Georgia Power Company Plant McIntosh Inactive Landfill No. 3 Permit No. 051-008D(LI) Effingham County

2020 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT





Evan B. Perry, Project Manager Date: July 31, 2020

PROFESSIONAL CERTIFICATION

This 2020 Annual 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 rule [40 Code of Federal Regulations (CFR) 257 Subpart D] and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 and 391-3-4-.14 by a qualified groundwater scientist or engineer with Atlantic Coast Consulting, Inc (ACC).

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1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (US EPA) Coal Combustion Residuals (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D) and the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management 391-3-4-.10, Atlantic Coast Consulting, Inc. (ACC) has prepared this 2020 Annual Groundwater Monitoring and Corrective Action Report to document groundwater monitoring activities conducted during the second half of 2019 and the first half of 2020 at the Georgia Power Company (Georgia Power) Plant McIntosh Inactive Landfill No. 3 (Site). Semiannual monitoring and reporting for the CCR unit are performed in accordance with the monitoring requirements of 40 CFR § 257.90 through § 257.95 of the Federal CCR rule, and 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 requirements specified in the Design and Operation (D&O) Plan (Georgia Power, 2010). An 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 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 events conducted in September 2019 and March 2020 and includes: (1) a state-modified list of Appendix I detection parameters according to EPD Rule 391-3-4-.14 and the approved Solid Waste Permit; and (2) CCR detection monitoring sampling events for 40 CFR § 257 Appendix III constituents.

This document serves as the 2020 Annual Groundwater Monitoring and Corrective Action Report in accordance with 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 55 and 15 feet North American Vertical Datum of 1988 (NAVD88). The predominant groundwater flow direction across Plant McIntosh to the east.

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. Figure 2, Well Location Map, shows the monitoring well locations. Wells were located to serve as upgradient and downgradient monitoring points based on groundwater flow direction (Table 1A, Monitoring Network Well Summary). Existing locations not included in the monitoring network are presented in Table 1B, Piezometer Summary. A Permit Minor Modification to abandon locations GWA-1, GWA-2, GWA-2A, GWA-3B, GWA-7, GWC-3, and GWC-4B was approved by EPD on July 29, 2020. The abandonments are currently being scheduled.

2.0 GROUNDWATER MONITORING ACTIVITIES

Pursuant to 40 CFR § 257.90(e), the following describes monitoring-related activities performed during 2020 and discusses any change in status of the monitoring program. All groundwater sampling was performed in accordance with § 257.93. Samples were collected from each well in the certified monitoring system shown on Figure 2 in September 2019, except for GWC-4B, which was dry, and from each well in March 2020, except for GWC-3, which was submerged due to flooding and could not be sampled. GWC-3 is situated 425 ft from the landfill boundary in a low-lying area that is prone to flooding and the pad and part of the riser are typically submerged. Historically, concentrations of analytes (where detected) at GWC-3 are well below all regulatory thresholds. As noted above, a minor modification requesting abandonment of GWC-3 was approved by EPD on July 29, 2020. Samples have not been collected from GWA-1 and GWA-2 since replacement wells GWA-1A, GWA-2A, and GWA-2B were installed in 2017-2018. Pursuant to 40 CFR § 257.90(e)(3), a summary and description of groundwater sampling events completed at the Site during the past year is shown on Table 2, Groundwater Sampling Event Summary.

2.1 Monitoring Well Installation and Maintenance

There was no change to the groundwater monitoring system during the annual monitoring period; the network remains the same as in the previous reporting year and is shown on Figure 2. 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 is included in Appendix A, Laboratory Analytical and Field Sampling Reports.

The Site monitoring network wells and piezometers were re-surveyed for top of casing elevation and horizontal location in June 2020. A data sheet surveyed by a Georgia Registered Land Surveyor is provided in Appendix B, Monitoring Well Survey Data.

2.2 Alternate Source Demonstrations

There are SSIs for the Appendix III parameter sulfate at three locations and total dissolved solids (TDS) at one location based on statistical analysis of the March 2020 data and June 2020 resampling data (see Section 4.0). These SSIs will be addressed in an alternate source demonstration (ASD) due to EPD on or before September 15, 2020.

