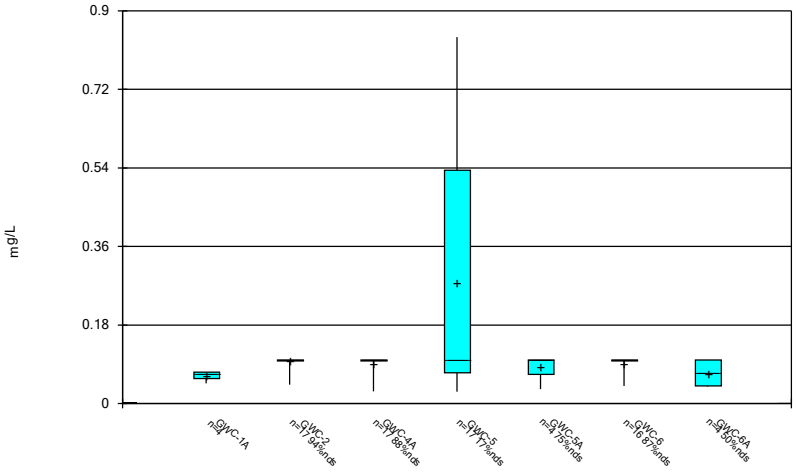
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

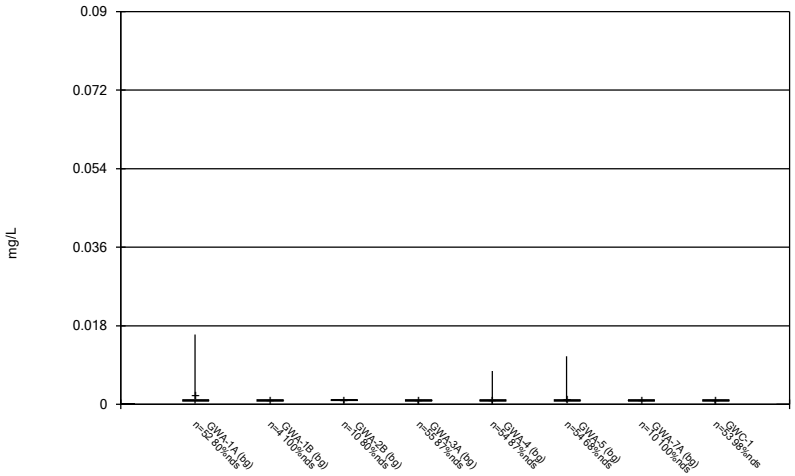
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

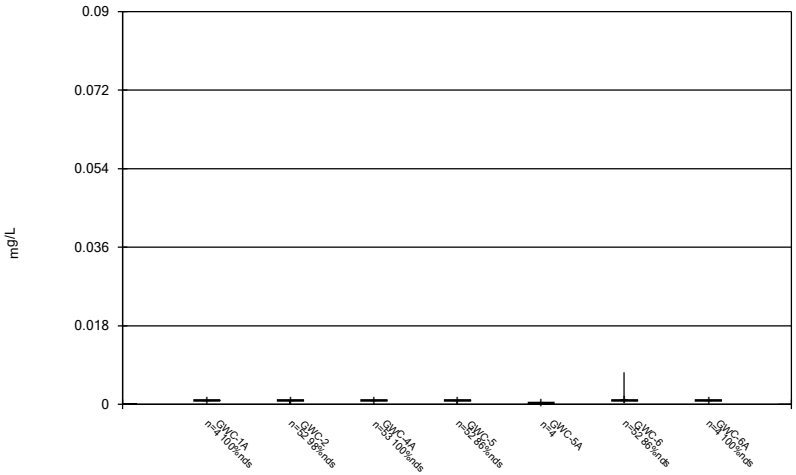
Box & Whiskers Plot



Constituent: Lead Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

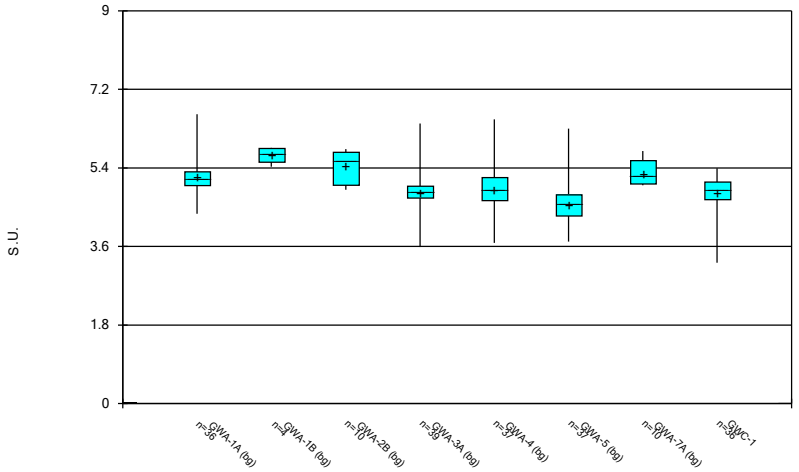
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Lead Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

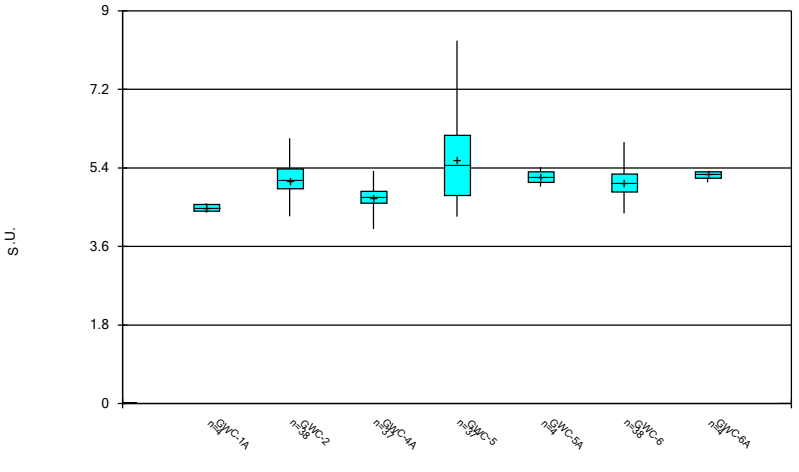
Box & Whiskers Plot



Constituent: pH Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

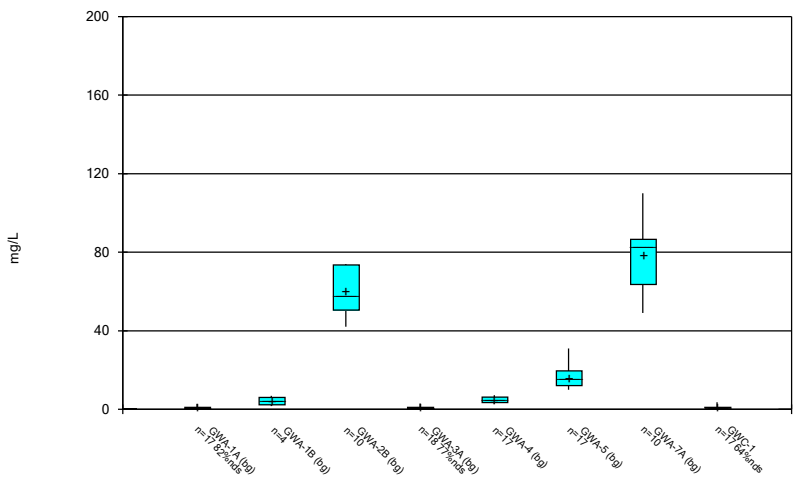
Box & Whiskers Plot



Constituent: pH Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

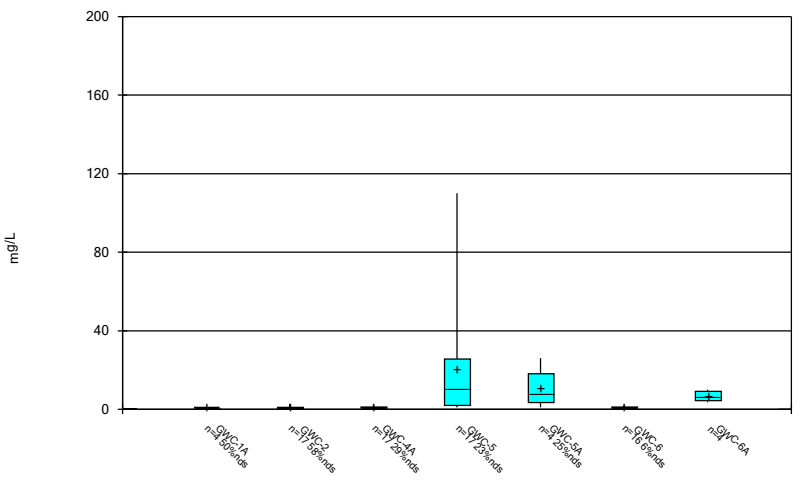
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

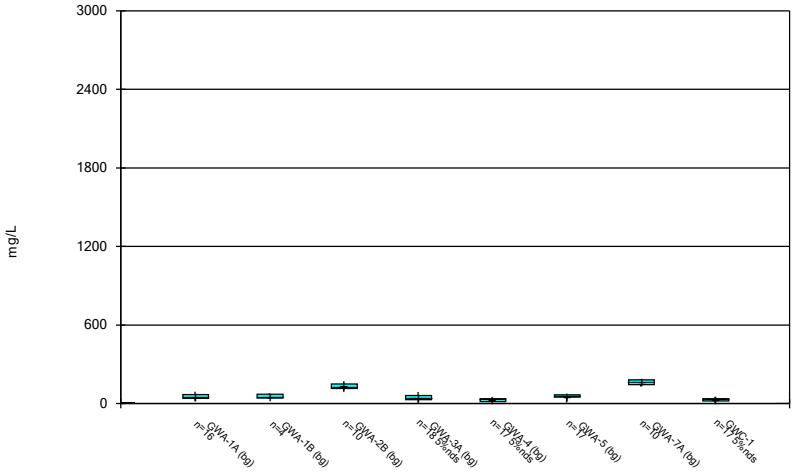
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Sulfate Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

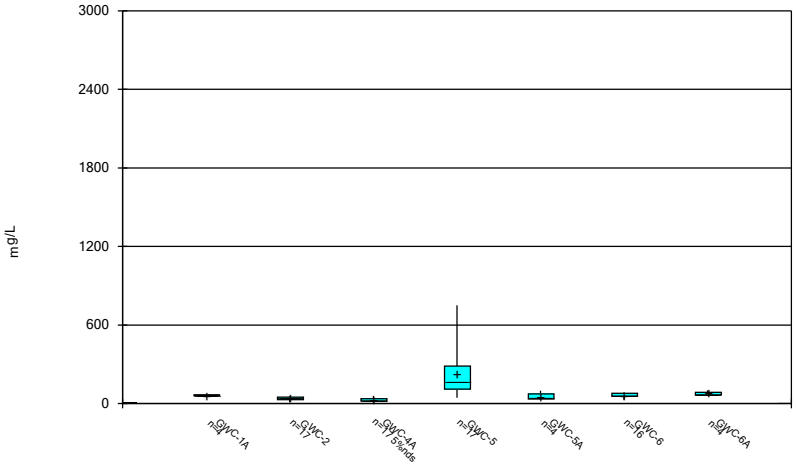
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

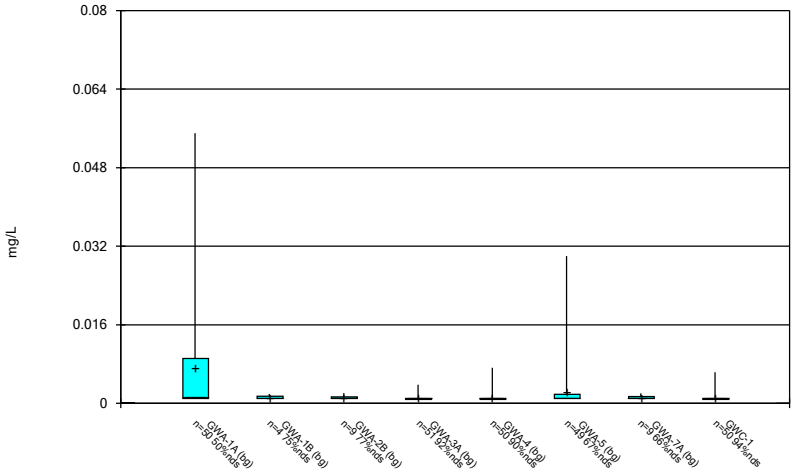
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

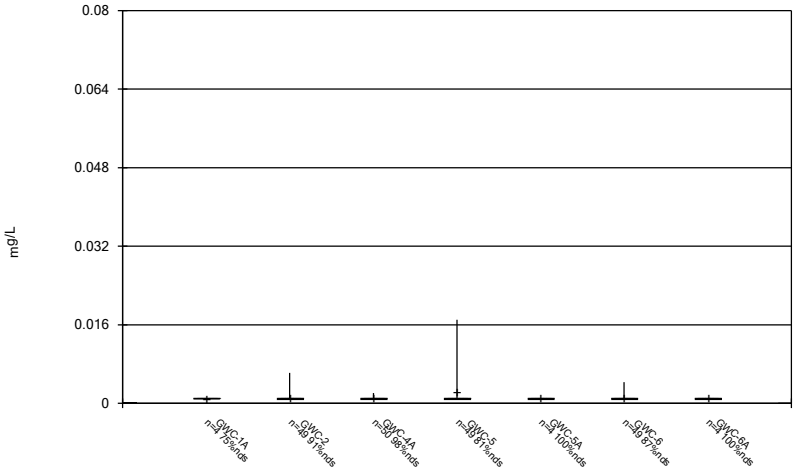
Box & Whiskers Plot



Constituent: Vanadium Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

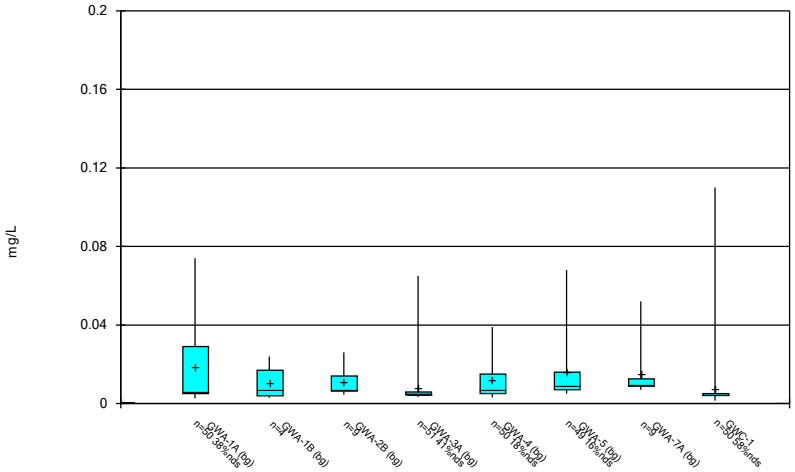
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Vanadium Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

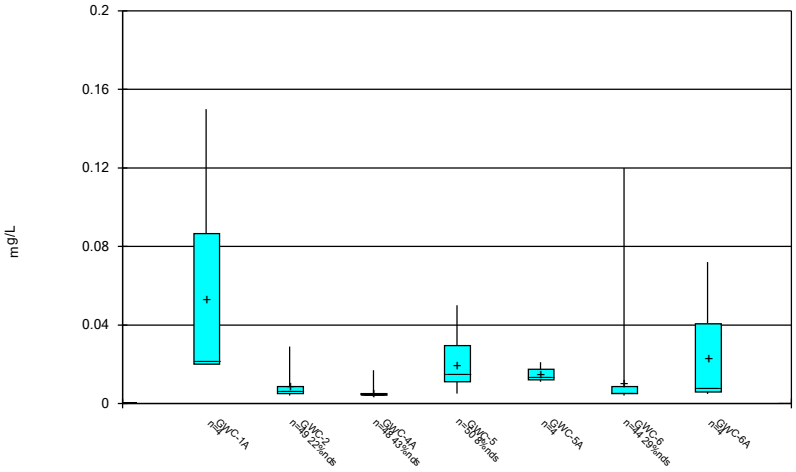
Box & Whiskers Plot



Constituent: Zinc Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Zinc Analysis Run 11/3/2022 1:12 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

FIGURE C.

Outlier Summary

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/3/2022, 1:20 PM

	GWA-1A Barium (mg/L)	GWA-5 Barium (mg/L)	GWC-5 Barium (mg/L)	GWC-6 Barium (mg/L)	GWA-1A Beryllium (mg/L)	GWC-6 Beryllium (mg/L)	GWA-1A Calcium (mg/L)	GWC-1 Calcium (mg/L)	GWC-4A Calcium (mg/L)	GWA-1A Chromium (mg/L)
10/5/1999										
11/12/1999										
12/29/1999										0.059 (o)
2/17/2000										0.048 (o)
9/13/2000										
11/10/2000										
1/4/2001										
4/4/2002										
12/6/2002										
6/28/2003										
12/13/2003										
5/28/2004										
12/10/2004						0.0058 (o)				
7/12/2006										
12/1/2006			0.019 (o)							
6/21/2007										
6/21/2008										
12/7/2008				0.12 (o)						
1/17/2014										
9/1/2016	0.86 (o)				0.0084 (o)		26 (o)			0.12 (o)
1/23/2017								1.3 (o)		
1/24/2017										
9/21/2017										
7/10/2018		0.14 (o)							2 (o)	

Outlier Summary

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/3/2022, 1:20 PM

	GWC-1 Chromium (mg/L)	GWC-2 Chromium (mg/L)	GWC-4A Chromium (mg/L)	GWC-5 Chromium (mg/L)	GWC-6 Chromium (mg/L)	GWA-1A Cobalt (mg/L)	GWA-5 Cobalt (mg/L)	GWC-1 Cobalt (mg/L)	GWA-5 Copper (mg/L)	GWC-1 Copper (mg/L)
10/5/1999										
11/12/1999										
12/29/1999										
2/17/2000										
9/13/2000										
11/10/2000										
1/4/2001					0.016 (o)					
4/4/2002										
12/6/2002				0.008 (o)					0.0089 (o)	
6/28/2003	0.007 (o)		0.061 (o)	0.021 (o)			0.018 (o)		0.019 (o)	
12/13/2003				0.011 (o)					0.0067 (o)	
5/28/2004									0.0057 (o)	
12/10/2004		0.74 (o)	0.0059 (o)		0.0046 (o)					
7/12/2006										0.0047 (o)
12/1/2006						0.012 (o)				
6/21/2007										
6/21/2008								0.0048 (o)		
12/7/2008										
1/17/2014										
9/1/2016					0.0069 (o)	0.023 (o)				
1/23/2017										
1/24/2017										
9/21/2017										
7/10/2018										

Outlier Summary

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/3/2022, 1:20 PM

	GWC-2 Copper (mg/L)	GWC-6 Copper (mg/L)	GWA-1A Lead (mg/L)	GWC-1 Lead (mg/L)	GWC-2 Lead (mg/L)	GWC-4A Lead (mg/L)	GWC-5 Lead (mg/L)	GWC-6 Lead (mg/L)	GWA-1A Total Dissolved Solids (mg/L)	GWA-5 Vanadium (mg/L)
10/5/1999					0.0054 (o)					
11/12/1999			0.0063 (o)							
12/29/1999										
2/17/2000										
9/13/2000						0.0067 (o)		0.079 (o)		
11/10/2000										
1/4/2001										
4/4/2002										
12/6/2002							0.007 (o)			
6/28/2003										
12/13/2003							0.018 (o)			
5/28/2004										
12/10/2004	0.11 (o)	0.0044 (o)								
7/12/2006										
12/1/2006										
6/21/2007										0.07 (o)
6/21/2008										
12/7/2008										
1/17/2014	0.0065 (o)									
9/1/2016			0.082 (o)						2200 (o)	
1/23/2017										
1/24/2017										
9/21/2017				0.004 (o)	0.0014 (o)					
7/10/2018										

Outlier Summary

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/3/2022, 1:20 PM

	GWC-2 Vanadium (mg/L)	GWC-5 Vanadium (mg/L)	GWA-5 Zinc (mg/L)	GWC-2 Zinc (mg/L)	GWC-4A Zinc (mg/L)	GWC-6 Zinc (mg/L)
10/5/1999	0.015 (o)					0.063 (o)
11/12/1999						
12/29/1999						
2/17/2000						
9/13/2000					0.036 (o)	0.061 (o)
11/10/2000						0.061 (o)
1/4/2001						0.05 (o)
4/4/2002				0.069 (o)		
12/6/2002						
6/28/2003			0.19 (o)			
12/13/2003						
5/28/2004						
12/10/2004						
7/12/2006						
12/1/2006					0.098 (o)	
6/21/2007						
6/21/2008						
12/7/2008						0.044 (o)
1/17/2014						
9/1/2016						
1/23/2017						
1/24/2017		0.044 (o)				
9/21/2017						
7/10/2018						

FIGURE D.

Interwell Prediction Limit Appendix III - All Results (No Significant)

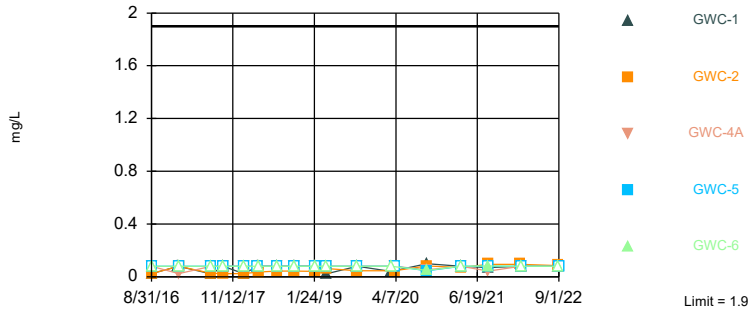
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/5/2022, 3:56 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GWC-1	1.9	n/a	8/31/2022	0.08ND	No	93	n/a	n/a	43.01	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-2	1.9	n/a	8/30/2022	0.085	No	93	n/a	n/a	43.01	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-4A	1.9	n/a	8/30/2022	0.08ND	No	93	n/a	n/a	43.01	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-5	1.9	n/a	9/1/2022	0.08ND	No	93	n/a	n/a	43.01	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-6	1.9	n/a	8/31/2022	0.08ND	No	93	n/a	n/a	43.01	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-1	20	n/a	8/31/2022	0.31J	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-2	20	n/a	8/30/2022	1.4	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-4A	20	n/a	8/30/2022	0.39J	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-5	20	n/a	9/1/2022	5.2	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-6	20	n/a	8/31/2022	1.5	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-1	26	n/a	8/31/2022	12	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-2	26	n/a	8/30/2022	4.8	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-4A	26	n/a	8/30/2022	4.8	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-5	26	n/a	9/1/2022	7	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-6	26	n/a	8/31/2022	7.3	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GWC-1	0.51	n/a	8/31/2022	0.1ND	No	93	n/a	n/a	58.06	n/a	n/a	0.0002244	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GWC-2	0.51	n/a	8/30/2022	0.1ND	No	93	n/a	n/a	58.06	n/a	n/a	0.0002244	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GWC-4A	0.51	n/a	8/30/2022	0.1ND	No	93	n/a	n/a	58.06	n/a	n/a	0.0002244	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GWC-5	0.51	n/a	9/1/2022	0.1ND	No	93	n/a	n/a	58.06	n/a	n/a	0.0002244	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GWC-6	0.51	n/a	8/31/2022	0.1ND	No	93	n/a	n/a	58.06	n/a	n/a	0.0002244	NP Inter (NDs) 1 of 2
pH (S.U.)	GWC-1	5.834	4.041	8/31/2022	4.69	No	173	4.937	0.5015	0	None	No	0.000752	Param Inter 1 of 2
pH (S.U.)	GWC-2	5.834	4.041	8/30/2022	4.96	No	173	4.937	0.5015	0	None	No	0.000752	Param Inter 1 of 2
pH (S.U.)	GWC-4A	5.834	4.041	8/30/2022	4.71	No	173	4.937	0.5015	0	None	No	0.000752	Param Inter 1 of 2
pH (S.U.)	GWC-5	5.834	4.041	9/1/2022	4.29	No	173	4.937	0.5015	0	None	No	0.000752	Param Inter 1 of 2
pH (S.U.)	GWC-6	5.834	4.041	8/31/2022	4.85	No	173	4.937	0.5015	0	None	No	0.000752	Param Inter 1 of 2
Sulfate (mg/L)	GWC-1	110	n/a	8/31/2022	1ND	No	93	n/a	n/a	30.11	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-2	110	n/a	8/30/2022	1.1	No	93	n/a	n/a	30.11	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-4A	110	n/a	8/30/2022	1ND	No	93	n/a	n/a	30.11	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-5	110	n/a	9/1/2022	1ND	No	93	n/a	n/a	30.11	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-6	110	n/a	8/31/2022	0.41J	No	93	n/a	n/a	30.11	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-1	166.2	n/a	8/31/2022	37	No	92	7.688	2.879	2.174	None	sqrt(x)	0.001504	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-2	166.2	n/a	8/30/2022	38	No	92	7.688	2.879	2.174	None	sqrt(x)	0.001504	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-4A	166.2	n/a	8/30/2022	21	No	92	7.688	2.879	2.174	None	sqrt(x)	0.001504	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-5	166.2	n/a	9/1/2022	140	No	92	7.688	2.879	2.174	None	sqrt(x)	0.001504	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-6	166.2	n/a	8/31/2022	61	No	92	7.688	2.879	2.174	None	sqrt(x)	0.001504	Param Inter 1 of 2

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Interwell Non-parametric



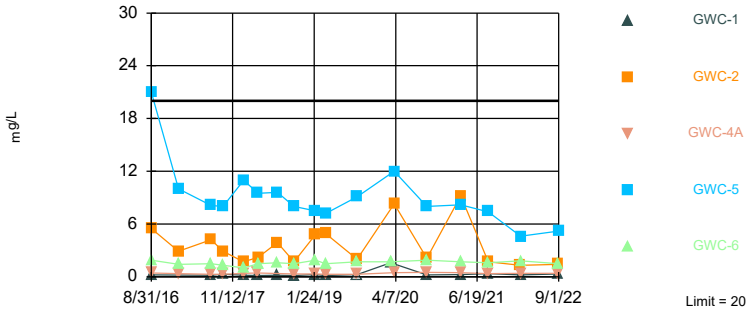
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 93 background values. 43.01% NDs. Annual per-constituent alpha = 0.002241. Individual comparison alpha = 0.0002244 (1 of 2). Comparing 5 points to limit.

Constituent: Boron Analysis Run 11/5/2022 3:54 PM View: PLs Interwell App III
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Interwell Non-parametric



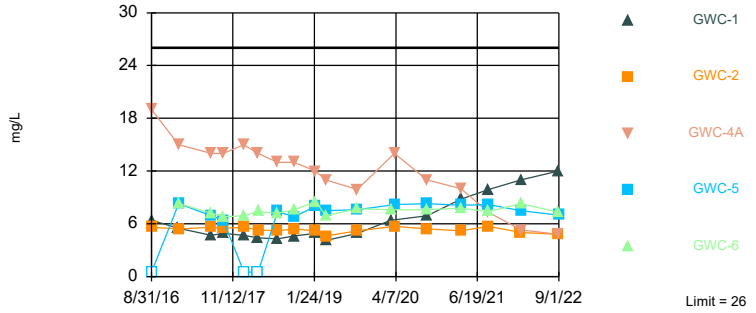
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 92 background values. Annual per-constituent alpha = 0.002286. Individual comparison alpha = 0.0002288 (1 of 2). Comparing 5 points to limit.

Constituent: Calcium Analysis Run 11/5/2022 3:54 PM View: PLs Interwell App III
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Interwell Non-parametric



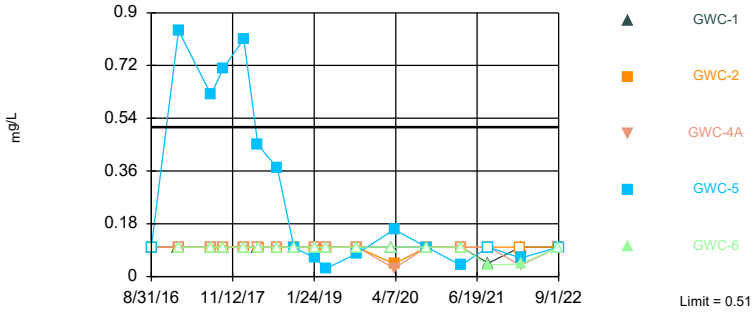
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 93 background values. Annual per-constituent alpha = 0.002241. Individual comparison alpha = 0.0002244 (1 of 2). Comparing 5 points to limit.

Constituent: Chloride Analysis Run 11/5/2022 3:54 PM View: PLs Interwell App III
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 93 background values. 58.06% NDs. Annual per-constituent alpha = 0.002241. Individual comparison alpha = 0.0002244 (1 of 2). Comparing 5 points to limit.

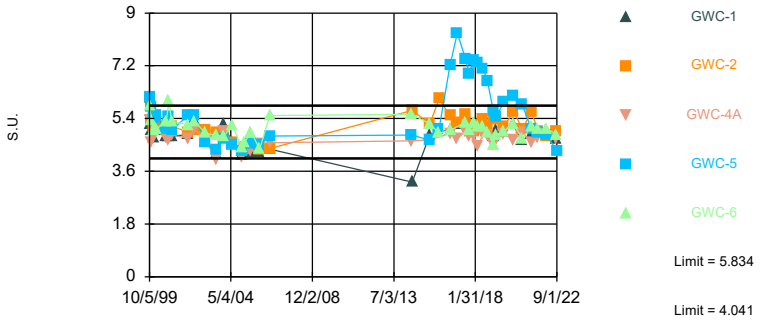
Constituent: Fluoride Analysis Run 11/5/2022 3:54 PM View: PLs Interwell App III
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=4.937, Std. Dev.=0.5015, n=173. Normality test: Chi Squared @alpha = 0.01, calculated = 11.91, critical = 14.07. Kappa = 1.788 (c=7, w=5, 1 of 2, event alpha = 0.05132). N exceeds UG tables; Kappa based on n=150. Report alpha = 0.007498. Individual comparison alpha = 0.000752. Comparing 5 points to limit.

Constituent: pH Analysis Run 11/5/2022 3:54 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

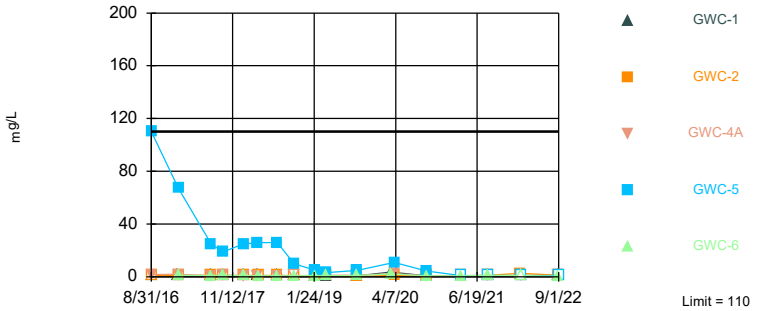
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

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 93 background values. 30.11% NDs. Annual per-constituent alpha = 0.002241. Individual comparison alpha = 0.0002244 (1 of 2). Comparing 5 points to limit.