Statistically significant increases (SSIs) of Appendix I groundwater monitoring parameters were reported in one or more wells for barium and cobalt following the September 2019 monitoring event. These SSIs have been addressed by previous alternate source demonstrations (ASDs). In



accordance with the EPD Rules for Solid Waste Management Chapter 391-3-4.14(23)(c) and § 257.94(e), alternate source demonstrations (ASDs) have been prepared for the following SSIs:

- Barium: GWA-3A, Alternative Source Demonstration (ERM, 2017) and
- Cobalt: GWC-5, Alternative Source Demonstration (GEI, 2020).

The ASDs conclude that the unit was not the source of the elevated constituents. The ASD completed in 2020 is provided in Appendix C, Alternate Source Demonstration.

2.3 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. Semiannual sampling events were conducted in September 2019 and March 2020.

Groundwater samples from wells in the detection monitoring system were collected from each monitoring well 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 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.

Select wells were resampled for chromium, cobalt, and copper in December 2019 and one well for TDS in June 2020 to verify analytical results. Copies of the analytical data packages for the semiannual detection monitoring events are included in Appendix A.

2.4 Additional Sampling

No additional sampling was conducted during the monitoring period.

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 network wells at the Site. Groundwater elevations recorded during the monitoring events are summarized in Table 3, Summary of Groundwater Elevations. Wells were re-surveyed in June 2020 and the new top of casing elevations were used to calculate the groundwater elevations on Table 3. Groundwater elevation data were used to develop Figures 3 and 4, Potentiometric Surface Contour Map – September 2019 and March 2020, respectively. Figure 3 was developed prior to the June 2020 resurvey and therefore references historical survey data. As shown on the figure, a potentiometric high exists in the western portion of the Site and groundwater flows generally eastward. The groundwater flow patterns observed during the monitoring events are consistent with historical patterns.

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



Equation

v = K (dh/dl) where: v = ground water 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 on Tables 4A and 4B, Horizontal Groundwater Flow Velocity Calculations – September 2019 and March 2020, respectively. The calculated flow velocity was approximately 0.062 feet per day in the September 2019 event and approximately 0.046 feet per day in the March 2020 event.

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 SESD 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, conductivity, oxidation-reduction potential, dissolved oxygen [DO], and temperature) during well purging prior to sampling. Turbidity was measured using a LaMotte 2020we portable turbidimeter. Groundwater samples were collected when the following stabilization criteria were met:

- ± 0.1 standard units for pH
- ± 5% for specific conductance
- \pm 10% for DO where DO > 0.5 mg/L. No criterion applies if DO < 0.5 mg/L.
- Turbidity measurements less than 10 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 Test America, Inc. (Eurofins) of Pittsburgh, Pennsylvania following chain-of-custody protocol. Stabilization logs for each well during each monitoring event are included in Appendix A.

3.3 Laboratory Analyses

Groundwater samples were collected during the groundwater monitoring event in September 2019 and March 2020. Analytical methods used for groundwater monitoring parameters are provided in laboratory reports in Appendix A. Samples were analyzed for Appendix III parameters and Appendix I parameters required by the current state permit during the monitoring events performed in September 2019 and March 2020. Analytical data collected in the monitoring events are summarized in Tables 5A and 5B, Summary of Groundwater Analytical Data – September 2019 and March 2020, respectively.



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

3.4 Quality Assurance and Quality Control

During each sampling event, quality assurance/quality control (QA/QC) samples are collected at a rate of 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 A.

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

Values followed by a "J" flag in Tables 5A and 5B indicate that the value is an estimated analyte concentration detected between the minimum detection limit 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 March 2020 groundwater monitoring data was performed by Groundwater Stats Consulting, LLC following the appropriate certified statistical methodology for the Site. The September 2019 statistical analysis was completed by GEI Consultants, Inc. Statistical analysis methods and results are provided in Appendix D, Statistical Analysis Reports. 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 Groundwater Stats Consulting, LLC (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 parameters required by the existing 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 SSIs. Typically, when changes in concentrations are present upgradient of the facility, it is an indication of naturally changing groundwater quality.