Constituent: Sulfate Analysis Run 11/5/2022 3:54 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

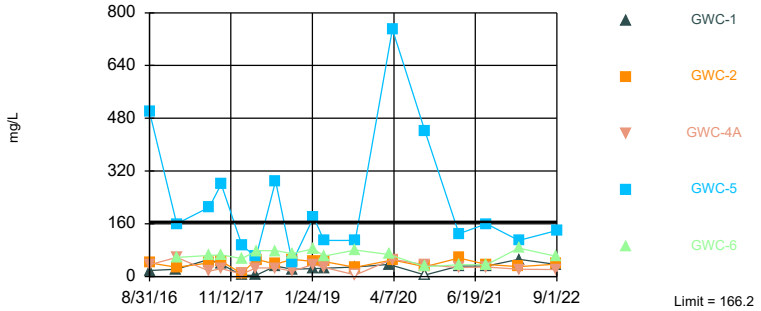
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=7.688, Std. Dev.=2.879, n=92, 2.174% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9693, critical = 0.962. Kappa = 1.808 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

Constituent: Total Dissolved Solids Analysis Run 11/5/2022 3:54 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-4 (bg)	GWC-1	GWA-3A (bg)	GWC-4A	GWA-5 (bg)	GWC-2	GWC-6	GWC-5	GWA-1A (bg)
8/31/2016	<0.08	0.023 (J)	<0.08	<0.08	0.073	0.023 (J)			
9/1/2016							<0.08	<0.08	0.029 (J)
1/19/2017	0.027 (J)		<0.08		0.036 (J)				
1/23/2017		<0.08							
1/24/2017						<0.08		<0.08	
1/25/2017				0.023 (J)					
1/27/2017							<0.08		
2/28/2017									<0.08
7/17/2017									<0.08
7/18/2017	<0.08		<0.08						
7/19/2017		0.021 (J)			0.07	0.026 (J)			
7/20/2017				<0.08			<0.08	<0.08	
9/20/2017			<0.08						<0.08
9/21/2017	<0.08	<0.08		<0.08	0.07	0.025 (J)		<0.08	
9/22/2017							<0.08		
1/8/2018									<0.08
1/9/2018	<0.08	0.025 (J)	<0.08	<0.08	0.042 (J)	0.023 (J)			
1/10/2018							<0.08	<0.08	
3/27/2018	<0.08		<0.08		0.037 (J)				<0.08
3/28/2018		<0.08		<0.08				<0.08	
3/29/2018						0.035 (J)	<0.08		
7/10/2018	<0.08		<0.08	<0.08	0.042 (J)	0.044 (J)			<0.08
7/11/2018		<0.08					<0.08	<0.08	
10/8/2018	<0.08				0.044 (J)				<0.08
10/9/2018		<0.08	<0.08	<0.08		0.043 (J)	<0.08	<0.08	
1/30/2019	<0.08	<0.08	<0.08	<0.08	0.03 (J)				<0.08
1/31/2019						0.04 (J)	<0.08	<0.08	
3/27/2019					0.036 (J)				<0.08
3/28/2019	<0.08	0.021 (J)	0.024 (J)	<0.08		0.062	<0.08	<0.08	
9/11/2019									<0.08
9/12/2019	<0.08	<0.08	<0.08	<0.08	0.048 (J)	0.045 (J)	<0.08	<0.08	
3/10/2020	<0.08		0.059 (J)		0.066 (J)				<0.08
3/11/2020		0.04 (J)					<0.08		
3/31/2020				<0.08		0.046 (J)		<0.08	
4/2/2020			0.084						
9/21/2020	0.073 (J)		0.11						0.11
9/22/2020		0.098		0.053 (J)	0.097	0.083	0.048 (J)	0.045 (J)	
3/23/2021			0.088			0.07 (J)			<0.08
3/24/2021	<0.08	<0.08		<0.08	0.048 (J)		<0.08	<0.08	
8/17/2021	0.045 (J)		0.098		0.067 (J)				0.049 (J)
8/18/2021		0.07 (J)		0.043 (J)		0.095	0.082	<0.08	
2/7/2022									
2/8/2022	<0.08		0.077 (J)		<0.08	0.094			<0.08
2/9/2022		<0.08		<0.08			<0.08	<0.08	
8/30/2022	<0.08		0.1	<0.08	<0.08	0.085			<0.08
8/31/2022		<0.08					<0.08		
9/1/2022								<0.08	

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-7A (bg)	GWA-2B (bg)	GWA-1B (bg)
8/31/2016			
9/1/2016			
1/19/2017			
1/23/2017			
1/24/2017			
1/25/2017			
1/27/2017			
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017			
7/20/2017			
9/20/2017			
9/21/2017			
9/22/2017			
1/8/2018			
1/9/2018			
1/10/2018			
3/27/2018			
3/28/2018			
3/29/2018			
7/10/2018			
7/11/2018			
10/8/2018	1.3	0.76	
10/9/2018			
1/30/2019	1.5	0.77	
1/31/2019			
3/27/2019			
3/28/2019	1.4	0.83	
9/11/2019			
9/12/2019	1.6	0.65	
3/10/2020		0.64	
3/11/2020	1.9		
3/31/2020			
4/2/2020			
9/21/2020	0.61		
9/22/2020		0.73	
3/23/2021	1.5	0.57	0.1
3/24/2021			
8/17/2021	1.4	0.68	0.11
8/18/2021			
2/7/2022	0.6	0.54	
2/8/2022			0.084
2/9/2022			
8/30/2022	1.2	0.98	0.12
8/31/2022			
9/1/2022			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-4 (bg)	GWA-5 (bg)	GWA-3A (bg)	GWC-1	GWC-2	GWC-4A	GWC-5	GWC-6	GWA-1A (bg)
8/31/2016	0.88	3.7	1.5	0.22 (J)	5.5	0.42			
9/1/2016							21	1.9	26 (o)
1/19/2017	1.1	2	1.8						
1/23/2017				1.3 (o)					
1/24/2017					2.9		10		
1/25/2017						0.37			
1/27/2017								1.4	
2/28/2017									2.7
7/17/2017									1.7
7/18/2017	0.86		1.7						
7/19/2017		2.6		0.19 (J)	4.2				
7/20/2017						0.29	8.1	1.5	
9/20/2017			1.7						1.5
9/21/2017	0.9	2.7		0.3	2.9	0.3	8		
9/22/2017								1.3	
1/8/2018									1.7
1/9/2018	1	4.1	1.9	0.16 (J)	1.7	0.38			
1/10/2018							11	1	
3/27/2018	0.89	4.8	1.9						1.7
3/28/2018				0.14 (J)		0.44	9.5		
3/29/2018					2.2			1.5	
7/10/2018	0.99	3.7	1.9		3.9	2 (o)			1.7
7/11/2018				0.18 (J)			9.6	1.6	
10/8/2018	1.1	3.2							1.6
10/9/2018			2.2	0.13 (J)	1.7	0.34	8	1.5	
1/30/2019	1	1.7	2.4	0.24 (J)		0.34			1.9
1/31/2019					4.8		7.5	1.9	
3/27/2019		3.1							1.6
3/28/2019	0.98		2.4	0.15 (J)	4.9	0.3	7.2	1.5	
9/11/2019									1.6
9/12/2019	0.84	1.9	2.3	<0.5 (D)	2	0.3 (J)	9.1	1.7	
3/10/2020	1.1	2.9	2.8						2
3/11/2020				1.6				1.7	
3/31/2020					8.3	0.48 (J)	12		
4/2/2020			3						
9/21/2020	1.4		3.1						1.8
9/22/2020		2.9		0.21 (J)	2.1	0.51	8	1.9	
3/23/2021			3.6		9.2				1.8
3/24/2021	1.3	3.1		0.25 (J)		0.46 (J)	8.2	1.7	
8/17/2021	1.4	2.9	3.5						1.8
8/18/2021				0.36 (J)	1.7	0.37 (J)	7.4	1.6	
2/7/2022									
2/8/2022	1.3	2.8	3.3		1.3				1.7
2/9/2022				0.23 (J)		0.39 (J)	4.6	1.8	
8/30/2022	1.2	3.4	3.9		1.4	0.39 (J)			1.8
8/31/2022				0.31 (J)				1.5	
9/1/2022							5.2		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-2B (bg)	GWA-7A (bg)	GWA-1B (bg)
8/31/2016			
9/1/2016			
1/19/2017			
1/23/2017			
1/24/2017			
1/25/2017			
1/27/2017			
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017			
7/20/2017			
9/20/2017			
9/21/2017			
9/22/2017			
1/8/2018			
1/9/2018			
1/10/2018			
3/27/2018			
3/28/2018			
3/29/2018			
7/10/2018			
7/11/2018			
10/8/2018	17	17	
10/9/2018			
1/30/2019	16	15	
1/31/2019			
3/27/2019			
3/28/2019	16	18	
9/11/2019			
9/12/2019	15	19	
3/10/2020	14		
3/11/2020		20	
3/31/2020			
4/2/2020			
9/21/2020		13	
9/22/2020	16		
3/23/2021	15	19	4
3/24/2021			
8/17/2021	15	17	3.9
8/18/2021			
2/7/2022	12	11	
2/8/2022			2.7
2/9/2022			
8/30/2022	15	14	5.2
8/31/2022			
9/1/2022			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-4 (bg)	GWA-3A (bg)	GWC-4A	GWC-2	GWC-1	GWA-5 (bg)	GWC-5	GWA-1A (bg)	GWC-6
8/31/2016	3.7	6.8	19	5.6	6.4	7.1			
9/1/2016							<1	8	
1/19/2017	4.6	6.9				3.3			
1/23/2017					5.5				
1/24/2017				5.4			8.3		
1/25/2017			15						
1/27/2017									8.3
2/28/2017								8.5	
7/17/2017								7.8	
7/18/2017	4.2	7.4							
7/19/2017				5.6	4.7	5.8			
7/20/2017			14				6.9		7.2
9/20/2017		7.6						8	
9/21/2017	4.4		14	5.5	4.9	6.2	6.4		
9/22/2017									6.8
1/8/2018								7.9	
1/9/2018	4.4	8.6	15	5.6	4.7	9.9			
1/10/2018							<1		6.9
3/27/2018	4.9	9.4				13		8	
3/28/2018			14		4.4		<1		
3/29/2018				5.3					7.4
7/10/2018	5.5	11	13	5.2		17		7.8	
7/11/2018					4.3		7.4		7.2
10/8/2018	6.6					16		8.5	
10/9/2018		14	13	5.4	4.6		6.8		7.6
1/30/2019	6.9	15	12		4.9	6.5		8.2	
1/31/2019				5.2			8		8.5
3/27/2019						9.1		8.1	
3/28/2019	5.7	15	11	4.6	4.1		7.5		6.9
9/11/2019								7.1	
9/12/2019	6.1	16	9.9	5.2	4.9	9.1	7.6		7.7
3/10/2020	5	19				3.7		8.1	
3/11/2020					6.4				7.6
3/31/2020			14	5.7			8.2		
4/2/2020		20							
9/21/2020	5.4	19						8.1	
9/22/2020			11	5.4	6.9	6.3	8.3		7.6
3/23/2021		22		5.2				8.6	
3/24/2021	6.2		10		8.8	7.4	8.1		7.8
8/17/2021	6.1	23				11		9.1	
8/18/2021			7.3	5.7	9.9		8.2		7.4
2/7/2022									
2/8/2022	6.4	23		5		12		8.6	
2/9/2022			5.3		11		7.5		8.3
8/30/2022	4.7	26	4.8	4.8		15		8.5	
8/31/2022					12				7.3
9/1/2022							7		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-2B (bg)	GWA-7A (bg)	GWA-1B (bg)
8/31/2016			
9/1/2016			
1/19/2017			
1/23/2017			
1/24/2017			
1/25/2017			
1/27/2017			
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017			
7/20/2017			
9/20/2017			
9/21/2017			
9/22/2017			
1/8/2018			
1/9/2018			
1/10/2018			
3/27/2018			
3/28/2018			
3/29/2018			
7/10/2018			
7/11/2018			
10/8/2018	7.3	6.8	
10/9/2018			
1/30/2019	7.3	7.1	
1/31/2019			
3/27/2019			
3/28/2019	6.1	6.1	
9/11/2019			
9/12/2019	7.6	6.8	
3/10/2020	8		
3/11/2020		6.9	
3/31/2020			
4/2/2020			
9/21/2020		6.5	
9/22/2020	8		
3/23/2021	7.8	7.6	9.9
3/24/2021			
8/17/2021	7.7	8.3	10
8/18/2021			
2/7/2022	6.7	7.6	
2/8/2022			9.5
2/9/2022			
8/30/2022	5.9	7.5	7.7
8/31/2022			
9/1/2022			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-4 (bg)	GWA-3A (bg)	GWC-4A	GWC-2	GWC-1	GWA-5 (bg)	GWC-5	GWA-1A (bg)	GWC-6
8/31/2016	<0.1	<0.1	<0.1	<0.1	<0.1	0.13 (J)			
9/1/2016							<0.1	<0.1	
1/19/2017	0.089 (J)	<0.1				<0.1			
1/23/2017					<0.1				
1/24/2017				<0.1			0.84		
1/25/2017			<0.1						
1/27/2017									<0.1
2/28/2017								0.098 (J)	
7/17/2017								<0.1	
7/18/2017	<0.1	<0.1							
7/19/2017				<0.1	<0.1	<0.1			
7/20/2017			<0.1				0.62		<0.1
9/20/2017		<0.1						<0.1	
9/21/2017	<0.1		<0.1	<0.1	<0.1	0.13 (J)	0.71		
9/22/2017									<0.1
1/8/2018								<0.1	
1/9/2018	<0.1	<0.1	<0.1	<0.1	<0.1	0.13 (J)			
1/10/2018							0.81		<0.1
3/27/2018	<0.1	<0.1				0.21		<0.1	
3/28/2018			<0.1		<0.1		0.45		
3/29/2018				<0.1					<0.1
7/10/2018	<0.1	<0.1	<0.1	<0.1		0.17 (J)		<0.1	
7/11/2018					<0.1		0.37		<0.1
10/8/2018	<0.1					0.11 (J)		<0.1	
10/9/2018		<0.1	<0.1	<0.1	<0.1		0.098 (J)		<0.1
1/30/2019	0.029 (J)	<0.1	<0.1		<0.1	0.089 (J)		<0.1	
1/31/2019				<0.1			0.063 (J)		<0.1
3/27/2019						0.1 (J)		<0.1	
3/28/2019	<0.1	<0.1	<0.1	<0.1	<0.1		0.027 (J)		<0.1
9/11/2019								<0.1	
9/12/2019	0.035 (J)	<0.1	<0.1	<0.1	<0.1	0.052 (J)	0.078 (J)		<0.1
3/10/2020	0.066 (J)	0.026 (J)				0.051 (J)		<0.1	
3/11/2020					<0.1				<0.1
3/31/2020			0.028 (J)	0.043 (J)			0.16		
4/2/2020		0.051 (J)							
9/21/2020	0.06 (J)	<0.1						<0.1	
9/22/2020			<0.1	<0.1	<0.1	0.049 (J)	0.1		<0.1
3/23/2021		<0.1		<0.1				<0.1	
3/24/2021	0.12		<0.1		<0.1	0.08 (J)	0.038 (J)		<0.1
8/17/2021	0.061 (J)	0.064 (J)				0.097 (J)		0.038 (J)	
8/18/2021			<0.1	<0.1	0.046 (J)		<0.1		0.04 (J)
2/7/2022									
2/8/2022	0.061 (J)	0.033 (J)		<0.1		0.12		<0.1	
2/9/2022			0.038 (J)		<0.1		0.063 (J)		0.042 (J)
8/30/2022	0.047 (J)	<0.1	<0.1	<0.1		0.11		<0.1	
8/31/2022					<0.1				<0.1
9/1/2022							<0.1		

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-2B (bg)	GWA-7A (bg)	GWA-1B (bg)
8/31/2016			
9/1/2016			
1/19/2017			
1/23/2017			
1/24/2017			
1/25/2017			
1/27/2017			
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017			
7/20/2017			
9/20/2017			
9/21/2017			
9/22/2017			
1/8/2018			
1/9/2018			
1/10/2018			
3/27/2018			
3/28/2018			
3/29/2018			
7/10/2018			
7/11/2018			
10/8/2018	<0.1	<0.1	
10/9/2018			
1/30/2019	<0.1	<0.1	
1/31/2019			
3/27/2019			
3/28/2019	<0.1	<0.1	
9/11/2019			
9/12/2019	0.036 (J)	<0.1	
3/10/2020	<0.1		
3/11/2020		<0.1	
3/31/2020			
4/2/2020			
9/21/2020		<0.1	
9/22/2020	0.039 (J)		
3/23/2021	<0.1	<0.1	0.079 (J)
3/24/2021			
8/17/2021	0.083 (J)	0.033 (J)	0.09 (J)
8/18/2021			
2/7/2022	0.027 (J)	<0.1	
2/8/2022			0.077 (J)
2/9/2022			
8/30/2022	<0.1	<0.1	0.51
8/31/2022			
9/1/2022			

Prediction Limit

Constituent: pH (S.U.) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-3A (bg)	GWA-5 (bg)	GWC-1	GWC-2	GWC-4A	GWC-5	GWC-6	GWA-4 (bg)
10/5/1999	6.63	6.42	6.3	5.23	6.08	5.33	6.13	5.84	6.51
11/12/1999	5.51	5.03	4.72	5.02	5.35	4.6	5.81	5.34	5.46
12/29/1999	5.23	4.92	4.8	4.75	5.19	4.8	5.43	5.01	5.13
2/17/2000	5.29	5.13	4.78	4.99	5.18	4.98	5.49	5.04	5.22
9/13/2000	5.41	4.85	4.58	4.81	5.13	4.75	5.05	5.29	4.86
11/10/2000	5.47	5.05	4.5	4.79	5.2	4.65	5.48	5.99	5.29
1/4/2001	5.44	5.08	4.61	4.79	5.14	4.83	4.99	5.31	5.53
12/11/2001	4.86	4.81	4.87	4.86	4.93	4.73	5.52	5.18	5.37
4/4/2002	5.1	4.92	4.96	5.39	5	5.05	5.5	5.31	5.32
12/6/2002	4.917 (D)	5.07 (D)	4.4 (D)	4.63	5.02	4.65 (D)	4.58 (D)	4.9 (D)	5.3 (D)
6/28/2003	4.91	4.69	3.77	4.19	4.92	4	4.32	4.82	4.73
12/13/2003	4.87	4.81	4.25	5.2	4.82	4.97	4.73	4.8	4.53
5/28/2004	4.98	3.93	3.9	4.57	4.6	4.51	4.5	5.18	4.22
12/10/2004	4.35	4.25	3.71	4.16	4.29	4.09	4.28	4.43	4.26
2/5/2005					4.43			4.6	
6/24/2005	4.82	4.5	3.94	4.23	4.56	4.27	4.56	4.93	4.47
12/13/2005	4.66	4.52	3.94	4.24	4.34	4.54	4.49	4.36	4.47
7/12/2006	5.49	3.59	5.56	4.36	4.38	4.57	4.8	5.5	3.68
7/11/2014	5.55					4.64	4.83	5.54	
7/12/2014		5.44	3.88	3.23	5.68				5.33
7/15/2015	5.13	4.98	4.19	4.85	5.22	4.67	4.66	5.22	4.94
1/16/2016	5.06	4.87	4.35				5.05	4.9	4.85
1/17/2016					6.07				
8/31/2016		4.92	4.53	5.02	5.49	4.89			4.79
9/1/2016							7.21	5	
1/19/2017		4.86	4.79						4.72
1/23/2017				5.22					
1/24/2017					5.25		8.32		
1/25/2017						4.73			
2/28/2017	5.33								
7/17/2017	5.09								
7/18/2017		5.02							4.96
7/19/2017			4.83	5.23	5.54			5.27	
7/20/2017						4.96	7.41		
9/20/2017	5.29	4.72							
9/21/2017			4.57	5.34	5.19	4.78	6.94	4.99	4.7
1/8/2018	5.26	4.92							
1/9/2018		4.83	4.4	5	4.97	4.79	7.39	5.25	4.91
3/27/2018	5.27	4.91	4.11						4.92
3/28/2018				5.08		4.44	7.31	5.14	
3/29/2018					5.15				
7/10/2018	5.17	4.87	4.62		5.37	4.88		5.13	4.94
7/11/2018				5.07			7.09		
10/8/2018	5.18	4.84	4.51						4.76
10/9/2018				5.1	5.04	4.85	6.68	4.93	
1/29/2019						4.7			
1/30/2019	5.17	4.88	4.72	4.81		4.52		4.52	4.94
1/31/2019					5.38		5.69	4.52	
3/27/2019	5.09		4.56						
3/28/2019		4.8		4.99	5.38	4.68	5.46	4.85	4.99
9/11/2019	5.1								
9/12/2019		4.99	4.54	4.95	5.14	4.89	5.96	4.96	4.92

Prediction Limit

Constituent: pH (S.U.) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-3A (bg)	GWA-5 (bg)	GWC-1	GWC-2	GWC-4A	GWC-5	GWC-6	GWA-4 (bg)
3/10/2020	5.48	4.79	4.81						4.59
3/11/2020				5.21				5.23	
3/31/2020					5.64	4.66	6.17		
4/2/2020		4.75							
9/21/2020	4.95	4.69							4.6
9/22/2020			4.99	4.66	5.04	4.92	5.87	4.73	
3/23/2021	5.17	4.6			5.61				
3/24/2021			4.37	4.86		4.59	5.04	5.11	4.42
8/17/2021	5.24	4.76	4.62						4.78
8/18/2021				4.94	4.98	4.76	4.9	5.03	
2/7/2022									
2/8/2022	5.17	4.69	4.67		4.79				4.93
2/9/2022				5.01		4.82	4.82	5.05	
8/30/2022	5.01	4.71	4.51		4.96	4.71			4.72
8/31/2022				4.69				4.85	
9/1/2022							4.29		

Prediction Limit

Constituent: pH (S.U.) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-2B (bg)	GWA-7A (bg)	GWA-1B (bg)
10/5/1999			
11/12/1999			
12/29/1999			
2/17/2000			
9/13/2000			
11/10/2000			
1/4/2001			
12/11/2001			
4/4/2002			
12/6/2002			
6/28/2003			
12/13/2003			
5/28/2004			
12/10/2004			
2/5/2005			
6/24/2005			
12/13/2005			
7/12/2006			
7/11/2014			
7/12/2014			
7/15/2015			
1/16/2016			
1/17/2016			
8/31/2016			
9/1/2016			
1/19/2017			
1/23/2017			
1/24/2017			
1/25/2017			
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017			
7/20/2017			
9/20/2017			
9/21/2017			
1/8/2018			
1/9/2018			
3/27/2018			
3/28/2018			
3/29/2018			
7/10/2018			
7/11/2018			
10/8/2018	5.29	5.79	
10/9/2018			
1/29/2019			
1/30/2019	5.08	5.15	
1/31/2019			
3/27/2019			
3/28/2019	4.93	5.62	
9/11/2019			
9/12/2019	5.57	5.1	

Prediction Limit

Constituent: pH (S.U.) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-2B (bg)	GWA-7A (bg)	GWA-1B (bg)
3/10/2020	5.56		
3/11/2020		5.05	
3/31/2020			
4/2/2020			
9/21/2020		5.35	
9/22/2020	5.83		
3/23/2021	5.61	5.01	5.63
3/24/2021			
8/17/2021	5.82	5.51	5.83
8/18/2021			
2/7/2022	5.7	5.29	
2/8/2022			5.43
2/9/2022			
8/30/2022	4.9	5	5.86
8/31/2022			
9/1/2022			

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-4 (bg)	GWA-3A (bg)	GWC-4A	GWC-2	GWC-1	GWA-5 (bg)	GWC-5	GWA-1A (bg)	GWC-6
8/31/2016	7	<1	1.7	<1	<1	21			
9/1/2016							110	<1	
1/19/2017	6.3	<1				11			
1/23/2017					<1				
1/24/2017				<1			67		
1/25/2017			1.8						
1/27/2017									1.2
2/28/2017								2.7	
7/17/2017								<1	
7/18/2017	4.7	<1							
7/19/2017				<1	<1	12			
7/20/2017			0.83 (J)				25		0.84 (J)
9/20/2017		<1						<1	
9/21/2017	4.5		1.1	<1	<1	15	19		
9/22/2017									1.1
1/8/2018								<1	
1/9/2018	3	<1	0.79 (J)	<1	<1	25			
1/10/2018							25		0.95 (J)
3/27/2018	3.8	<1				31		<1	
3/28/2018			0.79 (J)		<1		26		
3/29/2018				<1					0.78 (J)
7/10/2018	3.4	<1	0.76 (J)	<1		19		<1	
7/11/2018					<1		26		0.78 (J)
10/8/2018	3.4					17		<1	
10/9/2018		<1	<1	<1	<1		10		0.79 (J)
1/30/2019	3.5	0.41 (J)	0.9 (J)		0.58 (J)	15		1.2	
1/31/2019				0.57 (J)			4.8		0.86 (J)
3/27/2019						20		<1	
3/28/2019	3	0.44 (J)	1.1	<1	0.67 (J)		3		0.96 (J)
9/11/2019								<1	
9/12/2019	3.7	0.69 (J)	1.1	0.43 (J)	0.78 (J)	10	4.9		1
3/10/2020	7.2	3				15		1.5	
3/11/2020					3.5				2.2
3/31/2020			2.5	1			11		
4/2/2020		<1							
9/21/2020	5	<1						<1	
9/22/2020			0.76 (J)	<1	0.63 (J)	12	4.3		0.59 (J)
3/23/2021		<1		0.8 (J)				<1	
3/24/2021	7		<1		0.77 (J)	16	<1		0.76 (J)
8/17/2021	5	<1				11		<1	
8/18/2021			<1	1.2	<1		<1		1.2
2/7/2022									
2/8/2022	5.9	<1		2.7		13		<1	
2/9/2022			<1		<1		<1		<1
8/30/2022	3.5	<1	<1	1.1		13		<1	
8/31/2022					<1				0.41 (J)
9/1/2022							<1		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-2B (bg)	GWA-7A (bg)	GWA-1B (bg)
8/31/2016			
9/1/2016			
1/19/2017			
1/23/2017			
1/24/2017			
1/25/2017			
1/27/2017			
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017			
7/20/2017			
9/20/2017			
9/21/2017			
9/22/2017			
1/8/2018			
1/9/2018			
1/10/2018			
3/27/2018			
3/28/2018			
3/29/2018			
7/10/2018			
7/11/2018			
10/8/2018	73	75	
10/9/2018			
1/30/2019	74	85	
1/31/2019			
3/27/2019			
3/28/2019	71	85	
9/11/2019			
9/12/2019	59	81	
3/10/2020	57		
3/11/2020		110	
3/31/2020			
4/2/2020			
9/21/2020		49	
9/22/2020	52		
3/23/2021	49	88	6.8
3/24/2021			
8/17/2021	54	84	5.2
8/18/2021			
2/7/2022	42	54	
2/8/2022			2.8
2/9/2022			
8/30/2022	74	73	1.6
8/31/2022			
9/1/2022			

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-1	GWA-3A (bg)	GWA-5 (bg)	GWC-4A	GWC-2	GWA-4 (bg)	GWC-5	GWC-6	GWA-1A (bg)
8/31/2016	18 (D)	42 (D)	66 (D)	36 (D)	42 (D)	14 (D)			
9/1/2016							500 (D)		2200 (o)
1/19/2017		52 (D)	48 (D)			34 (D)			
1/23/2017	22 (D)								
1/24/2017					28 (D)		160 (D)		
1/25/2017				58 (D)					
1/27/2017								58 (D)	
2/28/2017									74 (D)
7/17/2017									50
7/18/2017		32				26			
7/19/2017	52		48		42				
7/20/2017				16			210	64	
9/20/2017		16							26
9/21/2017	38		76	24	46	24	280		
9/22/2017								66	
1/8/2018									16
1/9/2018	4 (J)	4 (J)	18	8	10	16			
1/10/2018							94	54	
3/27/2018		30	48			<10			40
3/28/2018	4 (J)			26			60		
3/29/2018					52			78	
7/10/2018		30	76	26	38	14			90
7/11/2018	32						290	78	
10/8/2018			8			36			70
10/9/2018	22	56		16	52		44	70	
1/30/2019	24	41	67	37		40			82
1/31/2019					45		180	84	
3/27/2019			70						66
3/28/2019	25	36		28	45	24	110	62	
9/11/2019									53
9/12/2019	29	<10	20	<10	28	10	110	80	
3/10/2020		49	67			39			67
3/11/2020	37							67	
3/31/2020				52	50		750		
4/2/2020		61							
9/21/2020		61				31			31
9/22/2020	<10		53	36	30		440	30	
3/23/2021		76			56				47
3/24/2021	32		60	27		36	130	36	
8/17/2021		83	50			33			36
8/18/2021	32			29	37		160	36	
2/7/2022									
2/8/2022		62	57		30	29			45
2/9/2022	52			22			110	86	
8/30/2022		87	64	21	38	40			55
8/31/2022	37							61	
9/1/2022							140		

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2022 3:56 PM View: PLs Interwell App III

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-2B (bg)	GWA-7A (bg)	GWA-1B (bg)
8/31/2016			
9/1/2016			
1/19/2017			
1/23/2017			
1/24/2017			
1/25/2017			
1/27/2017			
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017			
7/20/2017			
9/20/2017			
9/21/2017			
9/22/2017			
1/8/2018			
1/9/2018			
1/10/2018			
3/27/2018			
3/28/2018			
3/29/2018			
7/10/2018			
7/11/2018			
10/8/2018	170	180	
10/9/2018			
1/30/2019	140	180	
1/31/2019			
3/27/2019			
3/28/2019	150	170	
9/11/2019			
9/12/2019	89	140	
3/10/2020	130		
3/11/2020		180	
3/31/2020			
4/2/2020			
9/21/2020		130	
9/22/2020	110		
3/23/2021	130	180	63
3/24/2021			
8/17/2021	130	160	43
8/18/2021			
2/7/2022	120	150	
2/8/2022			39
2/9/2022			
8/30/2022	150	160	79
8/31/2022			
9/1/2022			

FIGURE E.

Interwell Prediction Limit Appendix I - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/5/2022, 4:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Barium (mg/L)	**GWC-5**	**0.33**	**n/a**	**9/1/2022**	**0.36**	**Yes**	**277**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limit Appendix I - All Results

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/5/2022, 4:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Barium (mg/L)	GWC-1	0.33	n/a	8/31/2022	0.03	No	277	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Barium (mg/L)	GWC-2	0.33	n/a	8/30/2022	0.058	No	277	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Barium (mg/L)	GWC-4A	0.33	n/a	8/30/2022	0.035	No	277	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Barium (mg/L)	**GWC-5**	**0.33**	**n/a**	**9/1/2022**	**0.36**	**Yes**	**277**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Barium (mg/L)	GWC-6	0.33	n/a	8/31/2022	0.043	No	277	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Beryllium (mg/L)	GWC-1	0.0041	n/a	8/31/2022	0.0025ND	No	277	n/a	n/a	73.29	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Beryllium (mg/L)	GWC-2	0.0041	n/a	8/30/2022	0.00038J	No	277	n/a	n/a	73.29	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Beryllium (mg/L)	GWC-4A	0.0041	n/a	8/30/2022	0.0025ND	No	277	n/a	n/a	73.29	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Beryllium (mg/L)	GWC-5	0.0041	n/a	9/1/2022	0.0018J	No	277	n/a	n/a	73.29	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Beryllium (mg/L)	GWC-6	0.0041	n/a	8/31/2022	0.00049J	No	277	n/a	n/a	73.29	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Chromium (mg/L)	GWC-1	0.097	n/a	8/31/2022	0.002ND	No	276	n/a	n/a	40.22	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chromium (mg/L)	GWC-2	0.097	n/a	8/30/2022	0.005	No	276	n/a	n/a	40.22	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chromium (mg/L)	GWC-4A	0.097	n/a	8/30/2022	0.002ND	No	276	n/a	n/a	40.22	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chromium (mg/L)	GWC-5	0.097	n/a	9/1/2022	0.014	No	276	n/a	n/a	40.22	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chromium (mg/L)	GWC-6	0.097	n/a	8/31/2022	0.002ND	No	276	n/a	n/a	40.22	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Cobalt (mg/L)	GWC-1	0.017	n/a	8/31/2022	0.00036J	No	276	n/a	n/a	57.61	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	GWC-2	0.017	n/a	8/30/2022	0.0012J	No	276	n/a	n/a	57.61	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	GWC-4A	0.017	n/a	8/30/2022	0.00048J	No	276	n/a	n/a	57.61	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	GWC-5	0.017	n/a	9/1/2022	0.012	No	276	n/a	n/a	57.61	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	GWC-6	0.017	n/a	8/31/2022	0.00058J	No	276	n/a	n/a	57.61	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Copper (mg/L)	GWC-1	0.0055	n/a	8/31/2022	0.002ND	No	251	n/a	n/a	84.86	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Copper (mg/L)	GWC-2	0.0055	n/a	8/30/2022	0.002ND	No	251	n/a	n/a	84.86	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Copper (mg/L)	GWC-5	0.0055	n/a	9/1/2022	0.0012J	No	251	n/a	n/a	84.86	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Copper (mg/L)	GWC-6	0.0055	n/a	8/31/2022	0.002ND	No	251	n/a	n/a	84.86	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Lead (mg/L)	GWC-1	0.044	n/a	8/31/2022	0.001ND	No	277	n/a	n/a	78.7	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Lead (mg/L)	GWC-2	0.044	n/a	8/30/2022	0.001ND	No	277	n/a	n/a	78.7	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Lead (mg/L)	GWC-5	0.044	n/a	9/1/2022	0.00031J	No	277	n/a	n/a	78.7	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Lead (mg/L)	GWC-6	0.044	n/a	8/31/2022	0.001ND	No	277	n/a	n/a	78.7	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	GWC-1	0.11	n/a	8/31/2022	0.0011	No	255	n/a	n/a	71.37	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	GWC-2	0.11	n/a	8/30/2022	0.001ND	No	255	n/a	n/a	71.37	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	GWC-4A	0.11	n/a	8/30/2022	0.001ND	No	255	n/a	n/a	71.37	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	GWC-5	0.11	n/a	9/1/2022	0.001ND	No	255	n/a	n/a	71.37	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	GWC-6	0.11	n/a	8/31/2022	0.0013	No	255	n/a	n/a	71.37	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Zinc (mg/L)	GWC-1	0.11	n/a	8/31/2022	0.005ND	No	256	n/a	n/a	29.3	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Zinc (mg/L)	GWC-2	0.11	n/a	8/30/2022	0.012	No	256	n/a	n/a	29.3	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Zinc (mg/L)	GWC-4A	0.11	n/a	8/30/2022	0.0046J	No	256	n/a	n/a	29.3	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Zinc (mg/L)	GWC-5	0.11	n/a	9/1/2022	0.035	No	256	n/a	n/a	29.3	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Zinc (mg/L)	GWC-6	0.11	n/a	8/31/2022	0.0073	No	256	n/a	n/a	29.3	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2

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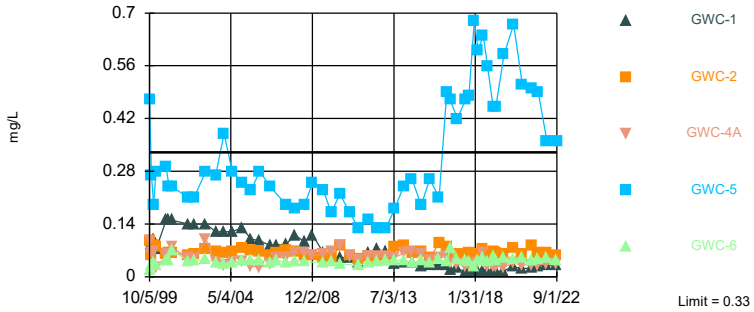
Exceeds Limit: GWC-5

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. Limit is highest of 277 background values. Annual per-constituent alpha = 0.0004919. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 5 points to limit.