4.1.1 State Appendix I Parameters

A permit minor modification was approved by EPD on August 20, 2019, following submittal of the 2019 First Semiannual Groundwater Monitoring Report to allow for intrawell methods to be used for evaluation of state Appendix I parameters. Statistical tests used to evaluate the groundwater monitoring data consist of intrawell prediction limits combined with a 1-of-2 verification resample plan for all required Appendix I parameters. Intrawell prediction limits are constructed from historical data within a given well, and the most recent sample is compared to background.

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

4.1.2 Appendix III Parameters

Statistical tests used to evaluate the groundwater monitoring data consist of interwell prediction limits combined with a 1-of-2 verification resample plan for Appendix III parameters boron, calcium, and fluoride. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent, and the most recent sample from each downgradient well is compared to the same limit for each parameter.

Monitoring results for chloride, pH, sulfate, and TDS were evaluated using intrawell prediction limits combined with a 1-of-2 verification resample plan. A summary of the statistical methodology used at the Site for routine groundwater monitoring is provided in Table 6, Statistical Method Summary.

4.2 Summary of Statistical Analyses Results for State Appendix I Parameters

As presented in the 2019 Second Semiannual Groundwater Monitoring and Corrective Action Report (GEI, 2020), the following were identified by statistical analysis as verified Appendix I SSIs:

Cobalt: GWC-5

As discussed in Section 2.2, an ASD was prepared presenting evidence that the SSI in well GWC-5 is not associated with a release from the landfill. The ASD is provided in Appendix C for reference.

During the March 2020 event, the only statistical exceedances in downgradient wells were:

Chromium: GWC-2

Barium in GWC-5

As discussed in Section 2.2, these exceedances were previously addressed by ASDs completed in February 2020 and August 2017, respectively. The 2020 ASD is provided in Appendix C for reference.



4.3 Summary of Statistical Analyses Results for Appendix III Parameters

Analytical data from the September 2019 and March 2020 monitoring events were statistically analyzed in accordance with the established methods. The statistical analysis and comparisons to prediction limits are included in Appendix D.

Based on the statistical results presented in Appendix D, the following summarizes parameters exhibiting prediction limit exceedances during the monitoring events:

September 2019

No Exceedances

March 2020

• Sulfate: GWC-1, GWC-4A, GWC-6

TDS: GWC-5

The exceedances for sulfate at GWC-1, GWC-4A, and GWC-6 and TDS will be further evaluated in the ASD to be completed on or before September 15, 2020.

5.0 MONITORING PROGRAM STATUS

The Site remains in detection monitoring. Georgia Power is currently preparing a demonstration that a source other than the landfill was the cause for four Appendix III SSIs identified during the March 2020 monitoring event per § 257.94(e). Other verified SSIs of Appendix I and Appendix III parameters are addressed by ASDs.

6.0 CONCLUSIONS AND FUTURE ACTIONS

This 2020 Annual Groundwater Monitoring and Corrective Action Report for Georgia Power's Plant McIntosh Inactive Landfill No. 3 was prepared to fulfill the requirements of USEPA's CCR Rule and Georgia EPD Rules for Solid Waste Management Chapter 391-3-4-.10.

Statistical evaluation of Site groundwater monitoring data identified SSIs of Appendix III groundwater monitoring parameters and Appendix I parameters required by the existing EPD permit. Statistical evaluation of the September 2019 groundwater monitoring data identified a SSI of cobalt in GWC-5. An ASD was prepared presenting evidence to conclude that the cobalt SSI is not associated with a release from the landfill. Verified SSIs of sulfate and TDS were identified by statistical analysis of the March 2020 semiannual monitoring data and June 2020 resample data. Georgia Power is currently preparing an alternate source demonstration to document that the sulfate and TDS SSIs are not the result of a release from the CCR unit. The Site remains in detection monitoring.

The next semiannual assessment monitoring event is tentatively scheduled for September 2020.

7.0 REFERENCES

Georgia Environmental Protection Division, 1997 – Criteria for Performing Site Acceptability Studies for Solid Waste Landfills in Georgia – Circular 14.