Constituent: Barium Analysis Run 11/5/2022 3:59 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

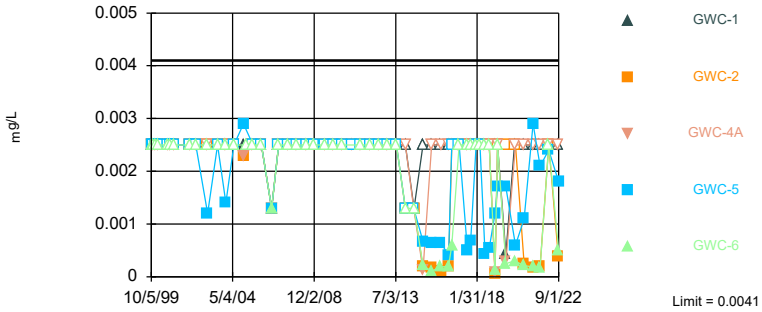
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 277 background values. 73.29% NDs. Annual per-constituent alpha = 0.0004919. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 5 points to limit.

Constituent: Beryllium Analysis Run 11/5/2022 3:59 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

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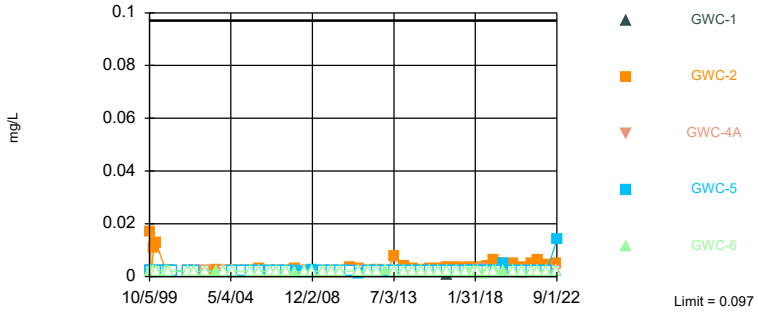
Hollow symbols indicate censored values.

Within Limit

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. Limit is highest of 276 background values. 40.22% NDs. Annual per-constituent alpha = 0.0004919. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 5 points to limit.

Constituent: Chromium Analysis Run 11/5/2022 3:59 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

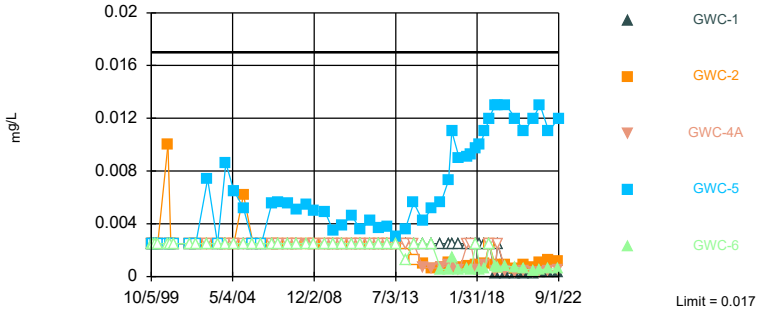
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 276 background values. 57.61% NDs. Annual per-constituent alpha = 0.0004919. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 5 points to limit.

Constituent: Cobalt Analysis Run 11/5/2022 4:00 PM View: PLs Interwell State

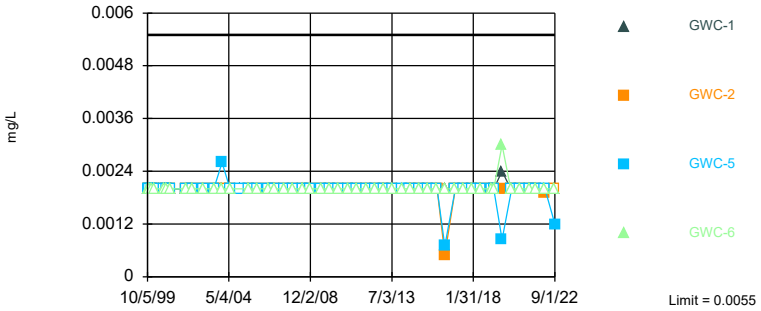
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 251 background values. 84.86% NDs. Annual per-constituent alpha = 0.0004919. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 4 points to limit. Assumes 1 future value.

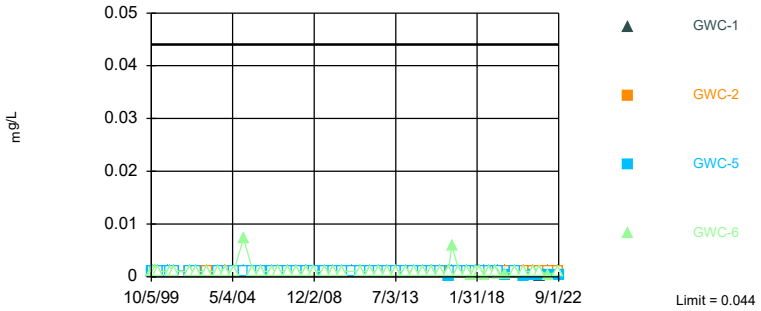
Constituent: Copper Analysis Run 11/5/2022 4:00 PM View: PLs Interwell State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 277 background values. 78.7% NDs. Annual per-constituent alpha = 0.0004919. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 4 points to limit. Assumes 1 future value.

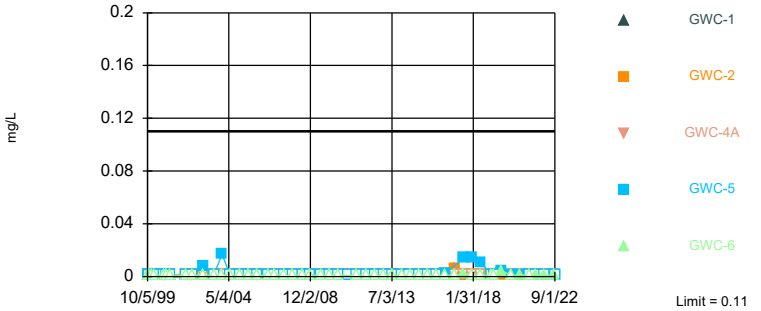
Constituent: Lead Analysis Run 11/5/2022 4:00 PM View: PLs Interwell State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 255 background values. 71.37% NDs. Annual per-constituent alpha = 0.0004919. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 5 points to limit.

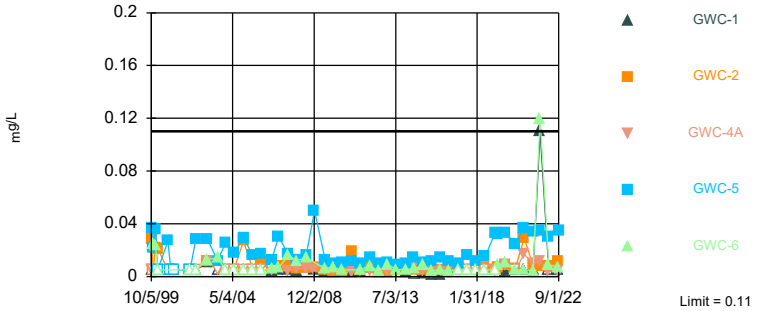
Constituent: Vanadium Analysis Run 11/5/2022 4:00 PM View: PLs Interwell State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

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. Limit is highest of 256 background values. 29.3% NDs. Annual per-constituent alpha = 0.0004919. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 5 points to limit.

Constituent: Zinc Analysis Run 11/5/2022 4:00 PM View: PLs Interwell State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-4 (bg)	GWC-6	GWA-5 (bg)	GWC-4A	GWA-7 (bg)	GWC-1	GWC-5	GWA-3A (bg)
10/5/1999	0.084	0.013	0.017	0.1	0.095	0.26	0.096	0.47	0.031
11/12/1999	0.099	0.017	0.031	0.086	0.063	0.16	0.085	0.27	0.023
12/29/1999	0.18	0.027	0.039	0.12	0.066	0.13	0.1	0.19	0.033
2/17/2000	0.12	0.023	0.031	0.13	0.023	0.12	0.072	0.28	0.026
9/13/2000	0.038	0.022	0.043	0.18	0.056	0.01	0.15	0.29	0.044
11/10/2000	0.065	0.035	0.044	0.018	0.059	0.27	0.15	0.24	0.044
1/4/2001	0.037	0.032	0.071	0.23	0.079	0.93 (o)	0.15	0.24	0.043
12/11/2001	0.027	0.032	0.042	0.12	0.049	0.27	0.14	0.21	0.041
4/4/2002	0.027	0.03	0.043	0.094	0.048	0.043	0.14	0.21	0.038
12/6/2002	0.028	0.041	0.046	0.33	0.1	0.26	0.14	0.28	0.044
6/28/2003	0.054	0.035	0.038	0.11	0.036	0.093	0.12	0.27	0.045
12/13/2003	0.027	0.029	0.035	0.057	0.031	0.28	0.12	0.38	0.039
5/28/2004	0.18	0.033	0.037	0.035	0.038	0.04	0.12	0.28	0.042
12/10/2004	0.1	0.037	0.043	0.04	0.041	0.035	0.13	0.25	0.045
6/24/2005	0.045	0.034	0.044	0.037	0.028	0.031	0.1	0.23	0.042
12/13/2005	0.048	0.03	0.045	0.039	0.025	0.027	0.096	0.28	0.043
7/12/2006	0.13	0.03	0.037	0.042	0.033	0.3	0.083	0.24	0.043
12/1/2006	0.012	0.032	0.044	0.044	0.051	0.011	0.084	0.019 (o)	0.041
6/21/2007	0.2	0.03	0.037	0.058	0.052	0.024	0.087	0.19	0.043
12/15/2007	0.14	0.034	0.042	0.073	0.062	0.026	0.11	0.18	0.045
6/21/2008		0.037			0.065	0.032	0.093	0.19	
6/22/2008	0.1		0.04	0.096					0.05
12/6/2008		0.034		0.094	0.056	0.11	0.11		0.14
12/7/2008	0.043		0.12 (o)					0.25	
7/10/2009						0.031			0.046
7/11/2009	0.13	0.037	0.038	0.12	0.059		0.064	0.23	
12/22/2009				0.089					
12/23/2009	0.17	0.058	0.04		0.067	0.028	0.052	0.17	0.049
6/23/2010		0.046		0.081	0.084	0.028	0.051	0.22	0.043
6/24/2010	0.045		0.035						
1/8/2011		0.036		0.097	0.053	0.024	0.052	0.17	0.047
1/9/2011	0.11								
7/10/2011		0.031		0.084	0.043	0.022	0.036	0.13	0.035
7/11/2011	0.022		0.03						
1/19/2012		0.045				0.028			0.05
1/20/2012	0.043		0.039	0.099	0.054		0.065	0.15	
7/12/2012		0.039		0.12	0.053	0.026	0.074	0.13	0.042
7/13/2012	0.05		0.04						
1/21/2013	0.11	0.042	0.045	0.095	0.053	0.031	0.066	0.13	0.048
7/19/2013						0.026			
7/20/2013	0.04	0.054	0.043	0.086	0.052		0.035	0.18	0.047
1/16/2014						0.028			
1/17/2014	0.082	0.057	0.045	0.14	0.063		0.036	0.24	0.049
7/11/2014					0.068			0.26	
7/12/2014	0.034	0.042	0.036	0.17		0.023	0.037		0.043
1/15/2015		0.041				0.024			0.05
1/16/2015	0.029		0.044	0.12	0.059		0.027	0.19	
7/15/2015	0.025	0.04	0.038	0.12	0.045	0.023	0.031	0.26	0.044
1/16/2016	0.026	0.04	0.047	0.12		0.024	0.032	0.21	0.048
1/17/2016					0.052				
6/22/2016	0.0374 (D)	0.0453		0.0839	0.0528	0.02	0.0323		0.0471 (D)
6/23/2016			0.0393					0.491	

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-4 (bg)	GWC-6	GWA-5 (bg)	GWC-4A	GWA-7 (bg)	GWC-1	GWC-5	GWA-3A (bg)
8/30/2016						0.02			
8/31/2016		0.041		0.093	0.037		0.019		0.043
9/1/2016	0.86 (o)		0.075					0.47	
1/19/2017		0.052		0.079		0.023			0.052
1/23/2017							0.023		
1/24/2017								0.42	
1/25/2017					0.034				
1/27/2017			0.046						
2/28/2017	0.027								
7/17/2017	0.022								
7/18/2017		0.037							0.046
7/19/2017				0.085		0.013	0.013		
7/20/2017			0.045		0.028			0.47	
9/20/2017	0.023					0.021			0.053
9/21/2017		0.042		0.1	0.032		0.016	0.48	
9/22/2017			0.04						
1/8/2018	0.022								
1/9/2018		0.043		0.13	0.033		0.016		0.05
1/10/2018			0.027			0.018		0.68	
3/27/2018	0.023	0.039		0.18					0.054
3/28/2018					0.037	0.019	0.014	0.6	
3/29/2018			0.044						
7/10/2018	0.024	0.043		0.14 (o)	0.065	0.026			0.056
7/11/2018			0.051				0.016	0.64	
10/8/2018	0.03	0.042		0.11					
10/9/2018			0.041		0.029	0.014	0.015	0.56	0.061
1/30/2019	0.024	0.04		0.079	0.027	0.036	0.018		0.071
1/31/2019			0.053					0.45	
3/27/2019	0.021			0.12					
3/28/2019		0.041	0.045		0.028	0.014	0.014	0.45	0.068
9/11/2019	0.022								
9/12/2019		0.044	0.052	0.086	0.026	0.015	0.016	0.59	0.073
3/10/2020	0.018	0.058		0.081					0.082
3/11/2020			0.048			0.014	0.027		
3/31/2020					0.036			0.67	
4/2/2020									0.088
9/21/2020	0.023	0.052							0.083
9/22/2020			0.051	0.078	0.031		0.022	0.51	
3/23/2021	0.023								0.093
3/24/2021		0.052	0.044	0.096	0.031		0.023	0.5	
8/17/2021	0.025	0.056		0.094					0.095
8/18/2021			0.047		0.032		0.029	0.49	
2/7/2022									
2/8/2022	0.024	0.054		0.1					0.1
2/9/2022			0.05		0.034		0.03	0.36	
8/30/2022	0.023	0.046		0.13	0.035				0.11
8/31/2022			0.043				0.03		
9/1/2022								0.36	

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-2	GWA-2B (bg)	GWA-1B (bg)
10/5/1999	0.097		
11/12/1999	0.057		
12/29/1999	0.084		
2/17/2000	0.079		
9/13/2000	0.06		
11/10/2000	0.062		
1/4/2001	0.064		
12/11/2001	0.057		
4/4/2002	0.06		
12/6/2002	0.072		
6/28/2003	0.066		
12/13/2003	0.063		
5/28/2004	0.067		
12/10/2004	0.075		
6/24/2005	0.071		
12/13/2005	0.068		
7/12/2006	0.058		
12/1/2006	0.063		
6/21/2007	0.071		
12/15/2007	0.068		
6/21/2008			
6/22/2008	0.057		
12/6/2008	0.058		
12/7/2008			
7/10/2009			
7/11/2009	0.05		
12/22/2009			
12/23/2009	0.05		
6/23/2010	0.083		
6/24/2010			
1/8/2011	0.057		
1/9/2011			
7/10/2011	0.046		
7/11/2011			
1/19/2012			
1/20/2012	0.055		
7/12/2012	0.045		
7/13/2012			
1/21/2013	0.045		
7/19/2013			
7/20/2013	0.079		
1/16/2014			
1/17/2014	0.084		
7/11/2014			
7/12/2014	0.065		
1/15/2015	0.067		
1/16/2015			
7/15/2015	0.049		
1/16/2016			
1/17/2016	0.09		
6/22/2016	0.0806		
6/23/2016			

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-2	GWA-2B (bg)	GWA-1B (bg)
8/30/2016			
8/31/2016	0.057		
9/1/2016			
1/19/2017			
1/23/2017			
1/24/2017	0.06		
1/25/2017			
1/27/2017			
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017	0.06		
7/20/2017			
9/20/2017			
9/21/2017	0.063		
9/22/2017			
1/8/2018			
1/9/2018	0.059		
1/10/2018			
3/27/2018			
3/28/2018			
3/29/2018	0.06		
7/10/2018	0.073		
7/11/2018			
10/8/2018		0.049	
10/9/2018	0.057		
1/30/2019		0.041	
1/31/2019	0.067		
3/27/2019			
3/28/2019	0.064	0.035	
9/11/2019			
9/12/2019	0.06	0.049	
3/10/2020		0.047	
3/11/2020			
3/31/2020	0.077		
4/2/2020			
9/21/2020			
9/22/2020	0.061	0.049	
3/23/2021	0.083	0.044	0.021
3/24/2021			
8/17/2021		0.047	0.022
8/18/2021	0.062		
2/7/2022		0.047	
2/8/2022	0.062		0.019
2/9/2022			
8/30/2022	0.058	0.03	0.022
8/31/2022			
9/1/2022			

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWC-6	GWA-7 (bg)	GWC-1	GWC-2	GWA-3A (bg)	GWC-4A
10/5/1999	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
11/12/1999	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
12/29/1999	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2/17/2000	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
9/13/2000	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
11/10/2000	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
1/4/2001	<0.0025	<0.0025	<0.0025	<0.0025	0.016 (o)	<0.0025	<0.0025	<0.0025	<0.0025
12/11/2001	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
4/4/2002	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
12/6/2002	<0.0025	<0.0025	0.0018	<0.0025	0.0039	<0.0025	<0.0025	<0.0025	<0.0025
6/28/2003	<0.0025	<0.0025	0.0036	<0.0025	0.0013	<0.0025	<0.0025	<0.0025	<0.0025
12/13/2003	<0.0025	<0.0025	0.0019	<0.0025	0.0041	<0.0025	<0.0025	<0.0025	<0.0025
5/28/2004	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
12/10/2004	0.0028	0.0023	0.0035	0.0058 (o)	0.0025	0.0025	0.0023	0.0024	0.0023
2/5/2005				<0.0025					
6/24/2005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
12/13/2005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
7/12/2006	0.0013	<0.0025	0.0013	0.0013	0.005 (o)	0.0013	0.0013	<0.0025	0.0013
12/1/2006	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
6/21/2007	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
12/15/2007	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
6/21/2008		<0.0025			<0.0025	<0.0025			<0.0025
6/22/2008	<0.0025		<0.0025	<0.0025			<0.0025	<0.0025	
12/6/2008		<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
12/7/2008	<0.0025			<0.0025					
7/10/2009					<0.0025			<0.0025	
7/11/2009	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025		<0.0025
12/22/2009			<0.0025						
12/23/2009	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
6/23/2010		<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
6/24/2010	<0.0025			<0.0025					
1/8/2011		<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
1/9/2011	<0.0025								
7/10/2011		<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
7/11/2011	<0.0025			<0.0025					
1/19/2012		<0.0025			<0.0025			<0.0025	
1/20/2012	<0.0025		<0.0025	<0.0025		<0.0025	<0.0025		<0.0025
7/12/2012		<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
7/13/2012	<0.0025			<0.0025					
1/21/2013	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
7/19/2013					<0.0025				
7/20/2013	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
1/16/2014					<0.0013 (J)				
1/17/2014	<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	<0.0013 (J)		<0.0025	<0.0013 (J)	<0.0025	<0.0025
7/11/2014									<0.0013 (J)
7/12/2014	<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	<0.0025	
1/15/2015		0.0002 (J)			0.00027 (J)		0.00019 (J)	0.00039 (J)	
1/16/2015	0.00022 (J)		0.00043 (J)	0.00021 (J)		<0.0025			0.00012 (J)
7/15/2015	0.00015 (J)	0.00018 (J)	0.00064 (J)	0.00011 (J)	0.00021 (J)	<0.0025	0.00018 (J)	0.00031 (J)	<0.0025
1/16/2016	0.00011 (J)	0.00013 (J)	0.00039 (J)	0.00019 (J)	0.00016 (J)	<0.0025		0.00034 (J)	
1/17/2016							0.00011 (J)		<0.0025
6/22/2016	0.00025 (JD)	0.0001 (J)	0.0002 (J)		0.0002 (J)	<0.0025	0.0002 (J)	0.0004 (J)	<0.0025

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWC-6	GWA-7 (bg)	GWC-1	GWC-2	GWA-3A (bg)	GWC-4A
6/23/2016				0.0002 (J)					
8/30/2016					<0.0025				
8/31/2016		<0.0025	<0.0025			<0.0025	<0.0025	0.00035 (J)	<0.0025
9/1/2016	0.0084 (o)			0.0006 (J)					
1/19/2017		<0.0025	<0.0025		<0.0025			<0.0025	
1/23/2017						<0.0025			
1/24/2017							<0.0025		
1/25/2017									<0.0025
1/27/2017				<0.0025					
2/28/2017	<0.0025								
7/17/2017	<0.0025								
7/18/2017		<0.0025						0.00038 (J)	
7/19/2017			<0.0025		<0.0025	<0.0025	<0.0025		
7/20/2017				<0.0025					<0.0025
9/20/2017	<0.0025				<0.0025			0.00039 (J)	
9/21/2017		<0.0025	<0.0025			<0.0025	<0.0025		<0.0025
9/22/2017				<0.0025					
1/8/2018	<0.0025								
1/9/2018		<0.0025	<0.0025			<0.0025	<0.0025	<0.0025	<0.0025
1/10/2018				<0.0025	<0.0025				
3/27/2018	<0.0025	<0.0025	<0.0025					<0.0025	
3/28/2018					<0.0025	<0.0025			<0.0025
3/29/2018				<0.0025			<0.0025		
7/10/2018	<0.0025	<0.0025	<0.0025		<0.0025		<0.0025	0.00038 (J)	<0.0025
7/11/2018				<0.0025		<0.0025			
10/8/2018	<0.0025	<0.0025	<0.0025						
10/9/2018				<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
1/30/2019	0.00026 (J)	0.00019 (J)	0.00024 (J)		0.00047 (J)	<0.0025		0.00051 (J)	7E-05 (J)
1/31/2019				0.00012 (J)			6.5E-05 (J)		
3/27/2019	<0.0025		<0.0025						
3/28/2019		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	0.00046 (J)	<0.0025
9/11/2019	0.00019 (J)								
9/12/2019		<0.0025	0.00036 (J)	0.00025 (J)	0.00024 (J)	0.00043 (J)	<0.0025	0.00084 (J)	0.00028 (J)
3/10/2020	0.00018 (J)	0.00029 (J)	0.00028 (J)					0.00058 (J)	
3/11/2020				0.0003 (J)	<0.0025	<0.0025			
3/31/2020							<0.0025		<0.0025
4/2/2020								0.00062 (J)	
9/21/2020	0.0002 (J)	<0.0025						0.00054 (J)	
9/22/2020			<0.0025	0.00021 (J)		<0.0025	0.00025 (J)		<0.0025
3/23/2021	0.00021 (J)						0.00018 (J)	0.00063 (J)	
3/24/2021		0.00019 (J)	0.00026 (J)	0.00019 (J)		<0.0025			<0.0025
8/17/2021	<0.0025	<0.0025	0.00018 (J)					0.00049 (J)	
8/18/2021				0.00018 (J)		<0.0025	0.0002 (J)		<0.0025
2/7/2022									
2/8/2022	<0.0025	<0.0025	<0.0025				<0.0025	0.00061 (J)	
2/9/2022				<0.0025		<0.0025			<0.0025
8/30/2022	0.00035 (J)	0.00028 (J)	<0.0025				0.00038 (J)	0.00083 (J)	<0.0025
8/31/2022				0.00049 (J)		<0.0025			
9/1/2022									

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-5	GWA-2B (bg)	GWA-1B (bg)
10/5/1999	<0.0025		
11/12/1999	<0.0025		
12/29/1999	<0.0025		
2/17/2000	<0.0025		
9/13/2000	<0.0025		
11/10/2000	<0.0025		
1/4/2001	<0.0025		
12/11/2001	<0.0025		
4/4/2002	<0.0025		
12/6/2002	0.0012		
6/28/2003	<0.0025		
12/13/2003	0.0014		
5/28/2004	<0.0025		
12/10/2004	0.0029		
2/5/2005			
6/24/2005	<0.0025		
12/13/2005	<0.0025		
7/12/2006	0.0013		
12/1/2006	<0.0025		
6/21/2007	<0.0025		
12/15/2007	<0.0025		
6/21/2008	<0.0025		
6/22/2008			
12/6/2008			
12/7/2008	<0.0025		
7/10/2009			
7/11/2009	<0.0025		
12/22/2009			
12/23/2009	<0.0025		
6/23/2010	<0.0025		
6/24/2010			
1/8/2011	<0.0025		
1/9/2011			
7/10/2011	<0.0025		
7/11/2011			
1/19/2012			
1/20/2012	<0.0025		
7/12/2012	<0.0025		
7/13/2012			
1/21/2013	<0.0025		
7/19/2013			
7/20/2013	<0.0025		
1/16/2014			
1/17/2014	<0.0013 (J)		
7/11/2014	<0.0013 (J)		
7/12/2014			
1/15/2015			
1/16/2015	0.00067 (J)		
7/15/2015	0.00065 (J)		
1/16/2016	0.00065 (J)		
1/17/2016			
6/22/2016			

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-5	GWA-2B (bg)	GWA-1B (bg)
6/23/2016	0.0004 (J)		
8/30/2016			
8/31/2016			
9/1/2016	<0.0025		
1/19/2017			
1/23/2017			
1/24/2017	<0.0025		
1/25/2017			
1/27/2017			
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017			
7/20/2017	0.00049 (J)		
9/20/2017			
9/21/2017	0.00068 (J)		
9/22/2017			
1/8/2018			
1/9/2018			
1/10/2018	<0.0025		
3/27/2018			
3/28/2018	<0.0025		
3/29/2018			
7/10/2018			
7/11/2018	0.00043 (J)		
10/8/2018		0.0014 (J)	
10/9/2018	0.00054 (J)		
1/30/2019		0.0019 (J)	
1/31/2019	0.0012 (J)		
3/27/2019			
3/28/2019	0.0017 (J)	0.0017 (J)	
9/11/2019			
9/12/2019	0.0017	0.00088 (J)	
3/10/2020		0.00087 (J)	
3/11/2020			
3/31/2020	0.0006 (J)		
4/2/2020			
9/21/2020			
9/22/2020	0.0011 (J)	0.00042 (J)	
3/23/2021		0.00071 (J)	<0.0025
3/24/2021	0.0029		
8/17/2021		0.00068 (J)	<0.0025
8/18/2021	0.0021 (J)		
2/7/2022		0.00071 (J)	
2/8/2022			<0.0025
2/9/2022	0.0024 (J)		
8/30/2022		0.0019 (J)	<0.0025
8/31/2022			
9/1/2022	0.0018 (J)		

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWC-6	GWA-4 (bg)	GWA-5 (bg)	GWC-5	GWC-1	GWA-7 (bg)	GWA-3A (bg)	GWC-2
10/5/1999	0.023	<0.002	<0.002	<0.002	<0.002	<0.002	0.097	<0.002	0.017
11/12/1999	0.03	<0.002	<0.002	<0.002	<0.002	<0.002	0.056	<0.002	<0.002
12/29/1999	0.059 (o)	<0.002	<0.002	<0.002	<0.002	<0.002	0.05	<0.002	0.011
2/17/2000	0.048 (o)	<0.002	<0.002	<0.002	<0.002	<0.002	0.058	<0.002	0.013
9/13/2000	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.043	<0.002	<0.002
11/10/2000	0.018	<0.002	<0.002	<0.002	<0.002	<0.002	0.011	<0.002	<0.002
1/4/2001	<0.002	0.016 (o)	<0.002	<0.002	<0.002	<0.002	0.33 (o)	<0.002	<0.002
12/11/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.095	<0.002	<0.002
4/4/2002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.015	<0.002	<0.002
12/6/2002	0.0046	<0.002	0.0037	0.027	0.008 (o)	<0.002	0.07	<0.002	<0.002
6/28/2003	0.0082	0.0021	0.0039	0.0051	0.021 (o)	0.007 (o)	0.016	0.0053	0.0027
12/13/2003	<0.002	<0.002	<0.002	<0.002	0.011 (o)	<0.002	0.038	<0.002	<0.002
5/28/2004	0.016	<0.002	<0.002	0.0031	<0.002	<0.002	0.004	0.0027	<0.002
12/10/2004	0.0087	0.0046 (o)	<0.002	0.0067	<0.002	<0.002	0.0043	0.004	0.74 (o)
2/5/2005									<0.002
6/24/2005	0.0069	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	0.0031	0.0023
12/13/2005	0.0075	<0.002	<0.002	<0.002	<0.002	<0.002	0.0037	0.0031	0.0031
7/12/2006	0.027	<0.002	0.023	<0.002	<0.002	<0.002	0.071	0.0025	0.0016
12/1/2006	<0.002	<0.002	0.0017	<0.002	<0.002	<0.002	0.0064	0.0037	0.0022
6/21/2007	0.012	<0.002	0.0027	0.0021	<0.002	<0.002	<0.002	0.0053	0.002
12/15/2007	0.0085	0.0016	0.0026	0.0022	0.002	<0.002	0.0044	0.0044	0.0029
6/21/2008			0.0021		0.0017	<0.002	0.004		
6/22/2008	0.021	<0.002		0.0019				0.0059	0.0023
12/6/2008			<0.002	<0.002		<0.002	0.0032	0.0031	0.0023
12/7/2008	0.01	<0.002			0.0025				
7/10/2009							0.004	0.0029	
7/11/2009	0.0073	<0.002	<0.002	<0.002	<0.002	<0.002			0.0015
12/22/2009				0.0032					
12/23/2009	0.013	<0.002	<0.002		<0.002	<0.002	0.0041	0.0025	0.0014
6/23/2010			<0.002	<0.002	<0.002	<0.002	0.0048	0.0013	0.0018
6/24/2010	0.0076	<0.002							
1/8/2011			<0.002	0.0019	<0.002	<0.002	0.0077	0.0017	0.0033
1/9/2011	0.023								
7/10/2011			<0.002	<0.002	0.0013	<0.002	0.0058	<0.002	0.0028
7/11/2011	0.0042	<0.002							
1/19/2012			<0.002				0.0059	<0.002	
1/20/2012	0.009	<0.002		<0.002	<0.002	<0.002			<0.002
7/12/2012			<0.002	0.0044	<0.002	<0.002	0.0053	<0.002	0.0025
7/13/2012	0.013	<0.002							
1/21/2013	0.032	0.0025	<0.002	<0.002	<0.002	<0.002	0.0059	0.0014	0.0022
7/19/2013							0.0063		
7/20/2013	0.01	<0.002	<0.002	0.0017	<0.002	<0.002		0.0021	0.0075
1/16/2014							0.0083		
1/17/2014	0.024	<0.002	<0.002	<0.0013 (J)	<0.002	<0.002		0.0023	0.0039
7/11/2014					<0.002				
7/12/2014	0.0069	<0.002	<0.002	0.0014		<0.002	0.0087	<0.0013 (J)	0.0031
1/15/2015			<0.002				0.0077	<0.002	0.0026
1/16/2015	0.0064	<0.002		0.0011 (J)	<0.002	<0.002			
7/15/2015	0.0051	<0.002	<0.002	0.0016	<0.002	<0.002	0.0078	<0.002	0.0032
1/16/2016	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	0.0084	0.0025	
1/17/2016									0.0029
6/22/2016	0.00815 (JD)		0.0005 (J)	0.002 (J)		0.0008 (J)	0.0061 (J)	0.00255 (JD)	0.0036 (J)

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWC-6	GWA-4 (bg)	GWA-5 (bg)	GWC-5	GWC-1	GWA-7 (bg)	GWA-3A (bg)	GWC-2
6/23/2016		<0.002			<0.002				
8/30/2016							0.0063		
8/31/2016			<0.002	0.002 (J)		<0.002		0.0042	0.0027
9/1/2016	0.12 (o)	0.0069 (o)			<0.002				
1/19/2017			<0.002	0.002 (J)			0.008	0.0039	
1/23/2017						<0.002			
1/24/2017					<0.002				0.0034
1/25/2017									
1/27/2017		<0.002 (D)							
2/28/2017	0.0012 (J)								
7/17/2017	0.003								
7/18/2017			<0.002					0.0018 (J)	
7/19/2017				0.0017 (J)		<0.002	0.0062		0.0028
7/20/2017		<0.002			<0.002				
9/20/2017	0.0025						0.0078	0.0026	
9/21/2017			<0.002	0.0021 (J)	<0.002	<0.002			0.0035
9/22/2017		0.0015 (J)							
1/8/2018	0.0038								
1/9/2018			0.0087	0.0019 (J)		<0.002		0.0038	0.003
1/10/2018		<0.002			<0.002		0.009		
3/27/2018	0.0044		<0.002	<0.002				0.0037	
3/28/2018					<0.002	<0.002	0.0081		
3/29/2018		<0.002							0.0032
7/10/2018	0.0045		<0.002	0.0012 (J)			0.0095	0.0022 (J)	0.0033
7/11/2018		0.0011 (J)			<0.002	<0.002			
10/8/2018	0.0054		<0.002	0.0015 (J)					
10/9/2018		<0.002			<0.002	<0.002	0.0026	0.0047	0.0039
1/30/2019	0.0061		0.00088 (J)	0.0014 (J)		0.0024 (J)	0.01	0.005	
1/31/2019		<0.002			<0.002				0.0061
3/27/2019	0.0044			<0.002					
3/28/2019		0.0019 (J)	<0.002		<0.002	<0.002	0.0048	0.0037	0.0049
9/11/2019	0.0076								
9/12/2019		0.0022	<0.002	0.0032	0.0051	<0.002	0.0035	<0.002	0.0048
3/10/2020	0.0041		<0.002	0.0031				<0.002	
3/11/2020		<0.002				<0.002	0.0053		
3/31/2020					<0.002				0.005
4/2/2020								0.0031	
9/21/2020	0.0049		<0.002					<0.002	
9/22/2020		<0.002		0.0017 (J)	<0.002	0.0017 (J)			0.0036
3/23/2021	0.0047							0.0022	0.0048
3/24/2021		<0.002	<0.002	<0.002	<0.002	<0.002			
8/17/2021	0.0046		<0.002	<0.002				<0.002	
8/18/2021		<0.002			<0.002	<0.002			0.0064
2/7/2022									
2/8/2022	0.0051		<0.002	0.003				<0.002	0.0046
2/9/2022		<0.002			<0.002	<0.002			
8/30/2022	0.0047		<0.002	<0.002				0.0084	0.005
8/31/2022		<0.002				<0.002			
9/1/2022					0.014				

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-4A	GWA-2B (bg)	GWA-1B (bg)
10/5/1999	<0.002		
11/12/1999	<0.002		
12/29/1999	<0.002		
2/17/2000	<0.002		
9/13/2000	<0.002		
11/10/2000	<0.002		
1/4/2001	<0.002		
12/11/2001	<0.002		
4/4/2002	<0.002		
12/6/2002	<0.002		
6/28/2003	0.061 (o)		
12/13/2003	<0.002		
5/28/2004	<0.002		
12/10/2004	0.0059 (o)		
2/5/2005			
6/24/2005	<0.002		
12/13/2005	<0.002		
7/12/2006	<0.002		
12/1/2006	<0.002		
6/21/2007	<0.002		
12/15/2007	<0.002		
6/21/2008	<0.002		
6/22/2008			
12/6/2008	<0.002		
12/7/2008			
7/10/2009			
7/11/2009	<0.002		
12/22/2009			
12/23/2009	<0.002		
6/23/2010	<0.002		
6/24/2010			
1/8/2011	<0.002		
1/9/2011			
7/10/2011	<0.002		
7/11/2011			
1/19/2012			
1/20/2012	<0.002		
7/12/2012	<0.002		
7/13/2012			
1/21/2013	<0.002		
7/19/2013			
7/20/2013	<0.002		
1/16/2014			
1/17/2014	<0.002		
7/11/2014	<0.002		
7/12/2014			
1/15/2015			
1/16/2015	<0.002		
7/15/2015	<0.002		
1/16/2016			
1/17/2016	<0.002		
6/22/2016	<0.002		

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-4A	GWA-2B (bg)	GWA-1B (bg)
6/23/2016			
8/30/2016			
8/31/2016	<0.002		
9/1/2016			
1/19/2017			
1/23/2017			
1/24/2017			
1/25/2017	<0.002 (D)		
1/27/2017			
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017			
7/20/2017	<0.002		
9/20/2017			
9/21/2017	<0.002		
9/22/2017			
1/8/2018			
1/9/2018	<0.002		
1/10/2018			
3/27/2018			
3/28/2018	0.0019 (J)		
3/29/2018			
7/10/2018	0.0029		
7/11/2018			
10/8/2018		<0.002	
10/9/2018	<0.002		
1/30/2019	<0.002	0.003	
1/31/2019			
3/27/2019			
3/28/2019	<0.002	0.0017 (J)	
9/11/2019			
9/12/2019	0.0028	<0.002	
3/10/2020		<0.002	
3/11/2020			
3/31/2020	<0.002		
4/2/2020			
9/21/2020			
9/22/2020	<0.002	<0.002	
3/23/2021		<0.002	<0.002
3/24/2021	<0.002		
8/17/2021		<0.002	<0.002
8/18/2021	<0.002		
2/7/2022		<0.002	
2/8/2022			<0.002
2/9/2022	<0.002		
8/30/2022	<0.002	0.0028	<0.002
8/31/2022			
9/1/2022			

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWC-5	GWC-4A	GWC-2	GWC-1	GWA-7 (bg)	GWA-5 (bg)	GWA-4 (bg)	GWA-3A (bg)
10/5/1999	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.013	<0.0025	<0.0025	<0.0025
11/12/1999	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
12/29/1999	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2/17/2000	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
9/13/2000	<0.0025	<0.0025	<0.0025	0.01	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
11/10/2000	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.017	<0.0025	<0.0025	<0.0025
1/4/2001	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.054 (o)	<0.0025	<0.0025	<0.0025
12/11/2001	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.014	<0.0025	<0.0025	<0.0025
4/4/2002	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
12/6/2002	<0.0025	0.0074	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
6/28/2003	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.018 (o)	<0.0025	<0.0025
12/13/2003	<0.0025	0.0086	<0.0025	<0.0025	<0.0025	0.0076	<0.0025	<0.0025	<0.0025
5/28/2004	<0.0025	0.0065	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
12/10/2004	<0.0025	0.0052	<0.0025	0.0062	<0.0025	<0.0025	0.007	<0.0025	<0.0025
6/24/2005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0072	<0.0025	<0.0025
12/13/2005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0062	<0.0025	<0.0025
7/12/2006	0.0032	0.0055	<0.0025	<0.0025	<0.0025	0.012	0.0048	<0.0025	<0.0025
12/1/2006	0.012 (o)	0.0056	<0.0025	<0.0025	<0.0025	<0.0025	0.0032	<0.0025	<0.0025
6/21/2007	<0.0025	0.0055	<0.0025	<0.0025	<0.0025	0.0064	0.0037	<0.0025	0.0025
12/15/2007	<0.0025	0.0051	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
6/21/2008		0.0054	0.0025		0.0048 (o)	<0.0025		<0.0025	
6/22/2008	0.0031			<0.0025			0.0025		<0.0025
12/6/2008			<0.0025	<0.0025	<0.0025	<0.0025	0.0025	<0.0025	<0.0025
12/7/2008	<0.0025	0.005							
7/10/2009						<0.0025			<0.0025
7/11/2009	<0.0025	0.0049	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	
12/22/2009							0.0025		
12/23/2009	<0.0025	0.0035	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
6/23/2010		0.0039	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
6/24/2010	<0.0025								
1/8/2011		0.0046	<0.0025	<0.0025	<0.0025	<0.0025	0.0026	<0.0025	<0.0025
1/9/2011	0.0031								
7/10/2011		0.0036	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
7/11/2011	<0.0025								
1/19/2012						<0.0025		<0.0025	<0.0025
1/20/2012	<0.0025	0.0042	<0.0025	<0.0025	<0.0025		<0.0025		
7/12/2012		0.0037	<0.0025	<0.0025	<0.0025	<0.0025	0.002	<0.0025	<0.0025
7/13/2012	0.0015								
1/21/2013	0.0035	0.0038	<0.0025	<0.0025	<0.0025	<0.0025	0.0014	<0.0025	<0.0025
7/19/2013						<0.0025			
7/20/2013	<0.0025	0.003	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025
1/16/2014						<0.0013 (J)			
1/17/2014	0.0027	0.0036	<0.0025	<0.0025	<0.0025		0.0019	<0.0013 (J)	<0.0013 (J)
7/11/2014		0.0056	<0.0025						
7/12/2014	<0.0013 (J)			<0.0013 (J)	<0.0025	<0.0025	0.0026	<0.0013 (J)	<0.0013 (J)
1/15/2015				0.00096 (J)		<0.0025		0.00084 (J)	0.00086 (J)
1/16/2015	<0.0025	0.0042	0.00071 (J)		<0.0025		0.0021		
7/15/2015	<0.0025	0.0052	0.00064 (J)	0.0006 (J)	<0.0025	<0.0025	0.0023	0.00083 (J)	0.00087 (J)
1/16/2016	0.00059 (J)	0.0056			<0.0025	<0.0025	0.002	0.00092 (J)	0.0011 (J)
1/17/2016			0.00066 (J)	0.00069 (J)					
6/22/2016	0.00085 (JD)		0.0009 (J)	0.0011 (J)	<0.0025	<0.0025	0.0007 (J)	0.0005 (J)	0.0009 (J)
6/23/2016		0.0073 (J)							

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWC-5	GWC-4A	GWC-2	GWC-1	GWA-7 (bg)	GWA-5 (bg)	GWA-4 (bg)	GWA-3A (bg)
8/30/2016						<0.0025			
8/31/2016			0.0006 (J)	0.0006 (J)	<0.0025		0.001 (J)	0.00055 (J)	0.00095 (J)
9/1/2016	0.023 (o)	0.011							
1/19/2017						<0.0025	0.00046 (J)	0.00041 (J)	0.00087 (J)
1/23/2017					<0.0025				
1/24/2017		0.009		0.00067 (J)					
1/25/2017			0.00047 (J)						
1/27/2017									
2/28/2017	0.00048 (J)								
7/17/2017	<0.0025								
7/18/2017								0.0007 (J)	0.001 (J)
7/19/2017				0.00079 (J)	<0.0025	<0.0025	0.00069 (J)		
7/20/2017		0.0091	<0.0025						
9/20/2017	<0.0025					0.00041 (J)			0.0011 (J)
9/21/2017		0.0093	<0.0025	0.00077 (J)	<0.0025		0.00073 (J)	0.00073 (J)	
9/22/2017									
1/8/2018	<0.0025								
1/9/2018			0.00048 (J)	0.00092 (J)	<0.0025		0.0014 (J)	0.0012 (J)	0.0011 (J)
1/10/2018		0.0097				<0.0025			
3/27/2018	<0.0025						0.0019 (J)	0.00081 (J)	0.0011 (J)
3/28/2018		0.01	0.00048 (J)		<0.0025	<0.0025			
3/29/2018				0.0008 (J)					
7/10/2018	<0.0025		0.00084 (J)	0.00097 (J)		0.00066 (J)	0.0015 (J)	0.00086 (J)	0.0012 (J)
7/11/2018		0.011			<0.0025				
10/8/2018	<0.0025						<0.0025	<0.0025	
10/9/2018		0.012	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025
1/30/2019	0.00038 (J)		0.00038 (J)		0.00023 (J)	0.0012 (J)	0.00076 (J)	0.00092 (J)	0.0014 (J)
1/31/2019		0.013		0.00092 (J)					
3/27/2019	<0.0025						0.0012 (J)		
3/28/2019		0.013	<0.0025	0.00072 (J)	<0.0025	<0.0025		0.00089 (J)	0.0014 (J)
9/11/2019	0.00032 (J)								
9/12/2019		0.013	0.00044 (J)	0.0009	0.00027 (J)	0.00048 (J)	0.00074	0.00091	0.0015
3/10/2020	0.00028 (J)						0.00099	0.0009	0.0019
3/11/2020					0.00026 (J)	0.00033 (J)			
3/31/2020		0.012	0.00033 (J)	0.00061 (J)					
4/2/2020									0.0017 (J)
9/21/2020	0.0003 (J)							0.00059 (J)	0.0016 (J)
9/22/2020		0.011	0.00042 (J)	0.00092 (J)	0.00021 (J)		0.00064 (J)		
3/23/2021	0.00028 (J)			0.00069 (J)					0.0017 (J)
3/24/2021		0.012	0.00037 (J)		0.0002 (J)		0.00077 (J)	0.00069 (J)	
8/17/2021	0.00032 (J)						0.00085 (J)	0.00096 (J)	0.002 (J)
8/18/2021		0.013	0.00034 (J)	0.0011 (J)	0.00031 (J)				
2/7/2022									
2/8/2022	0.00029 (J)			0.0013 (J)			0.001 (J)	0.00096 (J)	0.0019 (J)
2/9/2022		0.011	0.00042 (J)		0.0003 (J)				
8/30/2022	0.00031 (J)		0.00048 (J)	0.0012 (J)			0.0016 (J)	0.00097 (J)	0.0023 (J)
8/31/2022					0.00036 (J)				
9/1/2022		0.012							

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-6	GWA-2B (bg)	GWA-1B (bg)
10/5/1999	<0.0025		
11/12/1999	<0.0025		
12/29/1999	<0.0025		
2/17/2000	<0.0025		
9/13/2000	<0.0025		
11/10/2000	<0.0025		
1/4/2001	<0.0025		
12/11/2001	<0.0025		
4/4/2002	<0.0025		
12/6/2002	<0.0025		
6/28/2003	<0.0025		
12/13/2003	<0.0025		
5/28/2004	<0.0025		
12/10/2004	<0.0025		
6/24/2005	<0.0025		
12/13/2005	<0.0025		
7/12/2006	<0.0025		
12/1/2006	<0.0025		
6/21/2007	<0.0025		
12/15/2007	<0.0025		
6/21/2008			
6/22/2008	<0.0025		
12/6/2008			
12/7/2008	<0.0025		
7/10/2009			
7/11/2009	<0.0025		
12/22/2009			
12/23/2009	<0.0025		
6/23/2010			
6/24/2010	<0.0025		
1/8/2011			
1/9/2011	<0.0025		
7/10/2011			
7/11/2011	<0.0025		
1/19/2012			
1/20/2012	<0.0025		
7/12/2012			
7/13/2012	<0.0025		
1/21/2013	<0.0025		
7/19/2013			
7/20/2013	<0.0025		
1/16/2014			
1/17/2014	<0.0013 (J)		
7/11/2014			
7/12/2014	<0.0025		
1/15/2015			
1/16/2015	<0.0025		
7/15/2015	<0.0025		
1/16/2016	0.00055 (J)		
1/17/2016			
6/22/2016			
6/23/2016	0.0005 (J)		

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-6	GWA-2B (bg)	GWA-1B (bg)
8/30/2016			
8/31/2016			
9/1/2016	0.0014 (J)		
1/19/2017			
1/23/2017			
1/24/2017			
1/25/2017			
1/27/2017	0.00052 (J)		
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017			
7/20/2017	0.00062 (J)		
9/20/2017			
9/21/2017			
9/22/2017	0.00048 (J)		
1/8/2018			
1/9/2018			
1/10/2018	<0.0025		
3/27/2018			
3/28/2018			
3/29/2018	0.00052 (J)		
7/10/2018			
7/11/2018	0.00064 (J)		
10/8/2018		0.0051	
10/9/2018	<0.0025		
1/30/2019		0.0044	
1/31/2019	0.00076 (J)		
3/27/2019			
3/28/2019	0.0007 (J)	0.0046	
9/11/2019			
9/12/2019	0.00077	0.0023	
3/10/2020		0.003	
3/11/2020	0.00073		
3/31/2020			
4/2/2020			
9/21/2020			
9/22/2020	0.00058 (J)	<0.0025	
3/23/2021		0.00096 (J)	0.00019 (J)
3/24/2021	0.00046 (J)		
8/17/2021		0.00016 (J)	0.00025 (J)
8/18/2021	0.0005 (J)		
2/7/2022		0.00073 (J)	
2/8/2022			0.00032 (J)
2/9/2022	0.00059 (J)		
8/30/2022		0.004	0.00029 (J)
8/31/2022	0.00058 (J)		
9/1/2022			

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-7 (bg)	GWA-4 (bg)	GWC-1	GWC-2	GWA-3A (bg)	GWC-5	GWC-6	GWA-5 (bg)
10/5/1999	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11/12/1999	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
12/29/1999	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
2/17/2000	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
9/13/2000	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11/10/2000	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/4/2001	<0.002	0.054 (o)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
12/11/2001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
4/4/2002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
12/6/2002	<0.002	0.012 (o)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0089 (o)
6/28/2003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.019 (o)
12/13/2003	<0.002	0.01 (o)	<0.002	<0.002	<0.002	<0.002	0.0026	<0.002	0.0067 (o)
5/28/2004	0.0052	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0057 (o)
12/10/2004	<0.002	<0.002	<0.002	<0.002	0.11 (o)	<0.002	<0.002	0.0044 (o)	0.0027
6/24/2005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0038
12/13/2005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
7/12/2006	0.0055	0.016 (o)	<0.002	0.0047 (o)	<0.002	<0.002	<0.002	<0.002	0.0033
12/1/2006	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
6/21/2007	0.0032	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0035
12/15/2007	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
6/21/2008		<0.002	<0.002	<0.002			<0.002		
6/22/2008	<0.002				<0.002	<0.002		<0.002	<0.002
12/6/2008		<0.002	<0.002	<0.002	<0.002	<0.002			<0.002
12/7/2008	<0.002						<0.002	<0.002	
7/10/2009		<0.002				<0.002			
7/11/2009	<0.002		<0.002	<0.002	<0.002		<0.002	<0.002	<0.002
12/22/2009									0.0025
12/23/2009	0.0025	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
6/23/2010		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002
6/24/2010	<0.002							<0.002	
1/8/2011		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002
1/9/2011	0.004							<0.002	
7/10/2011		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002
7/11/2011	<0.002							<0.002	
1/19/2012		<0.002	<0.002			<0.002			
1/20/2012	<0.002			<0.002	<0.002		<0.002	<0.002	<0.002
7/12/2012		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002
7/13/2012	<0.002							<0.002	
1/21/2013	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
7/19/2013		<0.002							
7/20/2013	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/16/2014		<0.002							
1/17/2014	<0.005 (J)		<0.002	<0.002	0.0065 (o)	<0.002	<0.002	<0.002	<0.005 (J)
7/11/2014							<0.002		
7/12/2014	<0.005 (J)	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002
1/15/2015		<0.002	<0.002		<0.002	<0.002			
1/16/2015	<0.002			<0.002			<0.002	<0.002	<0.002
7/15/2015	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1/16/2016	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002
1/17/2016					<0.002				
6/22/2016	0.002 (JD)	<0.002	<0.002	<0.002	0.0005 (J)	0.00205 (JD)			0.001
6/23/2016							0.0007 (J)	<0.002	

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-7 (bg)	GWA-4 (bg)	GWC-1	GWC-2	GWA-3A (bg)	GWC-5	GWC-6	GWA-5 (bg)
1/19/2017		<0.002	<0.002			<0.002			<0.002
1/23/2017				<0.002					
1/24/2017					<0.002		<0.002		
1/27/2017								<0.002	
2/28/2017	<0.002								
7/17/2017	<0.002								
7/18/2017			<0.002			<0.002			
7/19/2017		<0.002		<0.002	<0.002				<0.002
7/20/2017							<0.002	<0.002	
1/8/2018	<0.002								
1/9/2018			0.0025	<0.002	<0.002	<0.002			<0.002
1/10/2018		<0.002					<0.002	<0.002	
7/10/2018	<0.002	<0.002	<0.002		<0.002	<0.002			<0.002
7/11/2018				<0.002			<0.002	<0.002	
1/30/2019	<0.002	0.0016 (J)	<0.002	<0.002		<0.002			<0.002
1/31/2019					<0.002		<0.002	<0.002	
3/27/2019	<0.002								<0.002
3/28/2019		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
9/11/2019	<0.002								
9/12/2019		0.0026	0.0022	0.0024	0.002	0.0024	0.00084 (J)	0.003	0.0011 (J)
3/10/2020	<0.002		<0.002			0.00082 (J)			0.0019 (J)
3/11/2020		<0.002		<0.002				<0.002	
3/31/2020					<0.002		<0.002		
4/2/2020						0.0019 (J)			
9/21/2020	<0.002		<0.002			<0.002			
9/22/2020				<0.002	<0.002		<0.002	<0.002	0.0013 (J)
3/23/2021	<0.002				<0.002	<0.002			
3/24/2021			<0.002	<0.002			<0.002	<0.002	0.00077 (J)
8/17/2021	<0.002		<0.002			<0.002			<0.002
8/18/2021				<0.002	<0.002		<0.002	<0.002	
2/7/2022									
2/8/2022	<0.002		<0.002		0.0019 (J)	0.0011 (J)			<0.002
2/9/2022				<0.002			<0.002	<0.002	
8/30/2022	<0.002		0.0012 (J)		<0.002	0.0029			0.0011 (J)
8/31/2022				<0.002				<0.002	
9/1/2022							0.0012 (J)		

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-2B (bg)	GWA-1B (bg)
10/5/1999		
11/12/1999		
12/29/1999		
2/17/2000		
9/13/2000		
11/10/2000		
1/4/2001		
12/11/2001		
4/4/2002		
12/6/2002		
6/28/2003		
12/13/2003		
5/28/2004		
12/10/2004		
6/24/2005		
12/13/2005		
7/12/2006		
12/1/2006		
6/21/2007		
12/15/2007		
6/21/2008		
6/22/2008		
12/6/2008		
12/7/2008		
7/10/2009		
7/11/2009		
12/22/2009		
12/23/2009		
6/23/2010		
6/24/2010		
1/8/2011		
1/9/2011		
7/10/2011		
7/11/2011		
1/19/2012		
1/20/2012		
7/12/2012		
7/13/2012		
1/21/2013		
7/19/2013		
7/20/2013		
1/16/2014		
1/17/2014		
7/11/2014		
7/12/2014		
1/15/2015		
1/16/2015		
7/15/2015		
1/16/2016		
1/17/2016		
6/22/2016		
6/23/2016		

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-2B (bg)	GWA-1B (bg)
1/19/2017		
1/23/2017		
1/24/2017		
1/27/2017		
2/28/2017		
7/17/2017		
7/18/2017		
7/19/2017		
7/20/2017		
1/8/2018		
1/9/2018		
1/10/2018		
7/10/2018		
7/11/2018		
1/30/2019	0.0035	
1/31/2019		
3/27/2019		
3/28/2019	0.0031	
9/11/2019		
9/12/2019	0.0038	
3/10/2020	0.0021	
3/11/2020		
3/31/2020		
4/2/2020		
9/21/2020		
9/22/2020	0.00096 (J)	
3/23/2021	0.0011 (J)	0.0015 (J)
3/24/2021		
8/17/2021	0.0043	<0.002
8/18/2021		
2/7/2022	0.0012 (J)	
2/8/2022		<0.002
2/9/2022		
8/30/2022	0.0013 (J)	<0.002
8/31/2022		
9/1/2022		

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWC-5	GWA-3A (bg)	GWC-6	GWA-4 (bg)	GWA-5 (bg)	GWC-1	GWA-7 (bg)	GWC-2
10/5/1999	0.007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.024	0.0054 (o)
11/12/1999	0.0063 (o)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.012	<0.001
12/29/1999	0.016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.012	<0.001
2/17/2000	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
9/13/2000	<0.001	<0.001	<0.001	0.079 (o)	<0.001	<0.001	<0.001	0.044	<0.001
11/10/2000	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.024	<0.001
1/4/2001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.094 (o)	<0.001
12/11/2001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.024	<0.001
4/4/2002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/6/2002	<0.001	0.007 (o)	<0.001	<0.001	<0.001	0.011	<0.001	0.023	<0.001
6/28/2003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0091	<0.001
12/13/2003	<0.001	0.018 (o)	<0.001	<0.001	<0.001	<0.001	<0.001	0.024	<0.001
5/28/2004	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/10/2004	0.01	<0.001	<0.001	0.0073	<0.001	<0.001	<0.001	<0.001	<0.001
6/24/2005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/13/2005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
7/12/2006	0.013	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.028	<0.001
12/1/2006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
6/21/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/15/2007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
6/21/2008		<0.001			<0.001		<0.001	<0.001	
6/22/2008	<0.001		<0.001	<0.001		<0.001			<0.001
12/6/2008			<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
12/7/2008	<0.001	<0.001		<0.001					
7/10/2009			<0.001					<0.001	
7/11/2009	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001		<0.001
12/22/2009						<0.001			
12/23/2009	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001
6/23/2010		<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
6/24/2010	<0.001			<0.001					
1/8/2011		<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
1/9/2011	<0.001								
7/10/2011		<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
7/11/2011	<0.001			<0.001					
1/19/2012			<0.001		<0.001			<0.001	
1/20/2012	<0.001	<0.001		<0.001		<0.001	<0.001		<0.001
7/12/2012		<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
7/13/2012	<0.001			<0.001					
1/21/2013	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
7/19/2013								<0.001	
7/20/2013	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001
1/16/2014								<0.001	
1/17/2014	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001
7/11/2014		<0.001							
7/12/2014	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/15/2015			<0.001		<0.001			<0.001	<0.001
1/16/2015	<0.001	<0.001		<0.001		<0.001	<0.001		
7/15/2015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/16/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
1/17/2016									<0.001
6/22/2016	0.00125 (JD)		0.00025 (JD)		0.0003 (J)	0.001 (J)	<0.001	0.0002 (J)	0.0001 (J)
6/23/2016		0.0001 (J)		<0.001					

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWC-5	GWA-3A (bg)	GWC-6	GWA-4 (bg)	GWA-5 (bg)	GWC-1	GWA-7 (bg)	GWC-2
8/30/2016								<0.001	
8/31/2016			<0.001		<0.001	0.00099 (J)	<0.001		<0.001
9/1/2016	0.082 (o)	<0.001		0.006					
1/19/2017			<0.001		<0.001	0.001 (J)		<0.001	
1/23/2017							<0.001		
1/24/2017		<0.001							<0.001
1/27/2017				<0.001 (D)					
2/28/2017	<0.001								
7/17/2017	<0.001								
7/18/2017			<0.001		<0.001				
7/19/2017						0.00081 (J)	<0.001	<0.001	<0.001
7/20/2017		<0.001		<0.001					
9/20/2017	0.00035 (J)		<0.001					0.00054 (J)	
9/21/2017		<0.001			0.0076	0.00086 (J)	0.004 (o)		0.0014 (o)
9/22/2017				0.00042 (J)					
1/8/2018	<0.001								
1/9/2018			<0.001		0.0023	0.00059 (J)	<0.001		<0.001
1/10/2018		<0.001		<0.001				<0.001	
3/27/2018	<0.001		<0.001		<0.001	<0.001			
3/28/2018		<0.001					<0.001	<0.001	
3/29/2018				<0.001					<0.001
7/10/2018	<0.001		<0.001		<0.001	0.00045 (J)		0.0013	<0.001
7/11/2018		<0.001		0.00037 (J)			<0.001		
10/8/2018	<0.001				<0.001	<0.001			
10/9/2018		<0.001	<0.001	<0.001			<0.001	<0.001	<0.001
1/30/2019	0.00021 (J)		0.00034 (J)		0.00013 (J)	0.00064 (J)	<0.001	0.0021	
1/31/2019		<0.001		<0.001					<0.001
3/27/2019	<0.001					0.0012 (J)			
3/28/2019		<0.001	0.00038 (J)	0.00052 (J)	<0.001		<0.001	<0.001	<0.001
9/11/2019	<0.001								
9/12/2019		0.00024 (J)	<0.001	0.00065 (J)	<0.001	0.00082 (J)	<0.001	0.00036 (J)	<0.001
3/10/2020	0.00015 (J)		0.00013 (J)		0.00031 (J)	0.0022			
3/11/2020				<0.001			<0.001	0.00015 (J)	
3/31/2020		<0.001							<0.001
4/2/2020			0.00062 (J)						
9/21/2020	<0.001		<0.001		0.00025 (J)				
9/22/2020		0.00013 (J)		<0.001		0.0012	<0.001		<0.001
3/23/2021	0.00017 (J)		0.00029 (J)						<0.001
3/24/2021		0.00034 (J)		<0.001	0.00021 (J)	0.00066 (J)	<0.001		
8/17/2021	<0.001		0.00015 (J)		<0.001	0.00044 (J)			
8/18/2021		0.00032 (J)		<0.001			0.00015 (J)		<0.001
2/7/2022									
2/8/2022	<0.001		<0.001		<0.001	0.00058 (J)			<0.001
2/9/2022		0.00033 (J)		0.00039 (J)			<0.001		
8/30/2022	<0.001		<0.001		<0.001	0.00064 (J)			<0.001
8/31/2022				<0.001			<0.001		
9/1/2022		0.00031 (J)							

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-2B (bg)	GWA-1B (bg)
10/5/1999		
11/12/1999		
12/29/1999		
2/17/2000		
9/13/2000		
11/10/2000		
1/4/2001		
12/11/2001		
4/4/2002		
12/6/2002		
6/28/2003		
12/13/2003		
5/28/2004		
12/10/2004		
6/24/2005		
12/13/2005		
7/12/2006		
12/1/2006		
6/21/2007		
12/15/2007		
6/21/2008		
6/22/2008		
12/6/2008		
12/7/2008		
7/10/2009		
7/11/2009		
12/22/2009		
12/23/2009		
6/23/2010		
6/24/2010		
1/8/2011		
1/9/2011		
7/10/2011		
7/11/2011		
1/19/2012		
1/20/2012		
7/12/2012		
7/13/2012		
1/21/2013		
7/19/2013		
7/20/2013		
1/16/2014		
1/17/2014		
7/11/2014		
7/12/2014		
1/15/2015		
1/16/2015		
7/15/2015		
1/16/2016		
1/17/2016		
6/22/2016		
6/23/2016		

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-2B (bg)	GWA-1B (bg)
8/30/2016		
8/31/2016		
9/1/2016		
1/19/2017		
1/23/2017		
1/24/2017		
1/27/2017		
2/28/2017		
7/17/2017		
7/18/2017		
7/19/2017		
7/20/2017		
9/20/2017		
9/21/2017		
9/22/2017		
1/8/2018		
1/9/2018		
1/10/2018		
3/27/2018		
3/28/2018		
3/29/2018		
7/10/2018		
7/11/2018		
10/8/2018	<0.001	
10/9/2018		
1/30/2019	0.00028 (J)	
1/31/2019		
3/27/2019		
3/28/2019	<0.001	
9/11/2019		
9/12/2019	<0.001	
3/10/2020	<0.001	
3/11/2020		
3/31/2020		
4/2/2020		
9/21/2020		
9/22/2020	<0.001	
3/23/2021	<0.001	<0.001
3/24/2021		
8/17/2021	0.00073 (J)	<0.001
8/18/2021		
2/7/2022	<0.001	
2/8/2022		<0.001
2/9/2022		
8/30/2022	<0.001	<0.001
8/31/2022		
9/1/2022		

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWC-1	GWA-7 (bg)	GWC-5	GWC-4A	GWC-6	GWA-4 (bg)	GWA-3A (bg)	GWA-5 (bg)
10/5/1999	0.02	<0.001	0.087	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
11/12/1999	0.027	<0.001	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/29/1999	0.055	<0.001	0.045	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/17/2000	0.042	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
9/13/2000	<0.001	<0.001	0.028	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
11/10/2000	0.014	<0.001	0.11	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/4/2001	<0.001	<0.001	0.32 (o)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/11/2001	<0.001	<0.001	0.091	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
4/4/2002	<0.001	<0.001	0.012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/6/2002	<0.001	<0.001	0.07	0.0082	<0.001	<0.001	<0.001	<0.001	0.03
6/28/2003	<0.001	<0.001	0.016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/13/2003	<0.001	<0.001	0.046	0.017	<0.001	<0.001	<0.001	<0.001	<0.001
5/28/2004	0.017	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/10/2004	0.0082	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
6/24/2005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/13/2005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
7/12/2006	0.023	<0.001	0.071 (o)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/1/2006	0.0081	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
6/21/2007	0.009	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0038	0.07 (o)
12/15/2007	0.0056	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
6/21/2008		<0.001	0.0026	<0.001	<0.001		<0.001		
6/22/2008	0.013					<0.001		<0.001	0.0026
12/6/2008		<0.001	<0.001		<0.001		<0.001	<0.001	<0.001
12/7/2008	0.0027			<0.001		<0.001			
7/10/2009			<0.001					<0.001	
7/11/2009	0.0032	<0.001		<0.001	<0.001	<0.001	<0.001		<0.001
12/22/2009									<0.001
12/23/2009	0.0093	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
6/23/2010		<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001
6/24/2010	0.0033					<0.001			
1/8/2011		<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001
1/9/2011	<0.001								
7/10/2011		<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001
7/11/2011	<0.001					<0.001			
1/19/2012			<0.001				<0.001	<0.001	
1/20/2012	<0.001	<0.001		<0.001	<0.001	<0.001			<0.001
7/12/2012		<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001
7/13/2012	0.011					<0.001			
1/21/2013	0.028	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
7/19/2013			<0.001						
7/20/2013	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/16/2014			<0.001						
1/17/2014	0.019	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
7/11/2014				<0.001	<0.001				
7/12/2014	<0.005 (J)	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001
1/15/2015			0.002 (J)				<0.001	<0.001	
1/16/2015	0.0012 (J)	<0.001		<0.001	<0.001	<0.001			0.0011 (J)
7/15/2015	<0.001	<0.001	0.0015 (J)	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016 (J)
1/16/2016	0.0015 (J)	<0.001	0.001 (J)	<0.001		<0.001	0.00082 (J)	0.0011 (J)	<0.001
1/17/2016					<0.001				
6/22/2016	0.0081 (JD)	<0.001	<0.001		<0.001		<0.001	<0.001	0.0018 (J)
6/23/2016				0.0021 (J)		<0.001			