MacStat Consulting, Ltd., 2017. Statistical Analysis Plan – Plant McIntosh Landfill No. 3.



- Sanitas: Groundwater Statistical Software, Sanitas Technologies, Shawnee, KS, 2007. www.sanitastech.com.
- ERM, 2017. Alternate Source Demonstration Plant McIntosh Ash Disposal Site No. 3. August 2017
- GEI, Alternate Source Demonstration Plant McIntosh Inactive Landfill No. 3. February 2020.
- GEI, 2020. 2019 Second Semiannual Groundwater and Corrective Action Report Plant McIntosh Inactive Landfill No. 3. February 2020.
- Georgia Power, 2010. Plant McIntosh Ash Disposal Site No. 3 Revised Design & Operation Plan Groundwater Monitoring Plan. 1999, Revised February 15, 2010.
- Southern Company Services Earth Science and Environmental Engineering (SCS ES&EE), 2002. Savannah Electric Plant McIntosh Proposed Ash Monofill Site Acceptability Report. July 2002.
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- U.S. EPA, 2011, Region IV Data Validation Standard Operating Procedures. Science and Ecosystem Support Division. Athens, Georgia.
- U.S. EPA, 2013, Groundwater Sampling Operating Procedure: SESDPROC-3-1-R3, Athens, Georgia, 31 p.
- U.S. EPA, 2015, Field Equipment Cleaning and Decontamination Operating Procedure: SESDPROC-205-R3, Athens, Georgia, 18 p.
- U.S. EPA, 2017. National Functional Guidelines for Inorganic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [EPA-540-R-2017-001]. Washington, DC.



TABLES



Table 1A Monitoring Network Well Summary

Well	Installation Date (mm/dd/yyyy)	Northing	Easting	Bottom Depth (ft BTOC)	Bottom Elevation (NAVD88)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation (NAVD88)	Purpose
GWA-1*	5/6/1998	852026.28	954546.93	36.00	30.90	25.50	41.40	Upgradient
GWA-1A	1/5/2017	852023.48	954556.79	37.30	29.46	27.30	39.46	Upgradient
GWA-1A GWA-2*	5/7/1998	851831.46	954854.59	33.00	33.17	27.50	38.67	Upgradient
GWA-2A*	1/10/2017	851830.61	954846.09	43.18	23.15	33.18	33.15	Upgradient
GWA-2A	8/29/2018	851831.06	954866.86	51.78	14.42	41.48	24.72	Upgradient
GWA-2B	5/16/1998	851893.61	955179.89	33.88	28.89	23.38	39.39	Upgradient
GWA-3B*	5/16/1998	851891.96	955180.00	18.56	44.22	8.06	54.72	Upgradient
GWA-4	5/7/1998	851980.91	955475.74	29.16	32.85	23.66	38.35	Upgradient
GWA-5	5/7/1998	852110.59	955844.69	33.00	27.43	22.50	37.93	Upgradient
GWA-7*	11/7/2000	852261.63	954667.90	32.77	35.00	22.27	45.50	Upgradient
GWA-7A	8/29/2018	852254.28	954654.74	46.94	20.98	36.64	31.28	Upgradient
GWC-1	1/22/1996	852446.79	955308.31	35.96	30.12	26.16	39.92	Downgradient
GWC-2	1/23/1996	852343.90	955958.27	36.78	27.41	26.98	37.21	Downgradient
GWC-3*	1/25/1996	852759.94	954845.83	35.51	31.40	25.71	41.20	Downgradient
GWC-4A	5/16/1998	852544.35	955702.05	36.96	29.64	26.46	40.14	Downgradient
GWC-4B*	5/16/1998	852546.24	955700.46	18.00	48.83	7.50	59.33	Downgradient
GWC-5	5/5/1998	852679.23	955461.61	30.56	37.52	20.06	48.02	Downgradient
GWC-6	5/6/1998	852469.31	955055.59	32.64	35.87	27.14	41.37	Downgradient

- ft BTOC indicates feet below top of casing.
 NAVD88 indicates feet relative to North American Vertical Datum of 1988.
 * To be abandoned.
- 4. Wells resurveyed June 2020.