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWC-1	GWA-7 (bg)	GWC-5	GWC-4A	GWC-6	GWA-4 (bg)	GWA-3A (bg)	GWA-5 (bg)
1/19/2017			0.0025				0.0025	<0.001	0.0033
1/23/2017		0.0063							
1/24/2017				0.044 (o)					
1/25/2017					<0.001				
1/27/2017						<0.001			
2/28/2017	0.0019 (J)								
7/17/2017	<0.001								
7/18/2017							<0.001	<0.001	
7/19/2017		<0.001	0.0025						0.0045
7/20/2017				0.014	<0.001	0.0021 (J)			
1/8/2018	<0.001								
1/9/2018		<0.001			<0.001		0.0072	<0.001	0.0027
1/10/2018			0.0015 (J)	0.014		<0.001			
7/10/2018	<0.001		<0.001		<0.001		<0.001	<0.001	<0.001
7/11/2018		<0.001		0.011 (J)		<0.001			
1/30/2019	<0.001	<0.001	0.0043		<0.001		<0.001	<0.001	0.0019 (J)
1/31/2019				<0.001		<0.001			
3/27/2019	<0.001								<0.001
3/28/2019		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
9/11/2019	0.0014								
9/12/2019		0.0023	0.0037	0.0044	0.0021	0.0043	0.0017	0.002	0.004
3/10/2020	<0.001						<0.001	<0.001	0.01
3/11/2020		<0.001	0.0013			<0.001			
3/31/2020				0.0016	<0.001				
4/2/2020								0.0013	
9/21/2020	<0.001						0.0012	<0.001	
9/22/2020		<0.001		0.0015	<0.001	0.0011			0.0056
3/23/2021	<0.001							<0.001	
3/24/2021		<0.001		<0.001	<0.001	<0.001	<0.001		0.0018
8/17/2021	<0.001						<0.001	<0.001	0.0018
8/18/2021		<0.001		<0.001	<0.001	0.0013			
2/7/2022									
2/8/2022	<0.001						<0.001	<0.001	0.0023
2/9/2022		<0.001		<0.001	<0.001	0.0012			
8/30/2022	0.0019				<0.001		<0.001	<0.001	0.0028
8/31/2022		0.0011				0.0013			
9/1/2022				<0.001					

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-2	GWA-2B (bg)	GWA-1B (bg)
10/5/1999	0.015 (o)		
11/12/1999	<0.001		
12/29/1999	<0.001		
2/17/2000	<0.001		
9/13/2000	<0.001		
11/10/2000	<0.001		
1/4/2001	<0.001		
12/11/2001	<0.001		
4/4/2002	<0.001		
12/6/2002	<0.001		
6/28/2003	<0.001		
12/13/2003	<0.001		
5/28/2004	<0.001		
12/10/2004	<0.001		
6/24/2005	<0.001		
12/13/2005	<0.001		
7/12/2006	<0.001		
12/1/2006	<0.001		
6/21/2007	<0.001		
12/15/2007	<0.001		
6/21/2008			
6/22/2008	<0.001		
12/6/2008	<0.001		
12/7/2008			
7/10/2009			
7/11/2009	<0.001		
12/22/2009			
12/23/2009	<0.001		
6/23/2010	<0.001		
6/24/2010			
1/8/2011	<0.001		
1/9/2011			
7/10/2011	<0.001		
7/11/2011			
1/19/2012			
1/20/2012	<0.001		
7/12/2012	<0.001		
7/13/2012			
1/21/2013	<0.001		
7/19/2013			
7/20/2013	<0.001		
1/16/2014			
1/17/2014	<0.001		
7/11/2014			
7/12/2014	<0.001		
1/15/2015	<0.001		
1/16/2015			
7/15/2015	<0.001		
1/16/2016			
1/17/2016	<0.001		
6/22/2016	0.0019 (J)		
6/23/2016			

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 11/5/2022 4:02 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-2	GWA-2B (bg)	GWA-1B (bg)
1/19/2017			
1/23/2017			
1/24/2017	0.0062		
1/25/2017			
1/27/2017			
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017	0.0015 (J)		
7/20/2017			
1/8/2018			
1/9/2018	<0.001		
1/10/2018			
7/10/2018	<0.001		
7/11/2018			
1/30/2019		<0.001	
1/31/2019	<0.001		
3/27/2019			
3/28/2019	<0.001	<0.001	
9/11/2019			
9/12/2019	0.0018	0.0021	
3/10/2020		<0.001	
3/11/2020			
3/31/2020	<0.001		
4/2/2020			
9/21/2020			
9/22/2020	<0.001	<0.001	
3/23/2021	<0.001	<0.001	<0.001
3/24/2021			
8/17/2021		<0.001	<0.001
8/18/2021	<0.001		
2/7/2022		<0.001	
2/8/2022	<0.001		<0.001
2/9/2022			
8/30/2022	<0.001	0.0016	0.0019
8/31/2022			
9/1/2022			

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 11/5/2022 4:03 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWC-5	GWC-1	GWA-7 (bg)	GWA-3A (bg)	GWC-2	GWC-4A
10/5/1999	0.043	0.039	<0.005	0.037	<0.005	0.091	0.023	0.028	<0.005
11/12/1999	0.035	0.025	<0.005	0.022	<0.005	0.057	<0.005	<0.005	<0.005
12/29/1999	0.058	0.023	<0.005	0.036	<0.005	0.047	<0.005	0.022	<0.005
2/17/2000	0.051	<0.005	<0.005	<0.005	<0.005	0.048	<0.005	0.021	<0.005
9/13/2000	<0.005	0.035	0.021	0.027	<0.005	0.062	<0.005	<0.005	0.036 (o)
11/10/2000	<0.005	0.023	<0.005	<0.005	<0.005	0.11	<0.005	<0.005	<0.005
1/4/2001	<0.005	0.027	<0.005	<0.005	<0.005	0.39 (o)	<0.005	<0.005	<0.005
12/11/2001	<0.005	0.036	<0.005	<0.005	<0.005	0.096	<0.005	<0.005	<0.005
4/4/2002	<0.005	0.038	<0.005	0.028	<0.005	<0.005	<0.005	0.069 (o)	<0.005
12/6/2002	<0.005	0.033	0.06	0.028	0.011	0.084	<0.005	0.012	0.012
6/28/2003	<0.005	0.018	0.19 (o)	0.012	<0.005	0.026	<0.005	0.011	<0.005
12/13/2003	<0.005	0.013	0.067	0.026	<0.005	0.054	<0.005	<0.005	<0.005
5/28/2004	0.034	<0.005	0.068	0.018	<0.005	<0.005	<0.005	<0.005	<0.005
12/10/2004	0.021	<0.005	0.039	0.029	<0.005	<0.005	<0.005	0.027	<0.005
6/24/2005	<0.005	<0.005	0.033	0.016	<0.005	<0.005	<0.005	<0.005	<0.005
12/13/2005	0.013	0.011	0.039	0.017	0.015	<0.005	<0.005	0.011	<0.005
7/12/2006	0.074	0.0055	0.022	0.013	0.0042	0.15 (o)	0.0047	0.0064	<0.005
12/1/2006	0.048	0.0052	0.018	0.03	0.0047	0.047	0.065	0.0077	0.098 (o)
6/21/2007	0.067	0.0062	0.058	0.017	0.0052	0.003	0.008	0.0082	0.0043
12/15/2007	0.053	0.0055	0.0072	0.013	0.0046	<0.005	0.0043	0.0063	0.0057
6/21/2008		0.011		0.016	0.0067	0.0034			0.0064
6/22/2008	0.024		0.011				0.0062	0.0074	
12/6/2008		0.008	0.011		0.0054	0.041	0.051	0.0066	0.0052
12/7/2008	0.0087			0.05					
7/10/2009						0.0038	0.0043		
7/11/2009	0.045	0.011	0.013	0.013	0.0038			0.0054	0.0049
12/22/2009			0.013						
12/23/2009	0.054	0.0051		0.01	0.0029	<0.005	0.0039	0.0046	0.005
6/23/2010		0.0031	0.0084	0.011	<0.005	<0.005	<0.005	0.0041	0.0044
6/24/2010	0.0065								
1/8/2011		0.0035	0.0089	0.012	0.0032	0.0031	0.0037	0.019	0.0036
1/9/2011	0.022								
7/10/2011		0.0081	0.0084	0.0096	0.004	<0.005	0.0047	0.005	0.0046
7/11/2011	0.0032								
1/19/2012		0.017				0.0035	0.0045		
1/20/2012	0.0089		0.0094	0.014	0.0067			0.007	0.0045
7/12/2012		0.01	0.0098	0.01	0.0036	<0.005	0.0033	0.0045	0.0041
7/13/2012	0.012								
1/21/2013	0.024	0.013	0.007	0.011	0.0031	<0.005	0.0038	0.0045	0.0038
7/19/2013						<0.005			
7/20/2013	0.0068	<0.005	0.0074	0.0089	<0.005		0.004	<0.005	0.0047
1/16/2014						0.0033			
1/17/2014	0.02	0.0066	0.0092	0.0098	0.0031		0.005	0.0075	0.0051
7/11/2014				0.014					0.0066
7/12/2014	0.0055	0.0054	0.013		<0.0025 (J)	0.0028	0.004	0.0051	
1/15/2015		0.0076				0.0025	0.0056	0.0054	
1/16/2015	0.0043		0.0081	0.011	0.002 (J)				0.0046
7/15/2015	0.0026	0.0053	0.009	0.012	0.0015 (J)	0.0021 (J)	0.0034	0.0049	0.0036
1/16/2016	0.0035	0.0048	0.007	0.014	0.0015 (J)	0.0017 (J)	0.0038		
1/17/2016								0.0051	0.004
6/22/2016	0.00805 (JD)	0.0038 (J)	0.0091 (J)		<0.005	0.0087 (J)	0.00575 (JD)	0.0087 (J)	0.0053 (J)
6/23/2016				0.0116					

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 11/5/2022 4:03 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWA-1A (bg)	GWA-4 (bg)	GWA-5 (bg)	GWC-5	GWC-1	GWA-7 (bg)	GWA-3A (bg)	GWC-2	GWC-4A
1/19/2017		<0.005	0.0065 (J)			<0.005	<0.005		
1/23/2017					<0.005				
1/24/2017				0.01 (J)				0.0071 (J)	
1/25/2017									<0.005
1/27/2017									
2/28/2017	<0.005								
7/17/2017	<0.005								
7/18/2017		<0.005					<0.005		
7/19/2017			0.0099 (J)		<0.005	<0.005		<0.005	
7/20/2017				0.016 (J)					<0.005
1/8/2018	<0.005								
1/9/2018		0.0072 (J)	0.014 (J)		<0.005		<0.005	0.0079 (J)	<0.005
1/10/2018				0.012 (J)		<0.005			
7/10/2018	<0.005	<0.005	0.0089 (J)			<0.005	<0.005	0.0067 (J)	<0.005
7/11/2018				0.015 (J)	<0.005				
1/30/2019	<0.005	0.006 (J)	0.0057 (J)		<0.005	0.014 (J)	0.0058 (J)		0.0042 (J)
1/31/2019				0.033				<0.005	
3/27/2019	<0.005		0.01 (J)						
3/28/2019		<0.005		0.032	<0.005	<0.005	<0.005	0.0069 (J)	<0.005
9/11/2019	0.0062								
9/12/2019		0.0073	0.0074	0.033	0.0039 (J)	0.0059	0.0081	0.0089	0.0093
3/10/2020	<0.005	0.0079	0.0071				0.0079		
3/11/2020					<0.005	<0.005			
3/31/2020				0.025				0.0065	<0.005
4/2/2020							0.011		
9/21/2020	<0.005	0.013					0.0055		
9/22/2020			0.039	0.037	<0.005			0.029	0.017
3/23/2021	<0.005						0.0092	0.0085	
3/24/2021		0.0058	0.0085	0.034	<0.005				0.01
8/17/2021	0.048	0.029	0.024				0.014		
8/18/2021				0.035	0.11			0.0081	0.012
2/7/2022									
2/8/2022	0.0031 (J)	0.007	0.007				0.013	0.0078	
2/9/2022				0.03	<0.005				0.0039 (J)
8/30/2022	<0.005	0.01	0.013				0.012	0.012	0.0046 (J)
8/31/2022					<0.005				
9/1/2022				0.035					

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 11/5/2022 4:03 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-6	GWA-2B (bg)	GWA-1B (bg)
10/5/1999	0.063 (o)		
11/12/1999	0.025		
12/29/1999	0.024		
2/17/2000	<0.005		
9/13/2000	0.061 (o)		
11/10/2000	0.061 (o)		
1/4/2001	0.05 (o)		
12/11/2001	<0.005		
4/4/2002	<0.005		
12/6/2002	0.013		
6/28/2003	0.014		
12/13/2003	<0.005		
5/28/2004	<0.005		
12/10/2004	<0.005		
6/24/2005	<0.005		
12/13/2005	<0.005		
7/12/2006	0.0057		
12/1/2006	0.0068		
6/21/2007	0.016		
12/15/2007	0.012		
6/21/2008			
6/22/2008	0.014		
12/6/2008			
12/7/2008	0.044 (o)		
7/10/2009			
7/11/2009	0.0062		
12/22/2009			
12/23/2009	0.007		
6/23/2010			
6/24/2010	0.0049		
1/8/2011			
1/9/2011			
7/10/2011			
7/11/2011	0.0052		
1/19/2012			
1/20/2012	0.0081		
7/12/2012			
7/13/2012	0.004		
1/21/2013	0.0093		
7/19/2013			
7/20/2013	0.0054		
1/16/2014			
1/17/2014	0.0054		
7/11/2014			
7/12/2014	0.0057		
1/15/2015			
1/16/2015	0.0084		
7/15/2015	0.0046		
1/16/2016	0.0051		
1/17/2016			
6/22/2016			
6/23/2016	0.0041 (J)		

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 11/5/2022 4:03 PM View: PLs Interwell State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

	GWC-6	GWA-2B (bg)	GWA-1B (bg)
1/19/2017			
1/23/2017			
1/24/2017			
1/25/2017			
1/27/2017	<0.005		
2/28/2017			
7/17/2017			
7/18/2017			
7/19/2017			
7/20/2017	<0.005		
1/8/2018			
1/9/2018			
1/10/2018	<0.005		
7/10/2018			
7/11/2018	<0.005		
1/30/2019		0.013 (J)	
1/31/2019	<0.005		
3/27/2019			
3/28/2019	0.0084 (J)	0.014 (J)	
9/11/2019			
9/12/2019	0.011	0.0075	
3/10/2020		0.0061	
3/11/2020	0.0047 (J)		
3/31/2020			
4/2/2020			
9/21/2020			
9/22/2020	0.0053	0.0066	
3/23/2021		0.0066	0.0098
3/24/2021	0.0043 (J)		
8/17/2021		0.026	0.024
8/18/2021	0.12		
2/7/2022		0.0046 (J)	
2/8/2022			0.0048 (J)
2/9/2022	0.0087		
8/30/2022		0.014	0.003 (J)
8/31/2022	0.0073		
9/1/2022			

FIGURE F.

Trend Tests (Appendix I Prediction Limit Exceedance) - All Results

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/5/2022, 4:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Barium (mg/L)	**GWA-1A (bg)**	**-0.002091**	**-4.785**	**-2.58**	**Yes**	**53**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	GWA-2B (bg)	-0.0006992	-9	-30	No	10	0	n/a	n/a	0.01	NP
Barium (mg/L)	**GWA-3A (bg)**	**0.00149**	**7.317**	**2.58**	**Yes**	**55**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	**GWA-4 (bg)**	**0.0009886**	**6.411**	**2.58**	**Yes**	**54**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	GWA-5 (bg)	0.0006216	0.9536	2.58	No	53	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-7A (bg)	-0.01546	-26	-30	No	10	0	n/a	n/a	0.01	NP
Barium (mg/L)	**GWC-5**	**0.01113**	**2.842**	**2.58**	**Yes**	**53**	**0**	**n/a**	**n/a**	**0.01**	**NP**

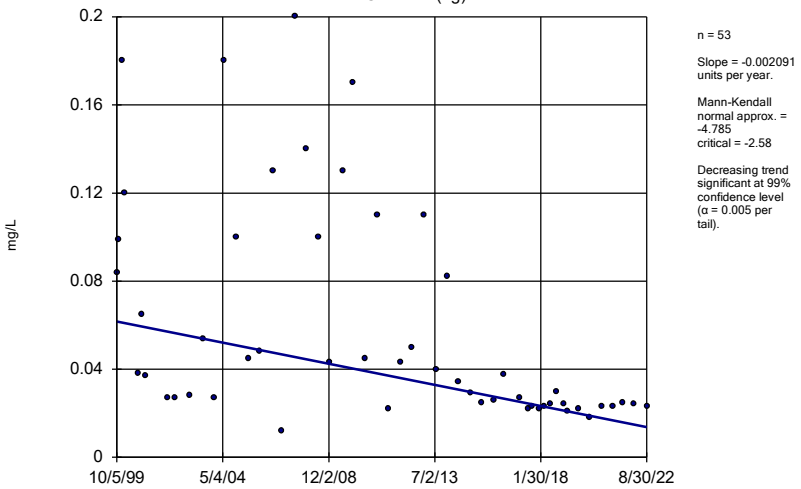
Trend Tests (Appendix I Prediction Limit Exceedance) - Significant Results

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 11/5/2022, 4:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Barium (mg/L)	**GWA-1A (bg)**	**-0.002091**	**-4.785**	**-2.58**	**Yes**	**53**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	**GWA-3A (bg)**	**0.00149**	**7.317**	**2.58**	**Yes**	**55**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	**GWA-4 (bg)**	**0.0009886**	**6.411**	**2.58**	**Yes**	**54**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Barium (mg/L)	**GWC-5**	**0.01113**	**2.842**	**2.58**	**Yes**	**53**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sen's Slope Estimator

GWA-1A (bg)



n = 53

Slope = -0.002091 units per year.

Mann-Kendall normal approx. = -4.785
critical = -2.58

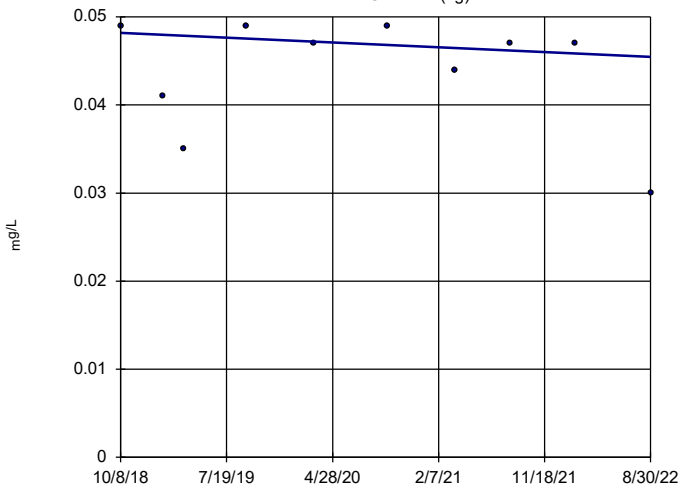
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 11/5/2022 4:12 PM View: Trend Tests - App I PL Exceedance
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2B (bg)



n = 10

Slope = -0.0006992 units per year.

Mann-Kendall statistic = -9
critical = -30

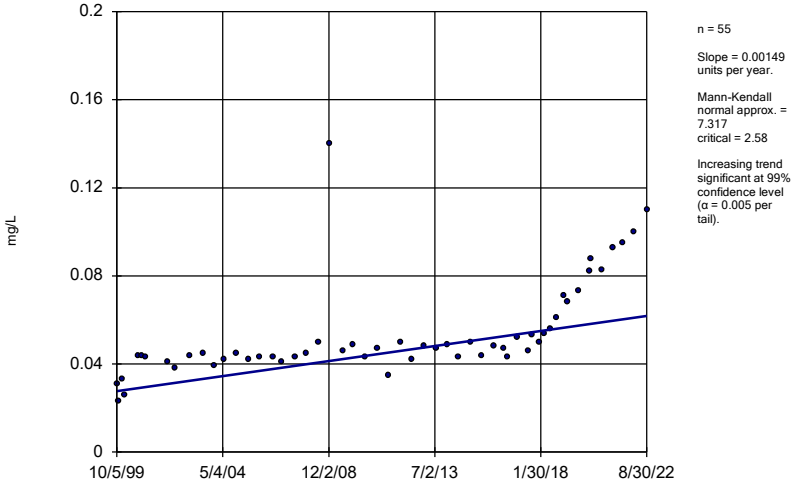
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 11/5/2022 4:12 PM View: Trend Tests - App I PL Exceedance
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-3A (bg)



n = 55

Slope = 0.00149 units per year.

Mann-Kendall normal approx. = 7.317
critical = 2.58

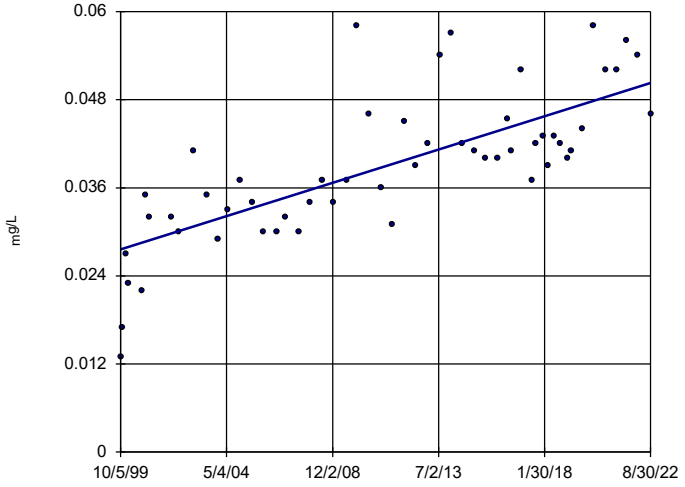
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 11/5/2022 4:12 PM View: Trend Tests - App I PL Exceedance
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-4 (bg)



n = 54

Slope = 0.0009886 units per year.

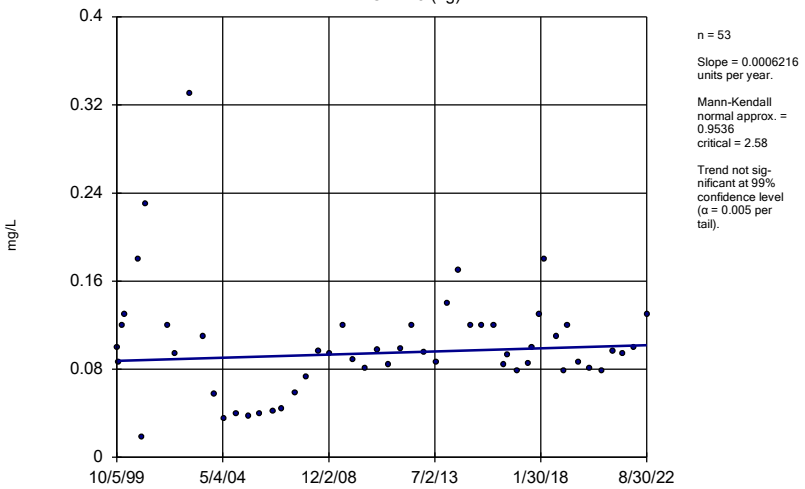
Mann-Kendall normal approx. = 6.411
critical = 2.58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 11/5/2022 4:12 PM View: Trend Tests - App I PL Exceedance
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sen's Slope Estimator

GWA-5 (bg)



n = 53

Slope = 0.0006216 units per year.

Mann-Kendall normal approx. = 0.9536
critical = 2.58

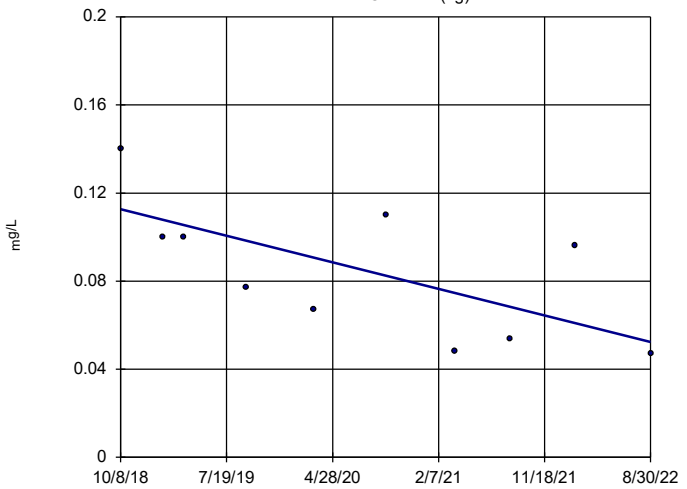
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 11/5/2022 4:12 PM View: Trend Tests - App I PL Exceedance
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-7A (bg)



n = 10

Slope = -0.01546 units per year.

Mann-Kendall statistic = -26
critical = -30

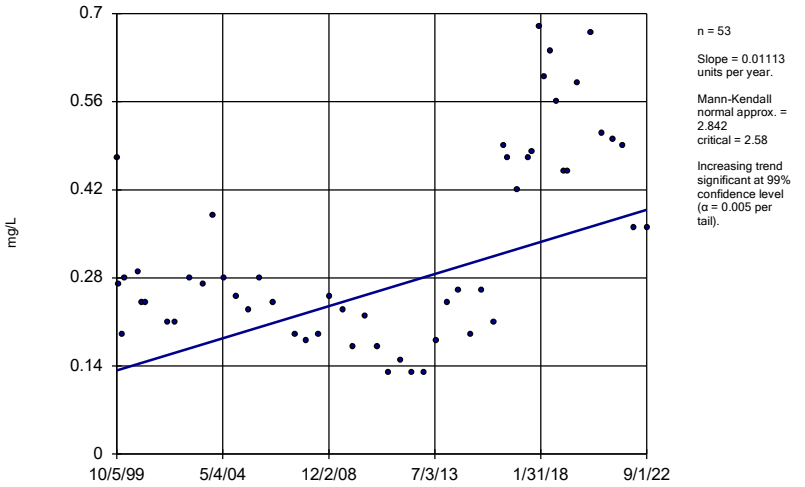
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 11/5/2022 4:12 PM View: Trend Tests - App I PL Exceedance
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-5



n = 53

Slope = 0.01113 units per year.

Mann-Kendall normal approx. = 2.842
critical = 2.58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 11/5/2022 4:12 PM View: Trend Tests - App I PL Exceedance
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

APPENDIX D

ALTERNATE SOURCE DEMONSTRATION

Georgia Power

Plant McIntosh Inactive Landfill No. 3

Permit No. 051-008D(LI)
Effingham County

UPDATE TO BARIUM AND COBALT ALTERNATE SOURCE DEMONSTRATIONS

Atlantic Coast Consulting, Inc.

TABLE OF CONTENTS

CERTIFICATION STATEMENT

I hereby certify that the information contained in this alternate source demonstration is accurate in accordance with 40 CFR 257.94(e)(2) and the Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management, Rule 391-3-4-.10(6)(a). I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management, and 40 CFR Part 258.50(g).

ATLANTIC COAST CONSULTING, INC.

Charles B. Adams, P.G.
Georgia Registered Professional
Geologist No. 1632
Preparer
Date: September 29, 2022

Chad Hall, PhD, P.E.
Georgia Registered Professional
Engineer No. PE040688
Reviewer
Date: September 29, 2022

1.0 INTRODUCTION

Georgia Power Company (GPC) is providing this update to previously submitted Alternate Source Demonstrations (ASDs) for two statistically significant increases (SSIs) at Plant McIntosh Inactive Landfill No. 3 (Site). The previous ASDs were submitted for SSIs of barium, cobalt, and chromium in groundwater monitoring well GWC-5. The ASDs were submitted to Georgia Environmental Protection Division (EPD) on August 9, 2017, and February 27, 2020 (ERM,2017 and GEI, 2020). The SSI for chromium discussed in the 2020 ASD is not a current SSI and is not discussed in this update. GPC is submitting this update in support of the proposed abandonment of GWC-5 and replacement with GWC-5A, which is more representative of the groundwater conditions at the Site.

Because these ASDs have not been approved by EPD, this document compiles information from the 2017 and 2020 ASDs and provides additional data since submittal to illustrate that alternate source conditions indicated in the original ASDs still exist. Copies of these ASDs are provided in **Attachment A**.

New information provided in this update supports data from the 2017 and 2020 ASDs that occurrences of barium and cobalt are a natural variation in groundwater quality and verifies that the conditions that caused solubility of barium and cobalt still exist; however, the original geochemical conditions are subsiding and as a result so are barium and cobalt concentrations. As summarized in this update, barium and cobalt concentrations are low with stable trends (within an order of magnitude of background levels). No SSIs of coal combustion residual (CCR) indicator parameters (Appendix III) and the lack of increases or detections of other more mobile constituents such as boron, chloride, or sulfate demonstrate no correlation to barium or cobalt. Barium and cobalt concentrations in GWC-5 increase with higher groundwater elevations attributable to surface hydrology. This ASD Update has been prepared pursuant to 40 CFR 257.94(e)(2) and Georgia EPD Rules for Solid Waste Management Chapter 391.-3-4-.10(6)(a) and demonstrates that the SSIs resulted from natural variation in groundwater quality.

2.0 BACKGROUND

GPC Plant McIntosh is located at 981 Old Augusta Road Central, in Effingham County, Georgia, approximately 4 miles northeast of the City of Rincon, and 18 miles north of the City of Savannah. The plant is situated on approximately 2,300 acres west of the Savannah River. Plant McIntosh Inactive Landfill No. 3 (Site) is located on the southwestern portion of the plant property. The Site is permitted under EPD Permit No. 051-008D(LI) and was issued a closure certificate on March 21, 2008. **Figure 1**, Site Location Map, depicts the Plant location referenced to regional landmarks. A recent potentiometric surface map is provided for reference as **Figure 2**, Potentiometric Contour Map February 2022.

2.1 Geology of Coastal Plain

The Site is situated in the Coastal Plain Physiographic Province. Coastal Plain sediments are Cretaceous to Pleistocene age and consist of stratified marine deposits and materials eroded from crystalline rock of the Piedmont Region. Sediments are typically clay, silt, and sand that overlay limestone/shale rock resting on older igneous and metamorphic basement rocks. These older, crystalline rocks dip to the south and east causing the overlying sediments to form a wedge-shaped deposit that is thickest to the east and the south. The Coastal Plain deposits crop out at

the land surface in bands, from oldest to most recent, from the Fall Line to the coast. Pleistocene-aged deposits are at the surface in this region.

3.0 ALTERNATE SOURCE DEMONSTRATION

As allowed by §257.94(e)(2) and EPD Rule 391.-3-4-.10(6)(a), the Site may demonstrate that a source other than the CCR unit caused the SSI for a constituent or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. This update demonstrates an alternate source for barium and cobalt SSIs in monitoring well GWC-5. Barium was initially identified as an SSI January 2017 and cobalt was initially identified as an SSI August 2019. Both barium and cobalt were identified as SSIs in GWC-5 during the First 2022 Semi-annual groundwater monitoring event (ACC, 2022). A summary of the February 2022 concentrations and statistical prediction limits are provided below:

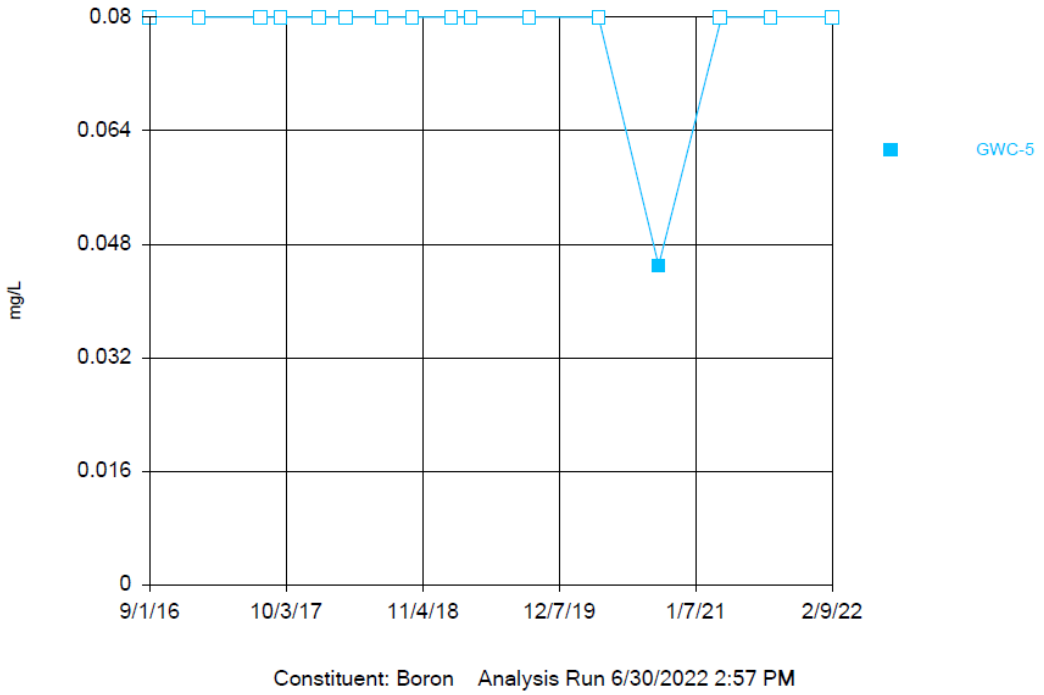
Constituent	Location	Concentration	Interwell Prediction Limit
Barium	GWC-5	0.36	0.33
Cobalt	GWC-5	0.011	0.0072

1. Units are milligrams per liter (mg/L).
2. Sample collected February 9, 2022.

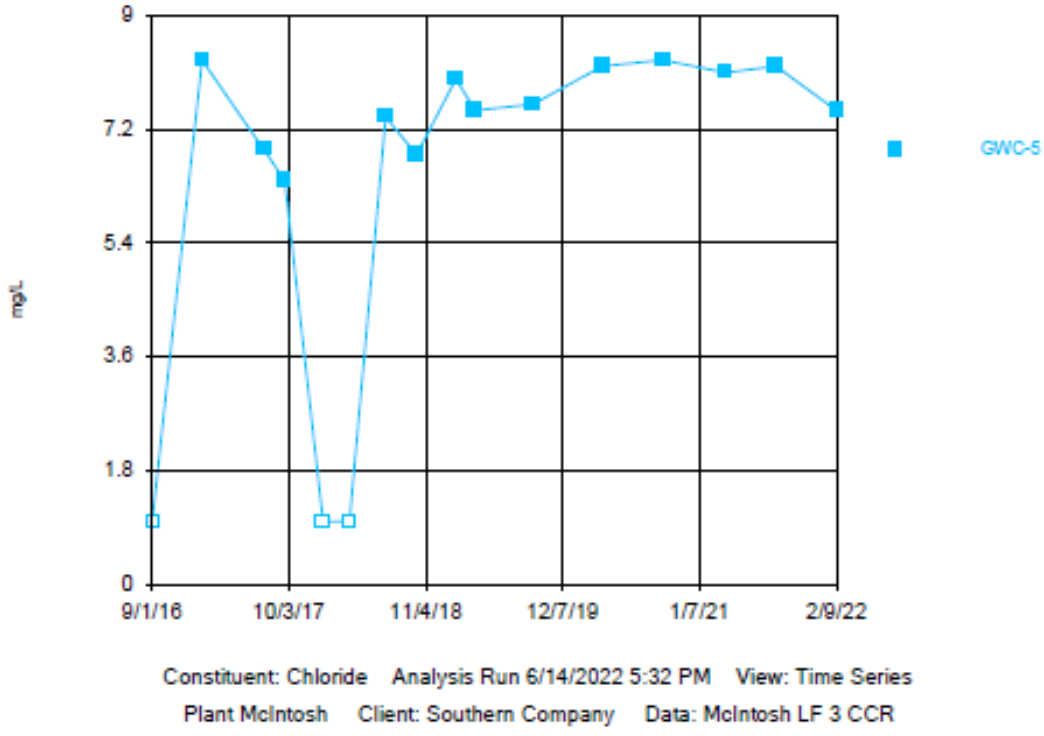
The February 2022 semiannual groundwater monitoring laboratory data are summarized in the attached **Table 1** (ACC, 2022).

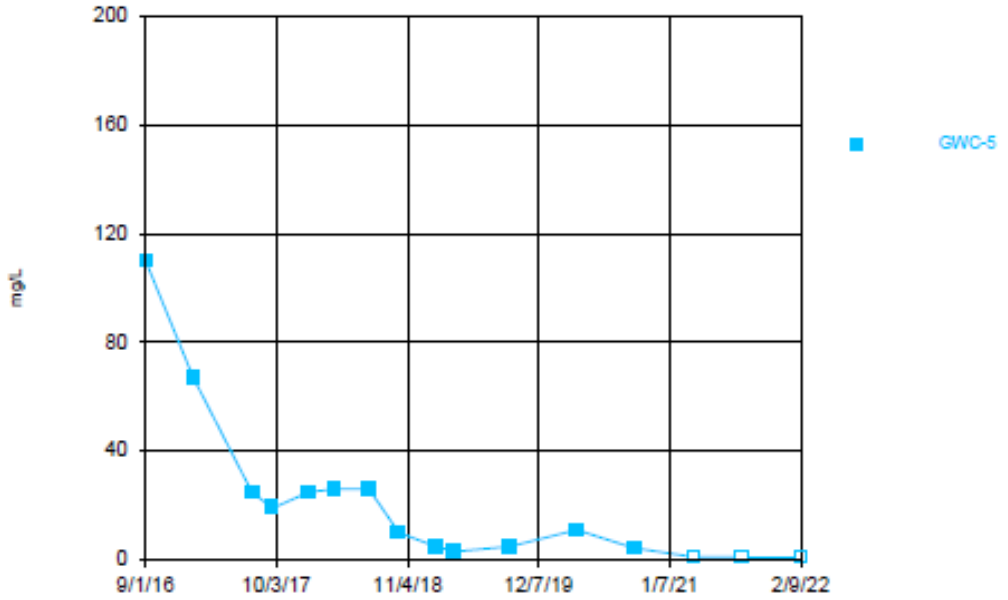
3.1 Supplemental Analytical Data

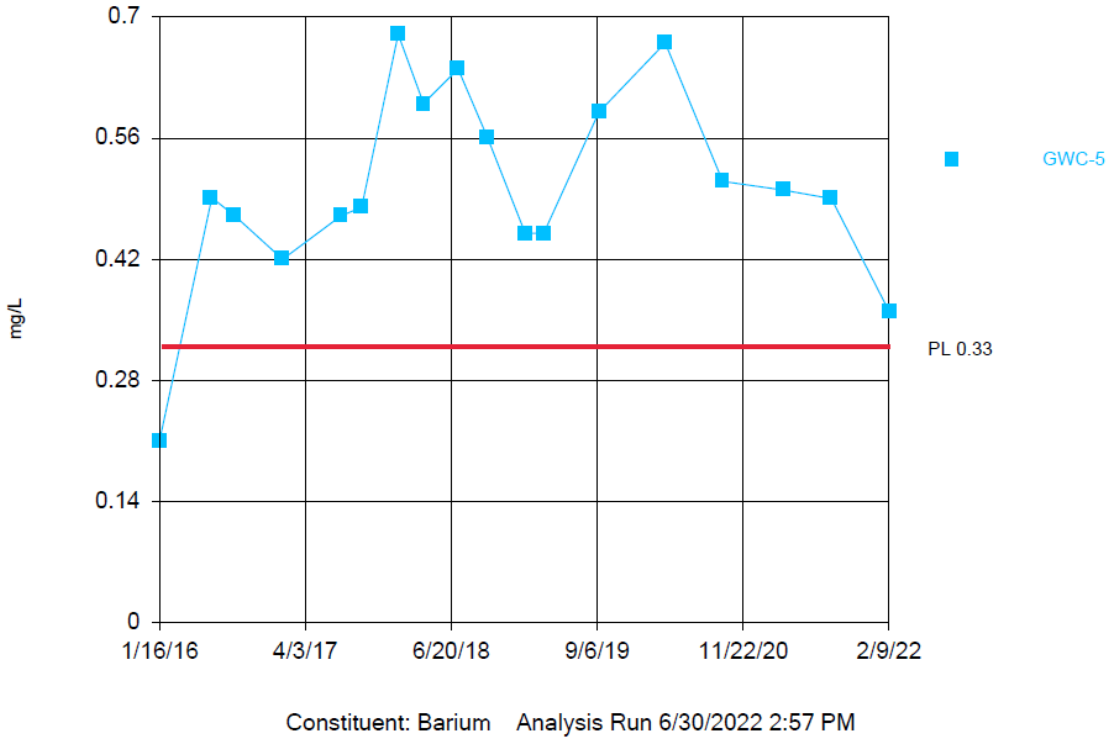
As detailed in the following subsections, these SSIs are not the result of a release from the unit and are the result of natural variability in groundwater quality. These ubiquitous metals and their SSIs occur without SSIs of other Appendix III constituents that would be indicative of a CCR release. A release from the unit would cause multiple Appendix III SSIs for parameters such as boron, chloride, and sulfate. This has not occurred. Most notably, boron was not detected above the reporting limit in GWC-5 samples (see attached **Table 1** for the estimated "J" value reported for GWC-5). The absence of multiple Appendix III SSIs supports the conclusion that the SSIs are not the result of a release from the unit. The graphs presented below show currently collected analytical data for Appendix III parameters and permit required parameters barium and cobalt.

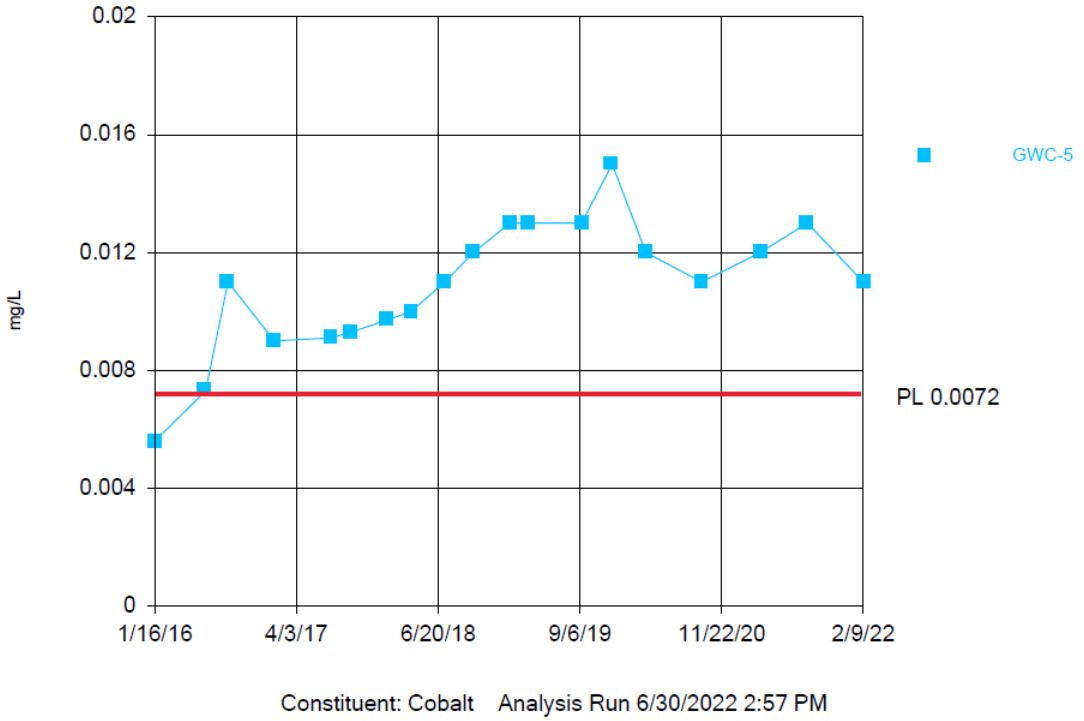


Note: the 9/22/2020 boron detection is an estimated value of 0.045 mg/L below the reporting limit of 0.08 mg/L (near background).




200
160
120
80
40
0
mg/L
9/1/16
10/3/17
11/4/18
12/7/19
1/7/21
2/9/22
GWC-5
Constituent: Sulfate Analysis Run 6/14/2022 5:32 PM View: Time Series
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR


0.7
0.56
0.42
0.28
0.14
0
mg/L
1/16/16
4/3/17
6/20/18
9/6/19
11/22/20
2/9/22
GWC-5
PL 0.33
Constituent: Barium Analysis Run 6/30/2022 2:57 PM



3.2 Surface Hydrology

The 2017 and 2020 ASDs for barium and cobalt attributed observed concentrations and SSIs to localized changes in geochemistry. Changes in surface water hydrology are documented to have affected geochemistry local to GWC-5 in the ASD for barium SSIs (ERM, 2017). GWC-5 is also located along the edge of a ditch that is susceptible to flooding during periods of heavy rainfall. The changes to surface water hydrology at the Site included:

- Tree removal in 2013 and 2015 (depicted in Figure 2 of Attachment A)
- Woody debris from the clearing prevented surface water outflow (expansion of wetland area - depicted in aerial photo of Attachment A)
- Repair of the access road in 2016 and additional clearing in the buffer zone November 2020
- Subsequent increase in groundwater levels due to historically high surface water levels in 2016

The location of the tree removal and expanded wetland is closest to well GWC-5 and would affect this area due to proximity. As noted in a previous ASD (ACC 2020c), groundwater elevations increased on a site-wide basis between December 2019 and March 2020, but GWC-5 increased by 7.09 feet more than for most Site wells and was not consistent with historical trends (i.e., the water level from GWC-5 was not able to be used to construct the March 2020 potentiometric contour map). This illustrated that during periods of higher precipitation, the low permeability lithology at GWC-5 creates a localized, low-yielding perched zone that is not consistent across the Site.

3.3 Geochemistry and Analytical Data Quality

As noted in the 2017 and 2020 ASDs provided in **Attachment A**, there is a natural variation in groundwater quality based on Site lithology and monitoring interval of the aquifer. Because the Site aquifer is composed of clay, silt, and sand, there is slight variation in mineral and ionic content of groundwater. The location of the well screen within these coastal plain sediments can affect the metals as discussed below.

3.3.1 Barium

The barium concentrations in groundwater and SSIs are a natural variation in groundwater where:

- No SSIs of CCR indicator parameters (Appendix III) and the lack of increases or detections of other more mobile constituents such as boron, chloride, or sulfate demonstrate no correlation to barium.
- Barium is naturally occurring in local geology and the Site.
- Barium is present in all Site groundwater samples and has been detected in all monitoring wells and all groundwater samples collected at the Site since 1999.
- Barium concentrations in GWC-5 increase with higher groundwater elevations.

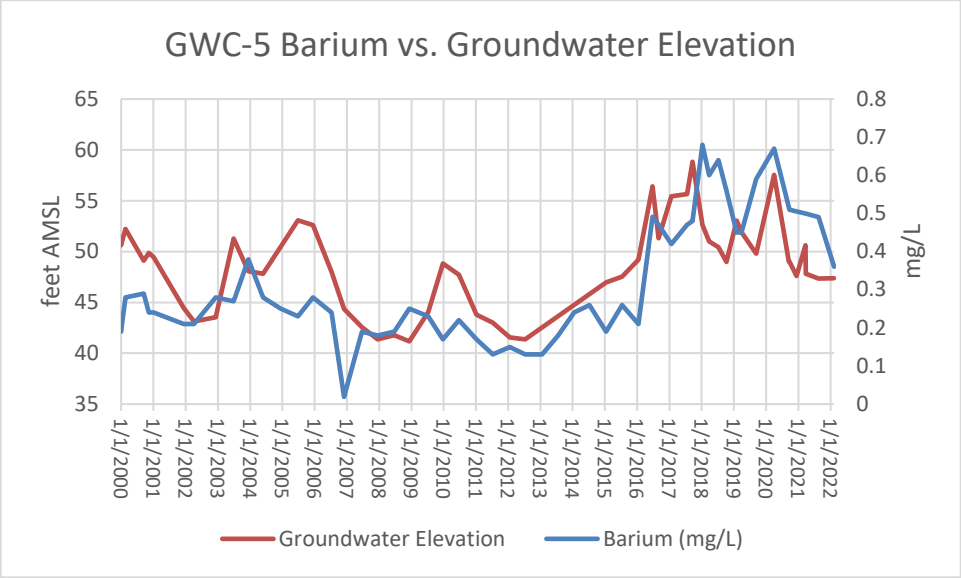
As documented in the U.S. Geological Survey Professional Paper[1] 1270, barium is ubiquitous in soils in the eastern U.S. Barium in soils in the eastern U.S. ranges from 10 to 1,500 parts per million (ppm). The 2017 ASD also documented barium in Coastal Plain sediments and in Site-specific groundwater samples:

> *"Barium has been detected in all monitoring wells and all groundwater samples collected at Ash Disposal Site No. 3 since 1999. The highest concentration of barium detected at Ash Disposal Site No. 3 is 0.491 mg/L[2]. Based on information presented below, barium is naturally occurring in local geology, groundwater, and at the site."*
>
> *Barium is an alkaline earth metal and occurs in nature as a free metal and as salts. Barite (BaSO4) and witherite (BaCO3) are the two most common barium minerals. Barium is commonly found in clays and other silicate minerals (i.e. alkali feldspar, plagioclase, pyroxene, amphibole, and micas) as a result of ion exchange (Choudhury & Cary, 2001). Silicate minerals are commonly found in weathered material from crystalline rock of the Piedmont which has been deposited as Coastal Plain sediments at the site (Clarke & Washington, 1924). In addition to barium being naturally present in Coastal Plain sediments, barium is naturally occurring in groundwater in the Coastal Plain (Lee, 1993)."*

The ubiquity of barium in soils is also demonstrated where barium concentrations in groundwater samples from GWC-5 increase with higher groundwater elevations (see graph).

[1] Data reevaluated in U.S. Geological Survey Professional Paper 1648 indicating that the reliability of the soil maps is good, and that data can be used to establish general baselines against which more specific natural geochemical variations can be evaluated.

[2] The reference to a specific report table is excerpted from this quotation.



Notes: AMSL = above Mean Sea Level, mg/L = milligrams per Liter

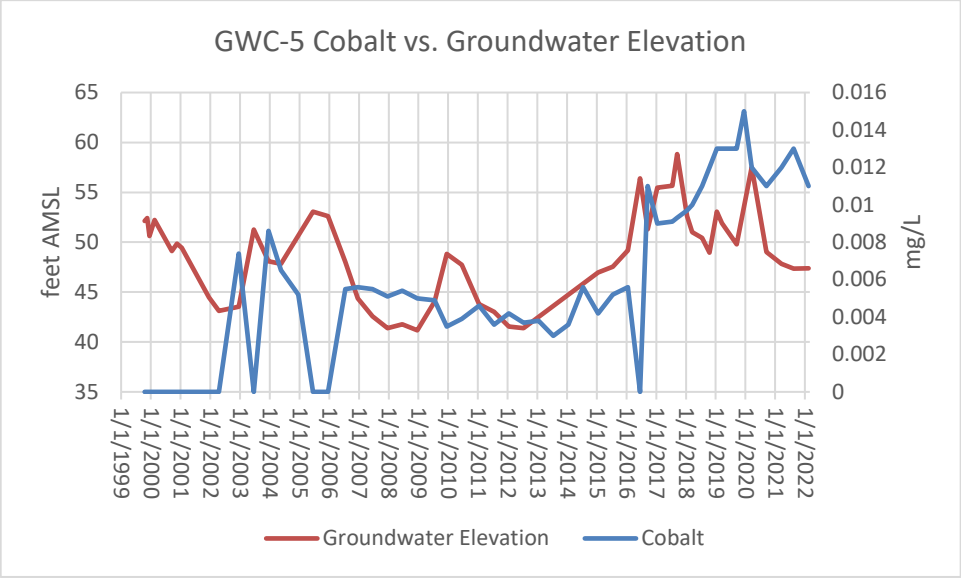
The 2017 ASD indicated an increase in dissolved ions in groundwater due to the anerobic conditions created by the expansion of wetland areas (described in Section 3.2). The 2017 ASD graphed barium concentrations and specific conductance noting an increase in specific conductance after 2016 (see Figure 4 of ERM, 2017). These conditions hold true with current data where there is a peak in barium concentrations after 2016. Barium shows current downward trends that concur with the induced changes to localized geochemistry and hydrology. As demonstrated in the graph above, the repairs to the road and installation of a drainage culvert improved drainage and clearing of the buffer zone appears to be lowering groundwater toward pre-2016 levels.

3.3.2 Cobalt

The cobalt concentrations in groundwater and SSIs are a natural variation in groundwater where:

- No SSIs of CCR indicator parameters (Appendix III) and the lack of increases or detections of other more mobile constituents such as boron, chloride, or sulfate demonstrate no correlation to cobalt.
- Cobalt is naturally occurring in local geology and the Site.
- Cobalt occurrences in groundwater can be attributed to localized changes in geochemistry.
- Cobalt concentrations in GWC-5 increase with higher groundwater elevations.

As documented in the U.S. Geological Survey Professional Paper 1270, cobalt is ubiquitous in soils in the eastern U.S. Cobalt in the eastern U.S. ranges from <0.3 to 70 ppm. The ubiquity of cobalt in soils is demonstrated where groundwater cobalt concentrations in samples from GWC-5 increase with higher groundwater elevations (see graph).



Notes: AMSL = above Mean Sea Level, mg/L = milligrams per Liter

Based on the time series observations, groundwater conditions and metals concentrations at GWC-5 were influenced by changes to surface water hydrology from 2016; however, groundwater at GWC-5 appears to be returning to pre-2016 conditions. Recent sampling data indicates that concentrations are low with stable trends (within an order of magnitude of background levels).

4.0 SUMMARY AND RECOMMENDATIONS

Based on a review and evaluation of available information the barium and cobalt SSIs are not the result of a release from the CCR unit. Barium and cobalt concentrations and SSIs are a natural variation in groundwater quality because:

- No SSIs of CCR indicator parameters (Appendix III) and the lack of increases or detections of other more mobile constituents such as boron, chloride, or sulfate demonstrate no correlation to barium or cobalt.
- Concentrations are low with stable trends (within an order of magnitude of background levels),
- Concentrations and SSIs are attributed to localized geochemical variability due to temporary documented changes to surface hydrology,
- Barium and cobalt concentrations in GWC-5 increase with higher groundwater elevations attributable to surface hydrology (natural variation in groundwater quality).

This ASD Update demonstrates that the SSIs are not the result of a release from the Unit. The barium and cobalt concentrations and SSIs are attributed to natural occurrence per 391-3-4-.14(23)(c). Therefore, pursuant to 40 CFR 257.94(e)(2) and EPD Rules for Solid Waste Management Chapter 391.-3-4-.10(6)(a), the Site will remain in detection monitoring.

GPC recommends abandoning well GWC-5 and utilizing the well complement GWC-5A as described in the *Minor Modification Request*. The well complement GWC-5A provides data most representative of groundwater conditions within the uppermost aquifer at the Site.

5.0 REFERNECES

Atlantic Coast Consulting, Inc. (ACC), 2020. 2020 Annual Groundwater Monitoring and Corrective Action Report – Plant McIntosh Inactive Landfill No. 3, July 2020.

Atlantic Coast Consulting, Inc. (ACC), 2020b. Groundwater Well Installation and Abandonment Report – Plant McIntosh Inactive Landfill No. 3, February 2020.

Atlantic Coast Consulting, Inc. (ACC), 2020c. Alternate Source Demonstration, Plant McIntosh Inactive Landfill No.3, September 2020.

Atlantic Coast Consulting, Inc. (ACC), 2022. 2022 Annual Groundwater Monitoring and Corrective Action Report– Plant McIntosh Inactive Landfill No. 3, July 2022.

Environmental Resources Management (ERM), 2017. Alternate Source Demonstration –Plant McIntosh Ash Disposal Site No. 3, August 2017.

GEI Consultants, Inc. (GEI), 2020. Alternate Source Demonstration –Plant McIntosh CCR Inactive Landfill No.3, February 2020.

GEI Consultants, Inc. (GEI), 2020. Monitoring Well Abandonment Request –Plant McIntosh CCR Inactive Landfill No.3, February 2020.

Groundwater Stats Consulting. (GSC), 2020. Plant McIntosh Landfill #3 Statistical Analysis – March/April 2020 Semi-Annual Sample Event, June 2020.

Lee, R., 1993. Geochemistry of Groundwater in the Southeastern Coastal Plain Aquifer System in Mississippi, Alabama, Georgia, and South Carolina Professional Paper 1410-D. Washington: U.S. Geological Survey.

Shacklette, Hansford T. and Boerngen, Josephine G., 1984. Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States, U.S. Geological Survey Professional Paper 1270, 1984.

Thomas, A.G., 1986. Specific Conductance as an Indicator of Total Dissolved Solids in Cold, Dilute Waters, Hydrological Sciences Journal, 31,1, p81-92, March 1986.

U.S. EPA Waste Management Division Office of Solid Waste, 1989, EPA 530/SW89-031 Interim Final RCRA Investigation (RFI) Guidance, Volume II or IV.

TABLES

Table 1
Summary of Groundwater Analytical Data
February 2022
Plant McIntosh Inactive Landfill No. 3
Effingham County, Georgia

	Substance	Well ID							
		GWA-1A	GWA-1B	GWA-2B	GWA-3A	GWA-4	GWA-5	GWA-7A	GWC-1
		2/8/2022	2/8/2022	2/7/2022	2/8/2022	2/8/2022	2/8/2022	2/7/2022	2/9/2022
APPENDIX III	Boron	<0.060	0.084	0.54	0.077 J	<0.060	<0.060	0.60	<0.060
	Calcium	1.7	2.7	12	3.3	1.3	2.8	11	0.23 J
	Chloride	8.6	9.5	6.7	23	6.4	12	7.6	11
	Fluoride	<0.026	0.077 J	0.027 J	0.033 J	0.061 J	0.12	<0.026	<0.026
	pH	5.17	5.43	5.70	4.69	4.93	4.67	5.29	5.01
	Sulfate	<0.76	2.8	42	<0.76	5.9	13	54	<0.76
	TDS	45	39	120	62	29	57	150	52
Required by Permit	Barium	0.024	0.019	0.047	0.10	0.054	0.10	0.096	0.030
	Beryllium	<0.00027	<0.00027	0.00071 J	0.00061 J	<0.00027	<0.00027	<0.00027	<0.00027
	Chromium	0.0051	<0.0015	<0.0015	<0.0015	<0.0015	0.0030	<0.0015	<0.0015
	Cobalt	0.00029 J	0.00032 J	0.00073 J	0.0019 J	0.00096 J	0.0010 J	0.0024 J	0.00030 J
	Copper	<0.0011	<0.0011	0.0012 J	0.0011 J	<0.0011	<0.0011	0.0080	<0.0011
	Lead	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	0.00058 J	<0.00017	<0.00017
	Vanadium	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.0023	0.0011	<0.00078
	Zinc	0.0031 J	0.0048 J	0.0046 J	0.013	0.0070	0.0070	0.0098	<0.0029

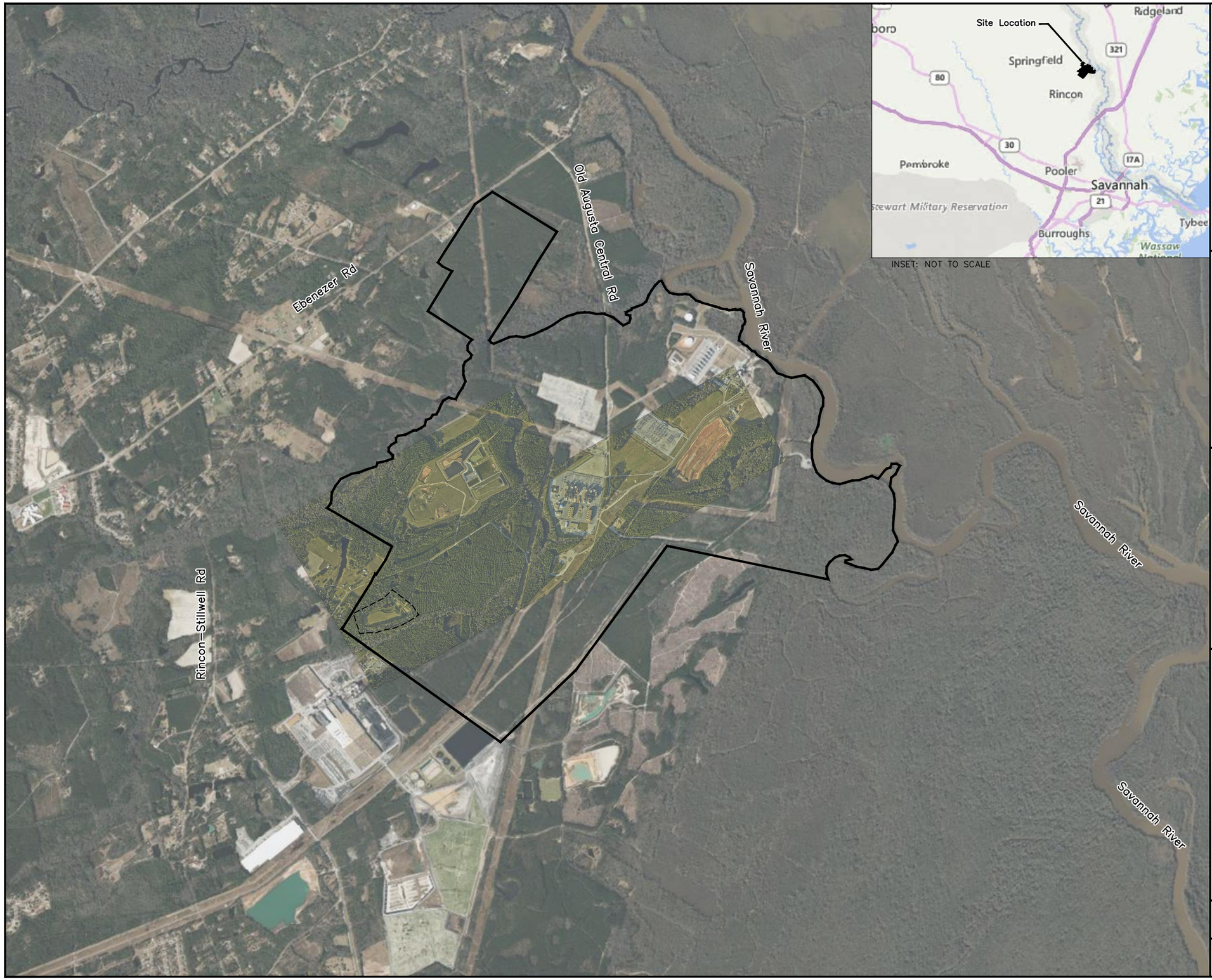
Notes:
1. Results for substances are reported in milligrams per liter (mg/L). pH results are reported in Standard Units.
2. < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).
3. J indicates the substance was detected at such low levels that the precision 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.
4. TDS indicates total dissolved solids.
5. Appendix III = indicator parameters evaluated during Detection Monitoring.
6. Parameters required by permit are Appendix I parameters included to meet GA EPD Rule 391-3-4-.14 requirements.

Table 1
Summary of Groundwater Analytical Data
February 2022
Plant McIntosh Inactive Landfill No. 3
Effingham County, Georgia

Substance		Well ID						
		GWC-1A	GWC-2	GWC-4A	GWC-5	GWC-5A	GWC-6	GWC-6A
		2/9/2022	2/8/2022	2/9/2022	2/9/2022	2/8/2022	2/9/2022	2/9/2022
APPENDIX III	Boron	0.13	0.094	<0.060	<0.060	<0.060	<0.060	<0.060
	Calcium	2.5	1.3	0.39 J	4.6	2.1	1.8	3.2
	Chloride	15	5.0	5.3	7.5	5.9	8.3	9.5
	Fluoride	0.069 J	<0.026	0.038 J	0.063 J	0.033 J	0.042 J	0.042 J
	pH	4.53	4.79	4.82	4.82	5.20	5.05	5.31
	Sulfate	<0.76	2.7	<0.76	<0.76	5.9	<0.76	5.4
	TDS	62	30	22	110	48	86	100
Required by Permit	Barium	0.27	0.062	0.034	0.36	0.052	0.050	0.083
	Beryllium	0.00040 J	<0.00027	<0.00027	0.0024 J	<0.00027	<0.00027	0.00032 J
	Chromium	<0.0015	0.0046	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
	Cobalt	0.0044	0.0013 J	0.00042 J	0.011	0.0020 J	0.00059 J	0.0012 J
	Copper	<0.0011	0.0019 J	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
	Lead	<0.00017	<0.00017	<0.00017	0.00033 J	0.00061 J	0.00039 J	<0.00017
	Vanadium	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.0012	<0.00078
	Zinc	0.023	0.0078	0.0039 J	0.030	0.011	0.0087	0.0069

Notes:
1. Results for substances are reported in milligrams per liter (mg/L). pH results are reported in Standard Units.
2. < indicates the substance was not detected above the relevant laboratory method detection limit (MDL).
3. 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.
4. TDS indicates total dissolved solids.
5. Appendix III = indicator parameters evaluated during Detection Monitoring.
6. Parameters required by permit are Appendix I parameters included to meet GA EPD Rule 391-3-4-.14 requirements.

FIGURES



INSET: NOT TO SCALE

ATLANTIC COAST CONSULTING, INC.

2,500 0 1,250 2,500

SCALE (IN FEET)

LEGEND:

EXISTING	DESCRIPTION
———	APPROXIMATE PROPERTY BOUNDARY
- - - - - -	INACTIVE LANDFILL No. 3

NOTES:

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

PROJECT

Georgia Power

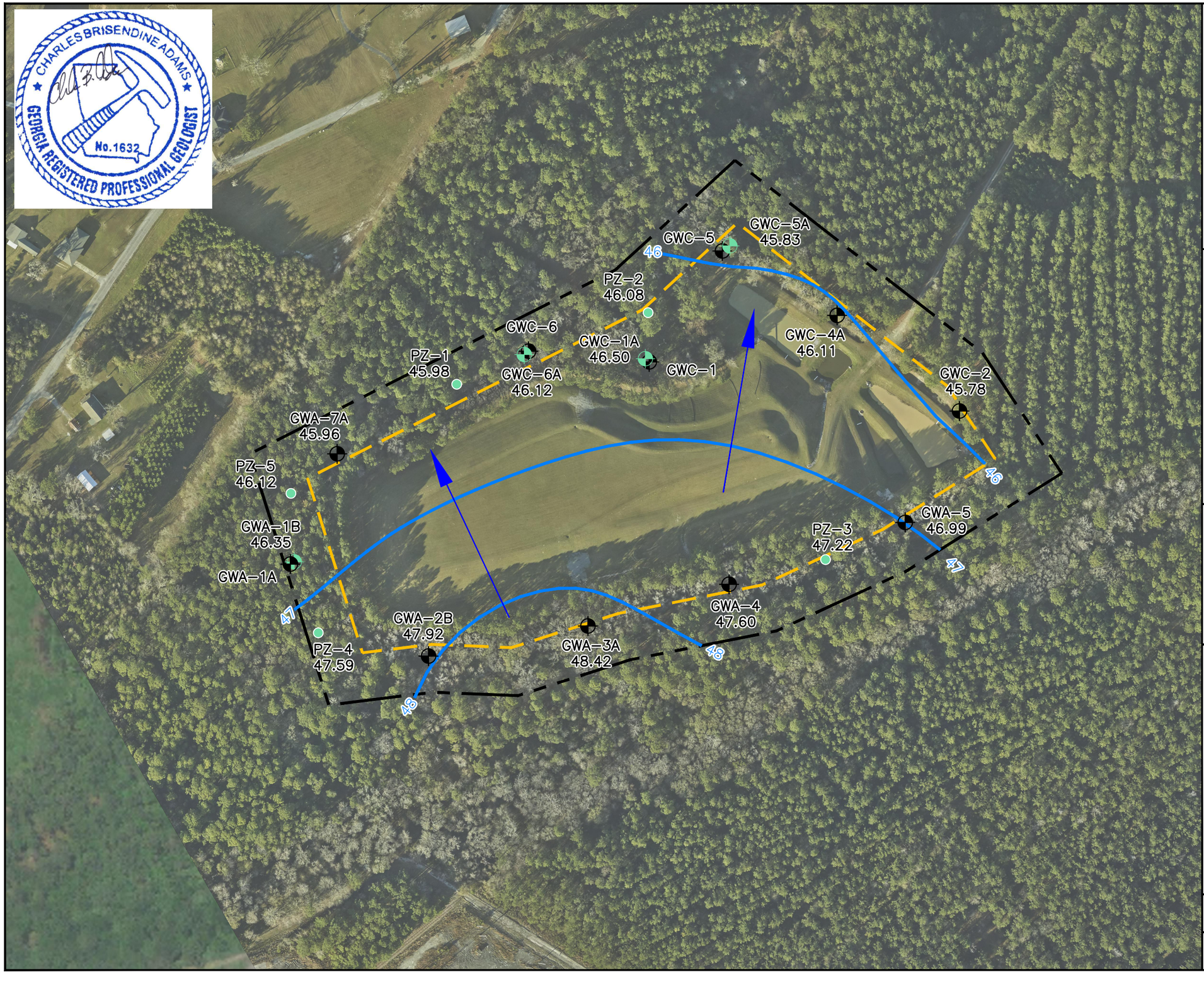
GEORGIA POWER COMPANY
PLANT McINTOSH
INACTIVE LANDFILL No. 3

2022 UPDATE TO BARIUM & COBALT ALTERNATE SOURCE DEMONSTRATIONS

SITE LOCATION MAP

PROJECT NO. 1054-110 June 2022

DRAWN BY:	RW	FIGURE:	1
CHECKED BY:	MM		



CHARLES BRISENDINE ADAMS
GEORGIA REGISTERED PROFESSIONAL GEOLOGIST
No. 1632

ATLANTIC COAST CONSULTING, INC.

200 0 100 200

SCALE (IN FEET)

LEGEND:

EXISTING	DESCRIPTION
	EXISTING 100–FOOT BUFFER ZONE
	WASTE MANAGEMENT BOUNDARY
GWC-1A 46.79	MONITORING WELL GROUNDWATER ELEVATION (FT NAVD88)
PZ-1 46.35	PIEZOMETER GROUNDWATER ELEVATION (FT NAVD88)
GWA-1B 46.76	NON–NETWORK WELL GROUNDWATER ELEVATION (FT NAVD88)
47	GROUNDWATER ELEVATION CONTOUR (FT NAVD88)
	GROUNDWATER FLOW DIRECTION

NOTES:
1. DEPTHS TO WATER MEASURED FEBRUARY 7, 2022.
2. FT NAVD88 = FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988.
3. GWA-1A, GWC-1, GWC-5, AND GWC-6 NOT USED TO CONSTRUCT POTENTIOMETRIC CONTOURS. WELLS SELECTED FOR CONTOURING WERE MOST CONSISTENT WITH OVERALL SITE GROUNDWATER FLOW PATTERN.
4. PIEZOMETERS PZ-4 AND PZ-5 WERE INSTALLED IN JANUARY 2022.
5. AERIAL DATED 2/15/2022 FROM SAM, LLC. ADDITIONAL PHOTOGRAPHY DATED 2021 FROM MICROSOFT CORPORATION, MAXAR, CNES, DISTRIBUTION AIRBUS DS.

PROJECT

Georgia Power

GEORGIA POWER COMPANY
PLANT McINTOSH
INACTIVE LANDFILL No. 3

2022 UPDATE TO BARIUM & COBALT ALTERNATE SOURCE DEMONSTRATIONS

POTENTIOMETRIC CONTOUR MAP FEBRUARY 2022

PROJECT NO. 1054-110 February 2022

DRAWN BY:	RW	FIGURE:	2
CHECKED BY:	MM		

ATTACHMENTS

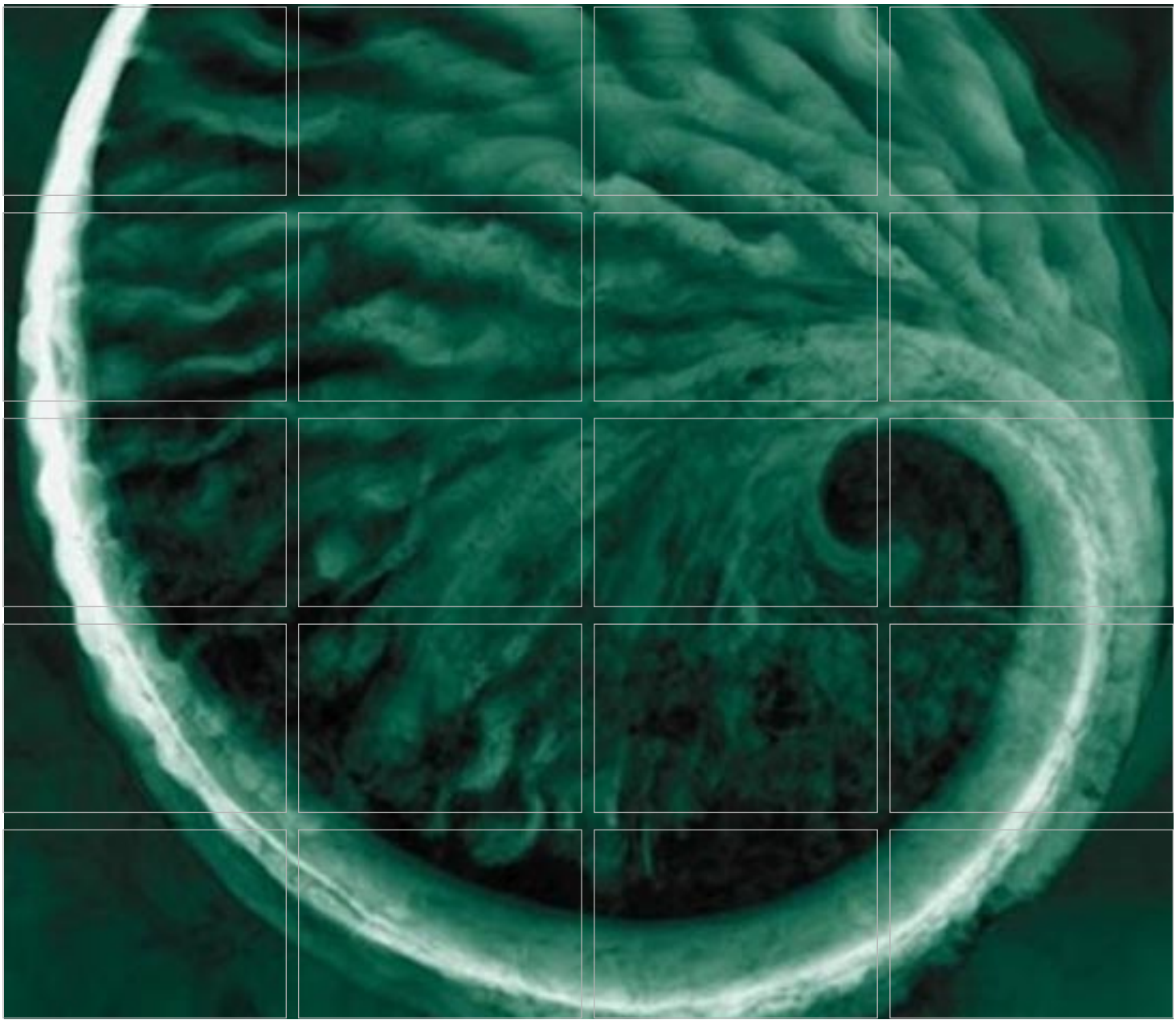
Atlantic Coast Consulting, Inc.

ATTACHMENT A

ALTERNATE SOURCE DEMONSTRATIONS COPIES FROM 2017 AND 2020

ATLANTIC COAST CONSULTING, INC.

ERM. ALTERNATE SOURCE DEMONSTRATION
PLANT MCINTOSH ASH DISPOSAL SITE NO. 3.
AUGUST 2017



Prepared for:

Georgia Power Company

ALTERNATE SOURCE DEMONSTRATION

Plant McIntosh Ash Disposal Site □o. 3
Permit □o. 051-008D (LI)

August 2017

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Georgia Power Company

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Plant McIntosh
Ash Disposal Site No. 3
Permit No. 051-008D (LI)

August 9, 2017

Hunter Sartain, P.E.
Principal

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Project Manager

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ERM

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ACRONYMS

ASD □ Alternate Source Demonstration

CCR □ coal combustion residual

D□O □ Design □ Operation

ERM □ En□ironmental Resources Management

GA □ Georgia

GPC □ Georgia Power Company

MCL □ maximum contaminant le□el

□S/cm □ microsiemens per centimeter

mg/L □ milligrams per liter

K_d □ partitioning coefficient

SSI □ statistically significant increase

UPL □ upper prediction limit

1.0 INTRODUCTION

Statistical analysis of the analytical data from the 2017 first semi-annual groundwater sampling e□ent at GPC□s Plant McIntosh Ash Disposal Site □o. 3 identified an SSI of barium in monitoring well GWC-5 (ERM, 2017).

Pursuant to the Rule 391-3-4.14(23)(c), this report pro□ides an ASD for the SSI noted abo□e. Based on re□iew of site data, the SSI for barium in well GWC-5 is likely the result of □ariability in naturally-occurring barium and therefore not indicati□e of a groundwater impact by the disposal unit. This report pro□ides details regarding the alternate source.

1.1 BACKGROUND

Plant McIntosh is located in southeast Effingham County, Georgia, approximately 4 miles northeast of the city of Rincon and 20 miles north-northeast of the city of Sa□annah. The plant property is on the west bank of the Sa□annah Ri□er at Big Kiffer Point (Site Location Map, Figure 1). Ash Disposal Site □o. 3 was closed in 2008 and is currently in post-closure care.

1.2 HISTORICAL MONITORING

A Groundwater Monitoring Plan was submitted and appro□ed in August 1999 and modified February 2010 as part of the facility D□O Plan. The monitoring well network consists of fourteen wells (se□en upgradient and se□en downgradient) located along the perimeter of Ash Disposal Site □o. 3 (Potentiometric Surface Map □anuary 10, 2017, Figure 2). Semi-annual groundwater monitoring began in October 1999 and is routinely performed in compliance with the permit conditions for groundwater monitoring at the site. Groundwater monitoring of CCR constituents for compliance with Georgia EPD□s CCR Rule □391-3-4-.10 (GA CCR Rule) has been conducted twice since the GA CCR Rule was promulgated.

1.3 BASIS OF THE STATISTICALLY SIGNIFICANTLY INCREASE

Data from the 2017 first semi-annual groundwater monitoring e□ent utili□ed the most recent measured concentration for analytes at each downgradient well and calculated a UPL using interwell methods. One exceedance of the UPL was found at one monitoring well location. The exceedance was identified as an SSI for barium in well GWC-5. □o exceedances of the MCL were identified in the data.

The 2017 First Semi-Annual Groundwater Monitoring Report (ERM, 2017) describes the statistical methods utili□ed to e□aluate data sampled for the first 2017 semi-annual e□ent. The calculated UPL for barium using the statistical approach identified within that report is 0.33 mg/L. The barium concentration in well GWC-5 for the first 2017 sampling e□ent was 0.42 mg/L. The MCL for barium is 2.0 mg/L.

2.0 ALTERNATE SOURCE DEMONSTRATION

GWC-5 is the only well within the network of 7 downgradient monitoring wells to ha□e a reported SSI during the □anuary 2017 groundwater sampling e□ent. Barium was the only constituent. A landfill release typically results in multiple SSIs in multiple wells. Since there are no other reported SSIs and barium is naturally occurring in soil and groundwater at the site, a locali□ed cause is likely and not a release from the unit. Based on these obser□ations, a re□iew of facility acti□ities and a re□iew of the existing field and analytical data were conducted.

The source of the SSI is the result of □ariability in naturally-occurring barium and the following details are pro□ided as basis for this demonstration□

- Barium is a naturally occurring at the site and is present in all site groundwater□
- The recent expansion of wetlands near GWC-5 has affected surface hydrology corresponding to changes in groundwater geochemistry and potentiometric surface in GWC-5□
- Field parameter and analytical data demonstrate the relationship between changes to the surface hydrology and increases in barium concentrations□and
- Analytical data are presented to show the presence of barium and the absence of more mobile (lower partitioning coefficient K_d) CCR-related constituents.

2.1 GEOLOGY OF COASTAL PLAIN

Ash Disposal Site □o. 3 is situated in the Coastal Plain Pro□ince of Georgia. Coastal Plain sediments were deposited from Cretaceous to Pleistocene and consist of stratified marine deposits and materials eroded from crystalline rock of the Piedmont Region, typically clay, silt, sand, which o□erlay limestone resting on much older igneous and metamorphic basement rocks (□eatch, Stephenson, □ □aughan, 1911).

2.1.1 Occurrence of Barium

Barium has been detected in all monitoring wells and all groundwater samples collected at Ash Disposal Site □o. 3 since 1999. The highest concentration of barium detected at Ash Disposal Site □o. 3 is 0.491 mg/L (GWC-5 Groundwater Field Parameters, Table 1). Based on information presented below, barium is naturally occurring in local geology, groundwater, and at the site.

Barium is an alkaline earth metal and occurs in nature as a free metal and as salts. Barite ($BaSO_4$) and witherite ($BaCO_3$) are the two most common barium minerals. Barium is commonly found in clays and other silicate minerals (i.e. alkali feldspar, plagioclase, pyroxene, amphibole, and micas) as a result of ion exchange (Choudhury □ Cary, 2001). Silicate minerals are commonly found in weathered material from crystalline rock of the Piedmont which has

been deposited as Coastal Plain sediments at the site (Clarke □ Washington, 1924). In addition to barium being naturally present in Coastal Plain sediments, barium is naturally occurring in groundwater in the Coastal Plain (Lee, 1993).

2.2 SURFACE HYDROLOGY NEAR GWC-5

Recent site acti□ities ad□acent to Ash Disposal Site □o. 3 and GWC-5 in an area north and ad□acent to GWC-5 ha□e altered the surface hydrology and drainage at the site. Site personnel remo□ed trees and brush in 2013 and 2015, and the access road was repaired north of the Ash Disposal Site □o. 3 in March 2016 after washouts made it inaccessible.

A technical memorandum (memo) dated 26 May 2017 documents the findings from a site □isit conducted on 15 May 2017, including a large emergent / scrub-shrub wetland within the area north of Ash Disposal Site □o. 3, near GWC-5 (Appendix A). □umerous dead and/or dying pine trees, wetland □egetation, and wrack lines□which are indicati□e of increasing wetland conditions were obser□ed during the site □isit and documented in the memo. A large woody debris pile associated with the 2013 and 2015 tree clearing was obser□ed pre□enting the outflow of surface water from the area to the north. The surface drainage conditions appear to ha□e been exacerbated by the road repairs in 2016, and likely contributed to expansion of the emergent / scrub-shrub wetland area.

Restricting surface flow within wetlands may create locali□ed groundwater mounding due to preferential infiltration resulting in an increase in groundwater ele□ations. Following repair of the access road in 2016, groundwater ele□ations increased to historically high le□els indicati□e of this process. Figure 3 (Barium Concentration and Groundwater Ele□ation at GWC-5) demonstrates a direct relationship between the site acti□ities that caused an expansion of the wetland area and increases in groundwater ele□ation.

Restricted surface water within wetlands, such as the area north of GWC-5, can increase the concentration of dissol□ed ions in the wetlands system (Seelig, 2009). The following section relates geochemistry to the presence of wetlands at the site.

2.3 GEOCHEMISTRY AND ANALYTICAL DATA

The changes to surface hydrology creating the emerging wetland en□ironment ha□e altered the geochemistry in the groundwater near GWC-5. In wetlands, anaerobic conditions support reducing conditions in the surface water resulting in an increase in dissol□ed ions due to precipitation/dissolution of compounds pre□iously in e□uilibrium. As surface water with ele□ated dissol□ed ions infiltrate into the subsurface, geochemical changes in the groundwater are obser□ed as increases in specific conductance measurements. Historically high specific conductance measurements recorded during recent groundwater sampling e□ents demonstrate the relationship between increased dissol□ed ions (such as barium) and the reducing conditions caused by an expanded wetland area (Barium Concentration and Specific Conductance at GWC-5, Figure 4).

Historical barium concentrations and field parameters ha□e been collected at GWC-5 since 1999 (Table 1). Figure 4 shows the relationship between barium concentrations and specific conductance data. The following are obser□ations regarding the data as illustrated in Figure 4□

- Barium concentrations in GWC-5 generally exhibit a decreasing trend from until 2013, at the time tree clearing and road construction acti□ities began. Barium concentrations ha□e generally increased since that time.

- Specific conductance measurements in GWC-5 ha□e historically been obser□ed below 500 □S/cm. Howe□er, the 3 most recent measurements ha□e all exceeded 1,000 □S/cm with the highest □alue of 9,262 □S/cm. The 3 highest specific conductance measurements directly correspond to the SSIs of barium concentrations in 2016 and 2017.

- Based on the correlations between field measurements and barium concentrations relati□e to the timing of recent site work and expansion of wetlands, the SSI for barium at GWC-5 is likely naturally occurring barium concentrations present in the geologic formation. Barium dissolution is naturally occurring throughout the site, but is being impacted more specifically at GWC-5 due to recent changes in geochemistry caused by changing surface hydrology local to the area around GWC-5.

2.4 SUPPLEMENTAL ANALYTICAL DATA

GPC has recently conducted additional measurements within wells at the site in preparation for future compliance with the Georgia CCR Rule □391-3-4-.10. Two sampling e□ents ha□e occurred for the GA CCR Rule program and results are presented in Table 2 (GWC-5 CCR Parameters). Those constituents presented in Table 2 commonly ha□e a lower partitioning coefficient (K_d) than barium, indicating a higher potential to be present in dissol□ed form. A landfill release typically results in ele□ated concentrations of these constituents.

As presented in Table 2, boron, cadmium, copper, and lithium (common leachable ash components and not specifically related to the geologic formation at the site) were not detected abo□e the laboratory detection in the samples collected at GWC-5. □aturally occurring constituents in groundwater such as barium, calcium, and sulfate are reported at ele□ated concentrations as a result of the geochemical process as discussed in Section 2.3. These results indicate the increased concentration of barium is a result of natural □ariability enhanced by reducing conditions caused by the expansion of wetlands near GWC-5 and not a release from the unit.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Barium was the only detected SSI and was reported at one well, GWC-5, during the 2017 first semi-annual groundwater monitoring e□ent. This single well/ single constituent SSI suggests a locali□ed cause and not a release from the unit. The following data ha□e been pro□ided to demonstrate the SSI reported at GWC-5 is attributed to □ariability in the naturally-occurring

barium caused by changes to surface hydrology and subse□uent geochemical changes in the groundwater near the well□

- Changes to the surface hydrological conditions (expansion of the wetland area) coincide with changes to the groundwater ele□ation measured at GWC-5. The increase in barium concentrations at GWC-5 is concurrent with these obser□ed changes as indicated in Figure 3.

- Anaerobic conditions within a wetland en□ironment may lead to an increase in dissol□ed ions (such as barium). High specific conductance measured in groundwater at GWC-5 during recent sampling e□ents is indicati□e of an increase in dissol□ed ions. The Increase in barium concentration and specific conductance are concurrent with completion of acti□ities which ha□e resulted in the expansion of wetlands near GWC-5 (Figure 4).

- The absence of more mobile constituents (lower K_d) at GWC-5, typically indicati□e of a release from a landfill, indicates that the source of the barium is natural.

ERM recommends the following actions as a result of this ASD□

- Manage surface water to facilitate water drainage at the site□and

- Continue monitoring GWC-5 to □erify that the conclusions of this ASD are still supported by the data.

4.0 REFERENCES

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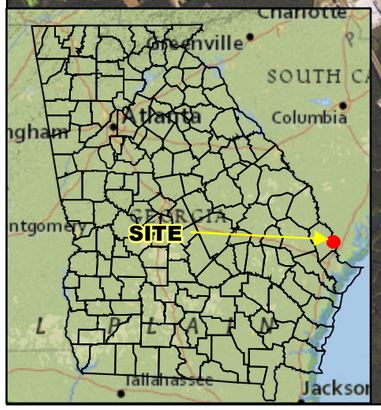
Landfill 3



Legend

- Approximate Property Boundary
- Landfill 3

N

0 2,000 4,000 8,000 12,000 16,000 Feet

1 inch = 4,000 feet

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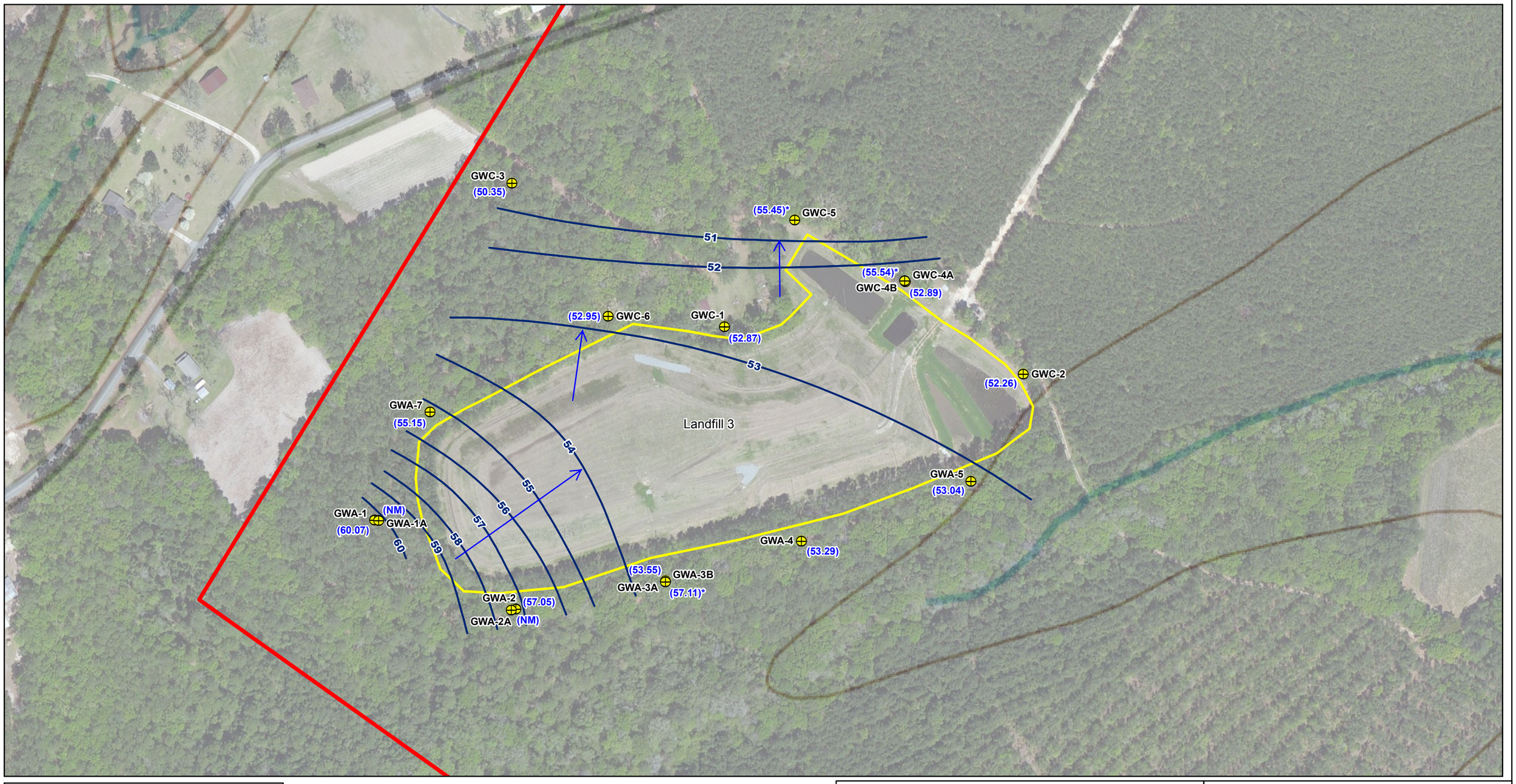
SCALE	DRAWING NUMBER	SHEET	CONT'D	REV
As Shown	SARpt_F1_McIntshALLUnitSiteLoc	1	As Shown	0

FIGURE 1

SITE LOCATION MAP
PLANT MCINTOSH ASH DISPOSAL SITE No. 3
RINCON, GEORGIA



Legend

- Monitoring Well
- Apparent Potentiometric Surface Contour
- Approximate Property Boundary
- Landfill 3

(53.55) = Groundwater Elevation (01/10/17, FtMSL)
(NM) = Not Measured
* = GWC-5, GWA-3B and GWC-4B not used in contouring.

N

0 100 200 400 600 800 Feet

1 inch = 200 feet

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SCALE	DRAWING NUMBER	SHEET	CONT'D	REV
As Shown	SARpt_F2_LF3GWElev_011017	2	As Shown	0

FIGURE 2

POTENTIOMETRIC SURFACE MAP
JANUARY 10, 2017
PLANT MCINTOSH ASH DISPOSAL SITE NO. 3
RINCON, GEORGIA

Figure 3.
Barium Concentration and Groundwater Elevation at GWC-5

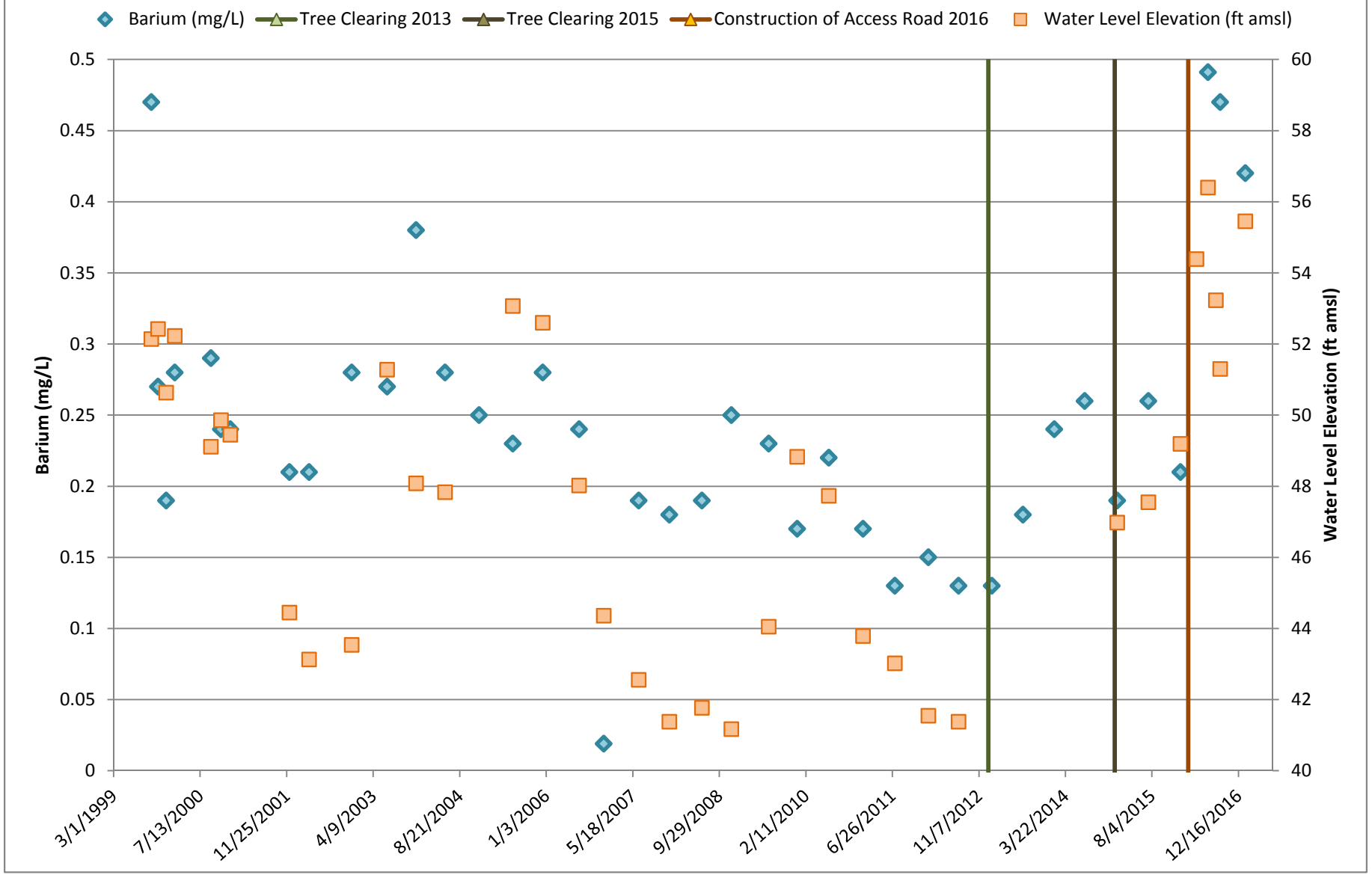


Figure 4.
Barium Concentration and Specific Conductance at GWC-5

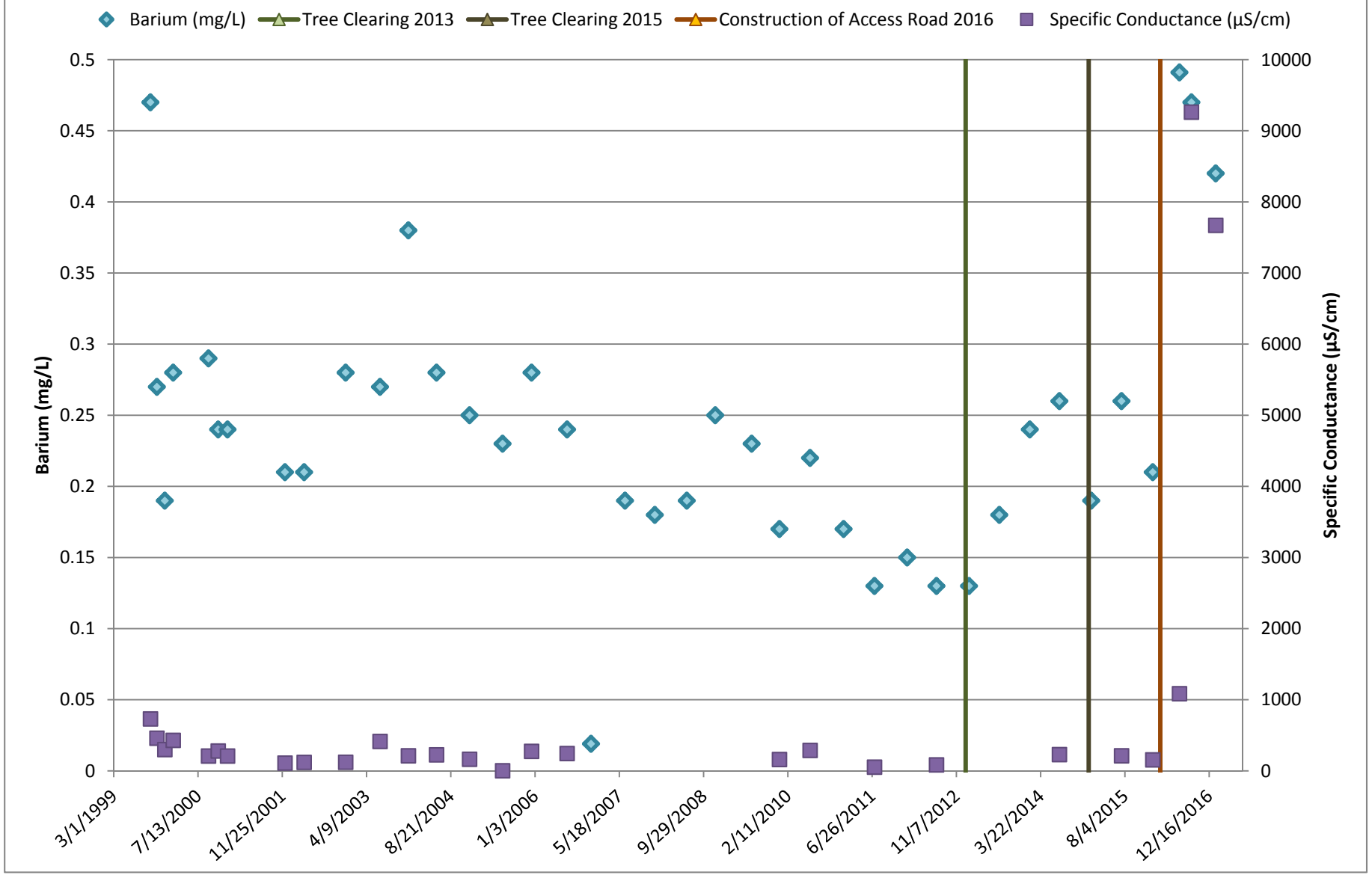


TABLE 1. GWC-5 GROUNDWATER FIELD PARAMETERS

Date	Barium (mg/L)	Specific Conductance (µS/cm)	pH (S.U.)	Water Level Elevation (ft amsl)
10/5/1999	0.47	730	6.13	52.14
11/12/1999	0.27	460	5.81	52.42
12/29/1999	0.19	300	5.43	50.63
2/17/2000	0.28	430	5.49	52.23
9/13/2000	0.29	210	5.05	49.11
11/10/2000	0.24	280	5.48	49.86
1/4/2001	0.24	210	4.99	49.45
12/11/2001	0.21	110	5.52	44.45
4/4/2002	0.21	120	5.50	43.13
12/6/2002	0.28	121	4.58	43.54
6/28/2003	0.27	414	4.32	51.28
12/13/2003	0.38	212	4.73	48.08
5/28/2004	0.28	226	4.50	47.83
12/10/2004	0.25	164	4.28	na
6/24/2005	0.23	2.41	4.56	53.07
12/13/2005	0.28	274	4.49	52.60
7/12/2006	0.24	245	4.80	48.02
12/1/2006	0.019	na	na	44.36
6/21/2007	0.19	na	na	42.56
12/15/2007	0.18	na	na	41.38
6/21/2008	0.19	na	na	41.77
12/7/2008	0.25	na	na	41.17
7/11/2009	0.23	na	na	44.05
12/23/2009	0.17	160	4.46	48.83
6/23/2010	0.22	288	4.79	47.73
1/8/2011	0.17	na	na	43.79
7/10/2011	0.13	52	5.01	43.02
1/20/2012	0.15	na	na	41.55
7/12/2012	0.13	84	4.49	41.38
1/21/2013	0.13	na	na	na
7/20/2013	0.18	na	na	na
1/17/2014	0.24	na	na	na
7/11/2014	0.26	229	4.83	na
1/16/2015	0.19	na	na	46.98
7/15/2015	0.26	213	4.66	47.55
1/16/2016	0.21	155	5.05	49.19
4/18/2016	na	na	na	54.39
6/23/2016	0.491	1086	6.32	56.40
8/8/2016	na	na	na	53.23
9/1/2016	0.47	9262	7.21	51.30
11/14/2017	na	na	na	55.94
1/24/2017	0.42	7670	8.32	55.45

Notes:

□o groundwater sampling was conducted on 4/18/2016, 8/8/2016, 11/14/201
mg/L - milligrams per liter
µS/cm - microsiemens per centimeter
S.U. - standard units
ft amsl - feet abo□e a□erage mean sea le□el
na - not a□ailable

TABLE 2. GWC-5 CCR PARAMETERS

	40 CFR Appendix III to Part 257			40 CFR Appendix IV to Part 257			EPD SW
Sample Date	**Boron**	**Calcium**	**Sulfate**	**Barium**	**Cadmium**	**Lithium**	**Copper**
Pre-□une 2016	na	na	na	0.13 - 0.47	□0.005	na	□0.02
6/23/2016	na	na	na	0.491	na	na	0.0007 □
9/1/2016	□0.050	21	110	0.47	□0.0025	□0.0050	na
1/24/2017	□0.050	10	67	0.42	□0.0025	□0.0050	□0.0025

Notes:

All units milligrams per liter (mg/L)

□ □estimated

□0.0025 □ □ot Detected at the associated reporting limit

na □not analy□ed

40 CFR Appendix III and Appendix I□ to Part 257 - Constituents analy□ed in compliance with State of Georgia CCR Rule □391-3-4-.10

EPD SW - Constituents sampled as part of Georgia EPD Solid Waste Permit

□Barium is also an EPD Solid Waste Permit constituent

□Cadmium was an EPD Solid Waste Permit constituent from 1999 - 2002

Appendix A
Technical Memorandum

TECHNICAL MEMORANDUM

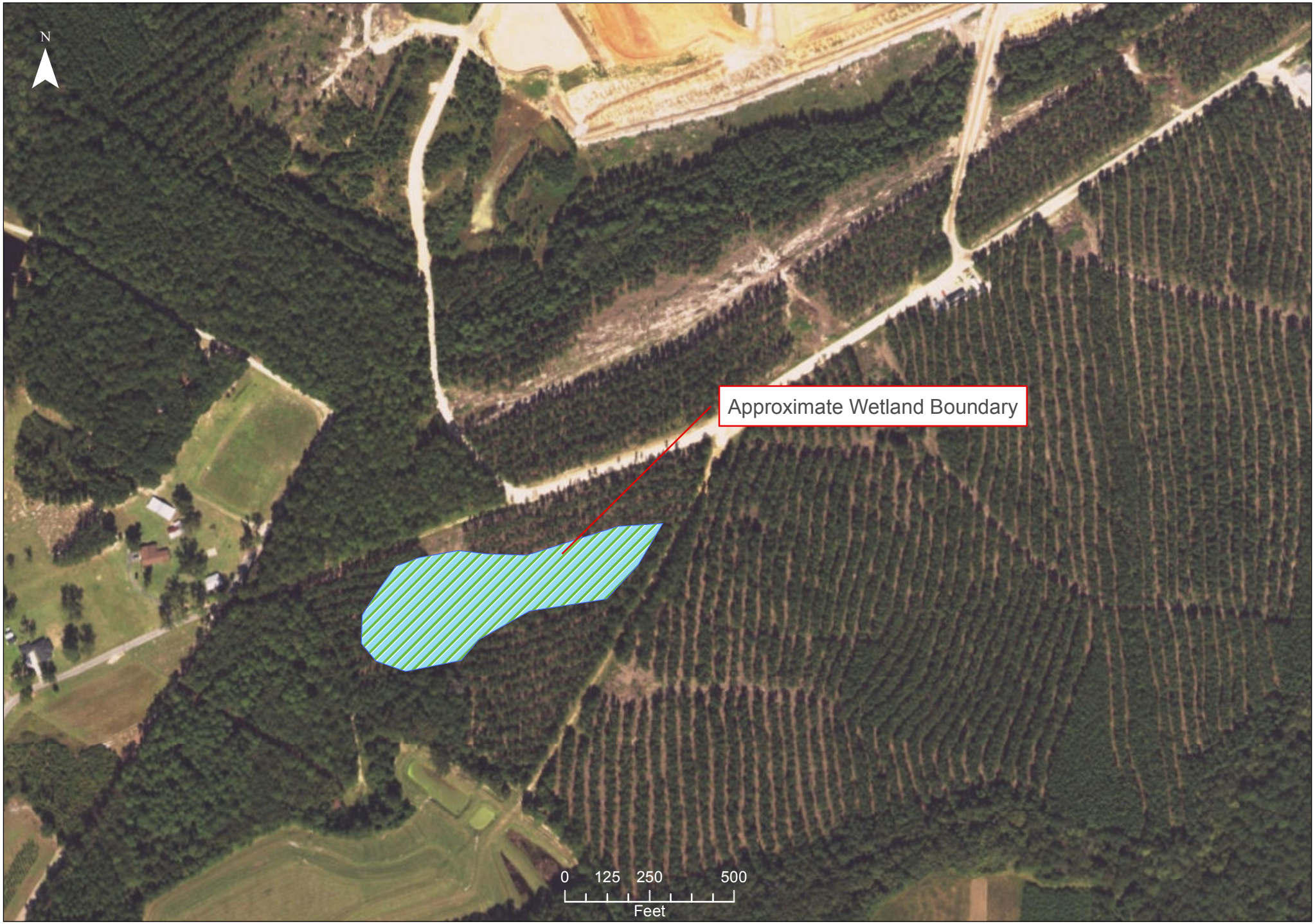
TO: LAUREN PETTY, P.G. – SOUTHERN CO. SERVICES

FROM: BRIAN ESTES

SUBJECT: PLANT MCINTOSH MONOFIL NO. 3

DATE: MAY 26, 2017

A site visit was conducted on 15 May 2017 for the Plant McIntosh Monofil No. 3 project to evaluate current site conditions and identify potential effects on recent ground water readings within the project area. A wetland approximation was conducted within the area immediately north of the monofil (see Figure 1). A large, emergent / scrub-shrub wetland occurs within this area and appears to be recently expanding. Numerous dead and/or dying pine trees, wetland vegetation and wrack lines were observed, indicative of increasing wetland conditions. Based on reviews of historical aerial imagery, the area was timber harvested / thinned in ~2013 (Figure 2). This area appears to have historically contained two small wetland features surrounded by planted pine plantation. However, the area appears to be expanding beyond its historical footprint. Recent timber harvest / thinning activities may have decreased evapotranspiration rates due to tree removal, which may result in increased surface hydrology. Additionally, along the northern edge of the wetland, a large debris pile consisting of tree limbs may be affecting wetland drainage (see attached Site Photographs). No confined channel drains the wetland areas, as sheet flow / infiltration appear to be the primary drainage. Although it is unknown if increasing hydrology has any effects on groundwater well readings, it is recommended that this debris pile be removed to facilitate site drainage. Any material removed should be placed within an upland area and stabilized with seed / straw. A U.S. Army Corps of Engineers permit would not be required for debris pile removal.



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McIntosh Monofil 3

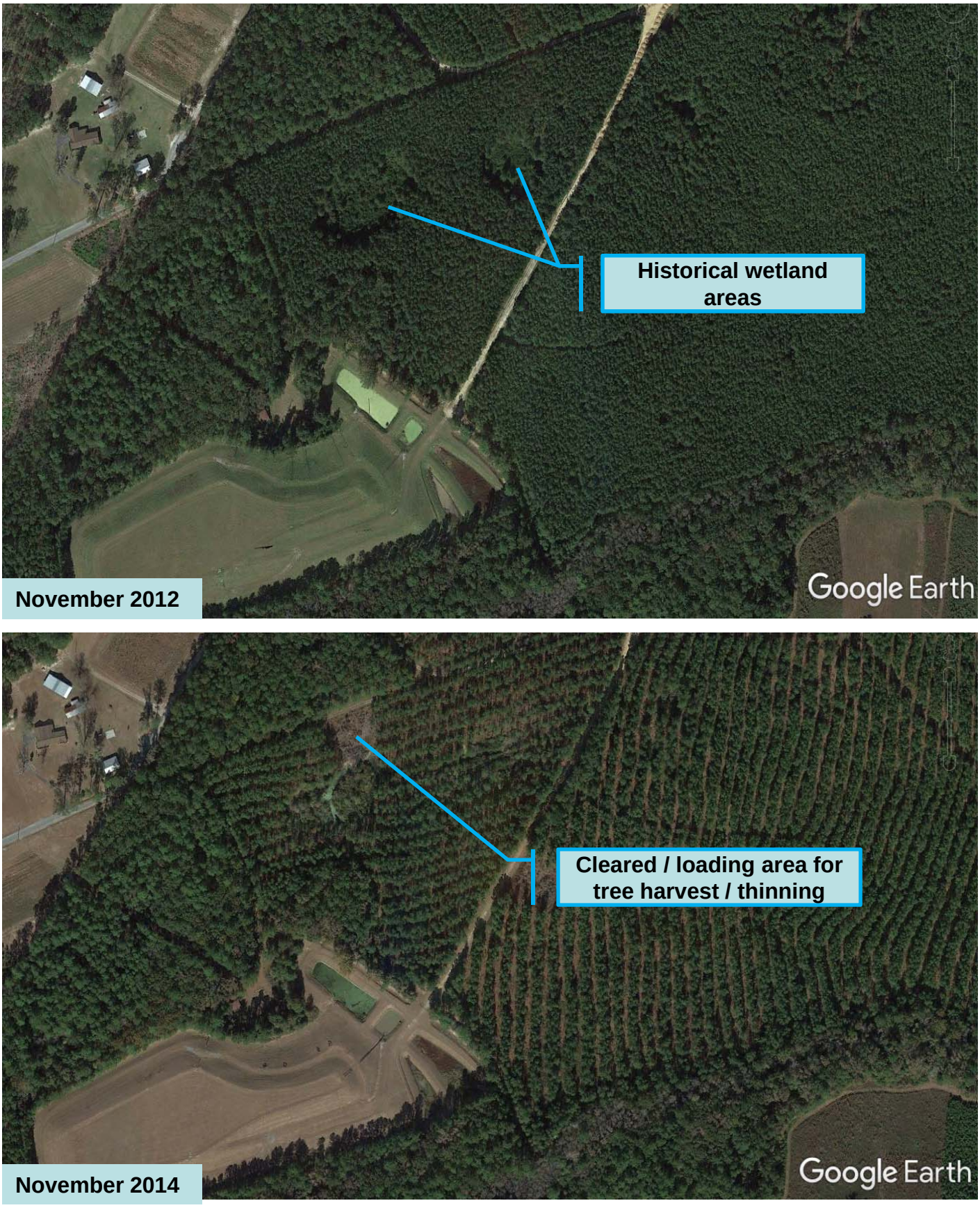


Figure 2. Aerial Imagery Comparisons 2012 / 2014
Plant McIntosh Monofil □o. 3
Rincon, Effingham County, Georgia

Georgia Power

GEI, ALTERNATE SOURCE DEMONSTRATION
PLANT MCINTOSH INACTIVE LANDFILL NO. 3.
FEBRUARY 2020

GEI Consultants

Consulting
Engineers and
Scientists

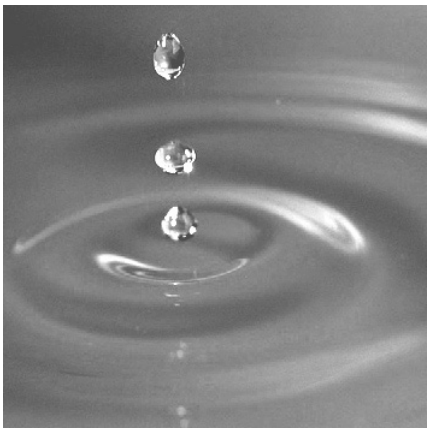
Georgia Power Company

Alternative Source Demonstration

Plant McIntosh Coal Combustion Residuals
Inactive Landfill No. 3
Permit No. 051-008D(L)(I)

Prepared by:
GEI Consultants, Inc.
1375 Peachtree Street, Suite A15
Atlanta, GA 30309

February 27, 2020
Project 1901973



Prepared by: Michael A. Cummings, P.G.
Project Hydrogeologist

Reviewed by: Christie Battenhouse, P.G.
Senior Project Manager

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PROFESSIONAL ENGINEER CERTIFICATION

"I hereby certify that this *Alternative Source Demonstration* for Georgia Power Company – Plant McIntosh Inactive Landfill No. 3 meets requirements in Georgia Administrative Code Rule 391-3-4-.14 and that the information used in this report is accurate pursuant to the requirements of Georgia Administrative Code Rule 391-3-4-.14 (30). I am a duly licensed Professional Engineer under the laws of the state of Georgia."

John M. Trast, P.E.
License No. PE41928

1. Introduction

This document presents an alternative source demonstration (ASD) for the statistically significant increases (SSIs) of state Appendix I Design and Operation (D&O) groundwater monitoring parameters (Appendix I) chromium and cobalt detected in samples collected from monitoring wells at Georgia Power Company's (GPC's) Plant McIntosh (the Site) Inactive Coal Combustion Residuals Landfill No. 3 (Landfill No. 3). Groundwater monitoring is currently conducted at Landfill No. 3 to comply with Landfill No. 3's Solid Waste permit number 051-008D(L)(I), as issued by the Georgia Environmental Protection Division (EPD), and in accordance with EPD Solid Waste Management Rule 391-3-4.14 Groundwater Monitoring and Corrective Action. This ASD has been prepared pursuant to the EPD Rules for Solid Waste Management 391-3-4-.14 (30).

In August 2019, analytical data for State Appendix I D&O parameters were evaluated to determine an appropriate statistical method for the data set. Groundwater Stats Consulting, LLC evaluated the background D&O parameter data set and recommended that an intrawell upper prediction limit (UPL) evaluation method combined with a 1-of-2 resampling plan for all D&O constituents should be used to statistically evaluate the Site data. The statistical evaluation of the March 2019 sampling results using the revised intrawell statistical methods was completed on August 9, 2019. As included in the *2019 Semiannual Groundwater Monitoring and Corrective Action Report* (GEI, 2019) for the March 2019 groundwater monitoring event, the following SSIs were identified using intrawell evaluation methods:

- Chromium: GWC-2
- Cobalt: GWC-5

Both wells were resampled in September 2019, within 90 days of identifying the SSIs, and the SSIs were verified as a result. This ASD documents that natural variability in groundwater, and not Landfill No. 3, is the cause of the SSI for chromium at well GWC-2 and cobalt at GWC-5.

EPD approved a minor modification on August 20, 2019, changing the method for statistical analysis to an intrawell PL approach for Appendix I parameters. Analytical data from the September 2019 semiannual detection monitoring event at Landfill No. 3 were statistically analyzed in accordance with the approved facility D&O Plan (GPC, 2010) and the minor modification dated August 9, 2019. Using the EPD-approved updated statistical method, the SSI for chromium at well GWC-2 is no longer observed when compared to the 2019 second semiannual UPL presented in the *2019 Second Semiannual Groundwater Monitoring and Corrective Action Report* (GEI, 2020).

1.1 Site Location and Background

Plant McIntosh is located in southeast Effingham County, Georgia, approximately 4 miles northeast of the city of Rincon, and 20 miles north-northwest of the city of Savannah. Plant McIntosh and Landfill No. 3 are shown on Figure 1.

Landfill No. 3 received CCR from the generating process but was closed in 2008 and is now inactive. Groundwater monitoring at Landfill No. 3 is performed on a semiannual basis in accordance with the revised D&O Plan for the facility (GPC, 2010). The groundwater monitoring network and a potentiometric surface contour map for March 2019 are presented as Figure 2. Monitoring wells GWC-2 and GWC-5 are situated downgradient and located along the eastern and northeastern portions of the inactive landfill, respectively.

2. Geology, Hydrogeology, and Geochemistry

The Site is situated on sediments that were deposited from the Cretaceous to Pleistocene period and consist of stratified marine deposits and materials eroded from crystalline rock of the Piedmont Region. The lithology described in the boring logs at the Site as interbedded clays, silts, and sands typical of Coastal Plain sediments. The uppermost aquifer at the Site is the surficial aquifer, characterized by silty to sandy clays, clayey silts, silty sands, and fine to medium grained sands. Monitoring wells and piezometers were screened in the surficial aquifer between elevation 59 and 15 feet (ft) North American Vertical Datum 88 (NAVD 88). Aquifer materials are heterogeneous as isolated areas of silty clay occur within more permeable silty sand and clayey sand deposits of the uppermost aquifer.

Based on groundwater flow at the Site documented in the *2019 Semiannual Groundwater Monitoring and Corrective Action Report* (GEI, 2019), the general direction of groundwater flow is from the southwest to the northeast across Landfill No. 3 (Figure 2). The groundwater flow pattern observed during the March 2019 detection monitoring event is historically consistent. The calculated groundwater flow velocity at the Landfill No. 3 is approximately 22 feet per year.

3. Alternative Source Demonstration

Based on review of Site information, the SSIs for chromium and cobalt are not the result of a release from Landfill No. 3 and are likely the result of variability of naturally occurring chromium and cobalt. The following lines of evidence summarized below support this conclusion:

- Chromium
    - Using an EPD-approved statistical method, the statistical analysis of September 2019 semiannual monitoring data no longer reports an SSI for chromium at well GWC-2.
    - The detection of chromium in GWC-2 represented a single-parameter SSI. A release from the CCR unit will result in multiple parameter SSIs and significant concentration increases. The absence of SSIs for other Appendix I and Appendix III parameters in well GWC-2 supports the conclusion that the chromium SSI in GWC-2 is not the result of a release from Landfill No. 3.
    - Historically, the chromium concentrations in upgradient wells including wells GWA-1A, GWA-2A, and GWA-7 exhibit variability and are frequently higher when compared to chromium concentrations in GWC-2. This demonstrates that comparable chromium concentrations are observed in background groundwater monitoring wells.
- Cobalt
    - The detection of cobalt in GWC-5 represents a single-parameter SSI. A release from the CCR unit will result in multiple parameter SSIs and significant concentration increases. The absence of SSIs for other Appendix I and Appendix III parameters in well GWC-5 supports the conclusion that the cobalt SSI in well GWC-5 is not the result of a release from Landfill No. 3.
    - Changes in surface water hydrology are documented to have affected geochemistry local to GWC-5 in an ASD for barium SSIs prepared by Environmental Resource Management, Inc. (ERM), dated August 9, 2017 (ERM, 2017) and submitted to the EPD.
    - Regional studies demonstrate that cobalt is naturally occurring in local alluvial-derived sand, silt, and clay. This demonstrates that Site soils are a viable source for naturally occurring cobalt in groundwater in response to localized changes in geochemistry.

The following sections present further details regarding the evidence supporting the conclusion that the chromium and cobalt SSIs are not the result of a release from the unit and can be attributed to natural variability in groundwater quality.

3.1 Chromium Evaluation

Based on the following, the SSI for chromium was not the result of a release from Landfill No. 3 and can be attributed to the natural occurrence and variability in chromium at the Site.

3.1.1 Absence of SSIs

Evaluation of the most recent monitoring data using the EPD-approved statistical method does not identify an SSI for chromium in well GWC-2. This demonstrates that the previously reported SSI was not the result of a release from Landfill No. 3 and can be attributed to natural occurrence of chromium at the Site.

There are no other SSIs for Appendix I or III parameters identified in GWC-2 at Landfill No. 3 in March 2019 (GEI, 2019). A release from Landfill No. 3 would result in SSIs of multiple Appendix I and Appendix III parameters, especially Appendix III indicators. This has not occurred. The absence of multiple SSIs demonstrates that this single-parameter SSI is not the result of a release from the unit.

3.1.2 Upgradient Monitoring Data

As shown in the data summary on Figure 3, the maximum chromium concentration in detected in background samples at locations GWA-1A, GWA-2A, and GWA-7 is greater than the maximum concentration detected in downgradient well GWC-2. This indicates that naturally occurring chromium occurs at the Site and can account for the chromium observed in this well.

Chromium concentrations detected in Landfill No. 3 upgradient monitoring wells and GWC-2 are summarized as Box and Whiskers Plots shown on Figure 3. As shown on these plots, chromium concentrations detected in background monitoring wells between 1999 and March 2019 vary widely both spatially across the upgradient pool and throughout the 20-year monitoring period. Chromium concentrations in several upgradient wells including wells GWA-1A, GWA-2A, and GWA-7 were frequently higher during each sampling event than those in well GWC-2. Figure 3 graphically illustrates the variability in background chromium concentrations. When compared to GWC-2, upgradient wells GWA-1A, GWA-2A, and GWA-7 exhibit a wider range of concentrations across the 20-year monitoring period.

3.2 Cobalt Evaluation

Based on the following, the SSI for cobalt is not the result of a release from Landfill No. 3. The variability and presence of cobalt and can be attributed to the natural occurrence of cobalt in deposits at the Site and localized geochemistry variability.

3.2.1 Absence of Other SSIs

There are no other SSIs for Appendix I or III parameters identified in GWC-5 at Landfill No. 3 in March 2019 (GEI, 2019). A release from Landfill No. 3 would result in SSIs of multiple Appendix I and Appendix III parameters, especially Appendix III indicators. This has not occurred. The absence of multiple SSIs demonstrates that this single-parameter SSI is not the result of a release from the unit.

3.2.2 Localized Hydrology & Natural Occurrence of Cobalt

Cobalt occurrences in groundwater can be attributed to localized changes in geochemistry. This condition has been documented in an ASD for similar occurrences of barium at well GWC-5 in a report from ERM dated August 2017.

Natural Site materials are a viable source for cobalt observed at Landfill No. 3. GEI completed a literature review to assess the potential variability of the trace element cobalt and in natural Coastal Plain sediments deposited at the Site. Several references ([Cocker,1998], [Cook, 1978], and [Windom, 1989]) indicate that the weathering of mafic minerals (e.g. pyroxene, hornblende, biotite mica, and others) derived from metamorphic regimes containing alkali, alkaline earth, and transition metals in the Piedmont Region (pegmatite province) frequently produce part per million (ppm)-level concentrations of trace metals including cobalt in the sediments of the Coastal Plain especially where sediment was transported and deposited away from the Piedmont Region. The Hart-Elbert County Mica Mining Area of Georgia and South Carolina is transected by the Savannah River upstream from Plant McIntosh (Griffits and Olson, 1953) and contains many minerals comprising cobalt including micaceous minerals. Historic Savannah River flow transported these sediments in a southeast direction toward Effingham County and deposited these alluvial sediments in Coastal Plain deposits below the Site. Micaceous minerals were observed in soils on-Site during inspection of soil cores obtained during well installations screened in the surficial aquifer at the Site. U. S. Geological Survey data identified background cobalt concentrations ranging as high as 7.2 ppm in Coastal Plain soil samples collected from the soil C-horizon (deeper than 1 meter) near the Site (U.S. Geological Survey Report prepared by Smith et al., 2014). Micaceous and mafic minerals present in the surficial aquifer at the Site are contributors to the natural variability of cobalt concentrations detected in the groundwater samples collected from the Site. Based on the information provided here, the cobalt SSI is clearly not the result of a release from Landfill No. 3. The SSI of cobalt is attributed to naturally occurring cobalt and localized geochemistry variation in the vicinity of the well.

4. Conclusion

Based on information presented in the ASD, the SSIs for chromium in well GWC-2 and cobalt in well GWC-5 are not the result of a release from the unit. The likely cause of the SSIs is the natural occurrence and variability of chromium and cobalt in groundwater.

This ASD demonstrates that the observed SSIs are not the result of a release from Landfill No. 3. Therefore, pursuant to Georgia Administrative Code Rule 391-3-4-.14 (30)(e), Landfill No. 3 will remain in detection monitoring.

5. References

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Figures

Savannah River

Big Kiffer Point

Lockner Creek

Inactive CCR Landfill No. 3

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

LEGEND

- Plant McIntosh Approximate Property Boundary
- Inacti□e CCR Landfill □o. 3
- Sa□annah Ri□er and Associated Tributaries

0 3,000 6,000

SCALE□1 inch □ 3000 feet

Alternative Source Demonstration
Plant McIntosh Inacti□e CCR Landfill □o. 3
Effingham County, Georgia

Georgia Power Company
Atlanta, Georgia

GEI Consultants

SITE LOCATIO□ MAP

Pro□ect □o. 1901973

Prepared □o□ember 2019 Fig. 1

LEGEND

- Downgradient Monitoring Well
- Pie□ometer
- Upgradient Monitoring Well
- Proposed For Abandonment
- Apparent Potentiometric Surface Contour
- Apparent Groundwater Flow Direction

(50.45) □ Groundwater Ele□ation measured 03/25/19

GWC-3
GWC-5 (51.92)
GWC-4A (50.00)
GWC-4B
PZ-2 (50.04)
GWC-6 (50.63)
GWC-1 (50.31)
PZ-1 (49.38)
GWC-2 (49.40)
GWA-7
GWA-7A (49.11)
50
51
52
53
54
55
56
GWA-1
GWA-1A (56.33)
GWA-5 (50.74)
GWA-4 (50.96)
PZ-3 (51.29)
GWA-3A (51.60)
GWA-3B
GWA-2
GWA-2A
GWA-2B (50.45)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, C□ES/Airbus DS, USDA, USGS, AeroGRID, IG□, and the GIS User Community

□OTES
GWC-5 was not used in contouring.
GWA-1, GWA-2, GWA-2A, GWA-3B, GWA-7, GWC-3, and GWC-4B are proposed for abandonment.

Ele□ations are in feet relati□e to □orth American □ertical Datum (□A□D) 88

0 150 300
SCALE□1 inch □ 150 feet

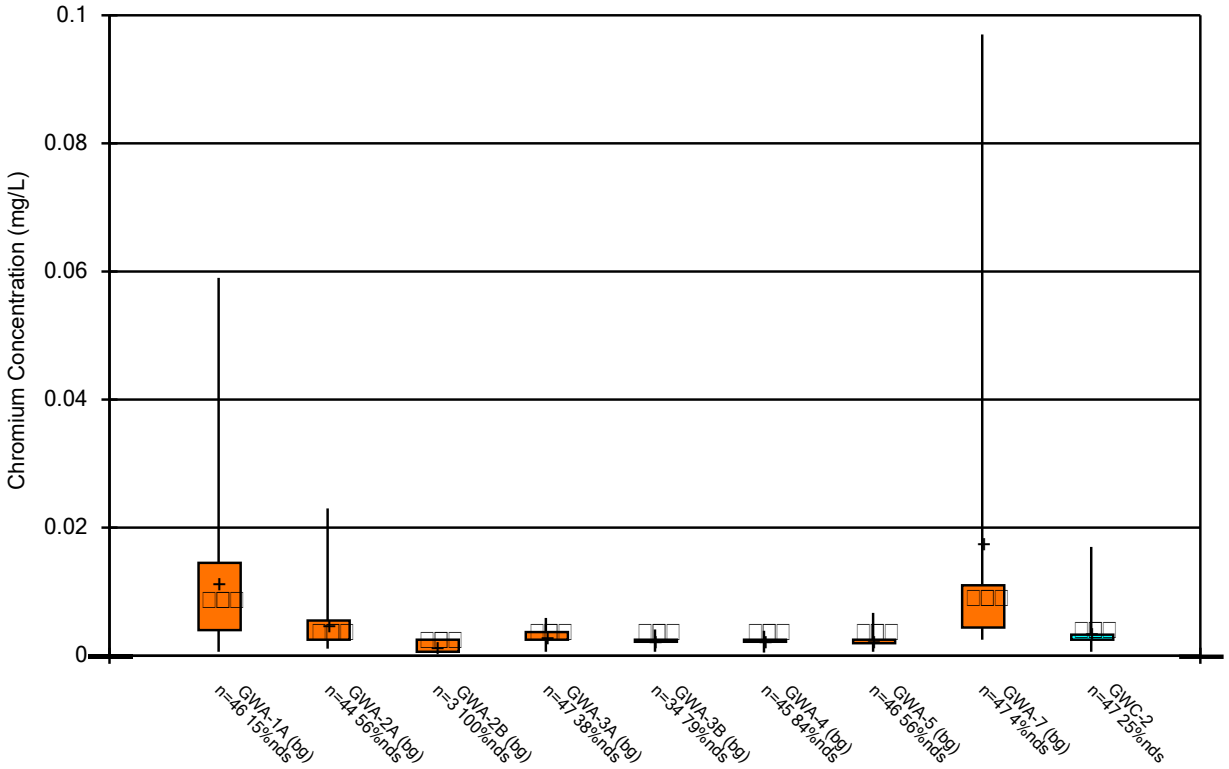
Alternati□e Source Demonstration
Plant McIntosh Inactive CCR Landfill No. 3
Effingham County, Georgia

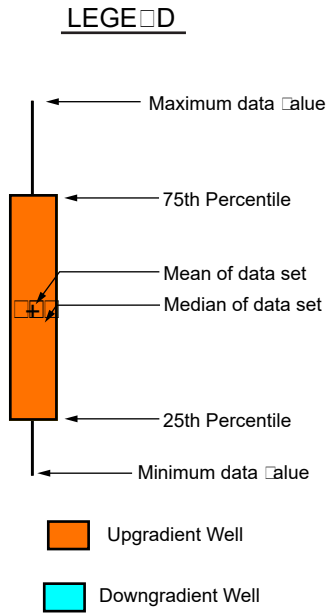
Georgia Power Company
Atlanta, Georgia

GEI Consultants

POTE□TIOMETRIC SURFACE
CO□TOUR MAP
MARCH 2019

Pro□ect □o. 1901973 | □o□ember 2019 | Fig. 2





Chromium Data Summary

Well	□	Mean	Std. De□	Std. Err.	Median	Min.	Max.	□ □Ds
Background (upgradient) Wells								
GWA-1A (bg)	46	0.01151	0.01212	0.001787	0.0074	0.00063	0.059	15.22
GWA-2A (bg)	44	0.004934	0.004834	0.0007288	0.0025	0.0011	0.023	56.82
GWA-2B (bg)	3	0.00141	0.0009728	0.0005616	0.0011	0.00063	0.0025	100
GWA-3A (bg)	47	0.00287	0.00107	0.0001561	0.0025	0.00063	0.0059	38.3
GWA-3B (bg)	34	0.002401	0.0005197	0.0000...	0.0025	0.00063	0.0041	79.41
GWA-4 (bg)	45	0.002452	0.0005144	0.0000...	0.0025	0.0005	0.0039	84.44
GWA-5 (bg)	46	0.002418	0.0009739	0.0001436	0.0025	0.00063	0.0067	56.52
GWA-7 (bg)	47	0.0176	0.02472	0.003605	0.0077	0.0025	0.097	4.255
Downgradient Well GWC-2								
GWC-2	47	0.003479	0.002937	0.0004284	0.0026	0.00063	0.017	25.53

Alternati□e Source Demonstration
Plant McIntosh Inacti□e CCR Landfill □o. 3
Effingham County, Georgia

Georgia Power Company
Atlanta, Georgia

GEI Consultants

BOX A□D WHISKER PLOT-
CHROMIUM

Pro□ect 1901973 | □o□ember 2019 | Fig. 3

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