Table 1B **Piezometer Summary**

Well	Installation Date (mm/dd/yyyy)	Northing	Easting	Bottom Depth (ft BTOC)	Bottom Elevation (NAVD88)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation (NAVD88)	Purpose
PZ-1	8/29/2018	852400.01	954904.93	52.68	14.73	42.38	25.03	Piezometer
PZ-2	8/28/2018	852549.77	955306.02	42.26	25.00	31.96	35.30	Piezometer
PZ-3	8/30/2018	852032.57	955677.60	41.57	19.71	31.27	30.01	Piezometer

- ft BTOC indicates feet below top of casing.
 NAVD88 indicates feet relative to North American Vertical Datum of 1988.
- 3. Well resurveyed June 2020.



Table 2 **Groundwater Sampling Event Summary**

Well	Hydraulic Location	Sept. 11-12 2019	Dec. 17, 2019	Mar. 10-11; Mar 31 - Apr 2, 2020	Jun. 17, 2019
Purpose of S	ampling Event	Semiannual Detection	Verification	Semiannual Detection	Verification
GWA-1	Upgradient	Χ		Х	
GWA-1A	Upgradient	Х		X	
GWA-2	Upgradient	Х		X	
GWA-2B	Upgradient	X X X X		X	
GWA-3A	Upgradient	Χ		X	
GWA-3B	Upgradient	Χ	Χ	X	
GWA-4	Upgradient	Χ		X	
GWA-5	Upgradient			Χ	
GWA-7	Upgradient	Х	Х	X	
GWA-7A	Upgradient	Χ		Х	
GWC-1	Downgradient	Х		X	
GWC-2	Downgradient	Х	X	X	
GWC-3	Downgradient	Х			
GWC-4A	Downgradient	Х		X	
GWC-4B	Downgradient			X	
GWC-5	Downgradient	Χ	Х	X	Х
GWC-6	Downgradient	Χ	Χ	X	

- X indicates sampled was collected.
 Semiannual Detection Event includes Appendix III and Appendix I Parameters.



Table 3 **Summary of Groundwater Elevations**

Well ID	Former TOC Elevation (NAVD88)	June 18, 2020 Revised TOC Elevation (NAVD88)	September 9, 2019 Groundwater Elevation (NAVD88)	March 9, 2020 Groundwater Elevation (NAVD88)
GWA-1	66.93	66.90	55.51	60.69
GWA-1A	66.78	66.76	54.36	59.34
GWA-2	66.19	66.17	53.30	58.39
GWA-2A	66.34	66.33	49.15	53.43
GWA-2B	66.18	66.20	49.01	53.35
GWA-3A	62.79	62.77	49.49	55.07
GWA-3B	62.80	62.78	51.62	58.83
GWA-4	62.01	62.01	48.82	54.85
GWA-5	60.43	60.43	48.41	55.08
GWA-7	67.80	67.77	51.47	56.35
GWA-7A	68.18	67.92	47.54	51.94
GWC-1	66.08	66.08	48.26	54.78
GWC-2	64.21	64.19	47.28	54.06
GWC-3	66.91	66.91	46.39	See Note 3
GWC-4A	66.62	66.60	47.87	54.80
GWC-4B	66.83	66.83	Dry	57.89
GWC-5	68.08	68.08	49.80	57.53
GWC-6	68.51	68.51	48.82	54.39
PZ-1	67.64	67.41	47.65	52.61
PZ-2	67.50	67.26	47.99	54.13
PZ-3	61.30	61.28	48.47	54.63

- ft BTOC indicates feet below top of casing.
 NAVD88 indicates feet relative to North American Vertical Datum of 1988.
 Well GWC-3 was submerged in March 2020 and could not be sampled. Well is scheduled for abandonment.
- September 9, 2019 Groundwater Elevations reference Former TOC Elevations and March 9, 2020 Groundwater Elevations reference Revised TOC Elevations.



Table 4A HORIZONTAL GROUNDWATER FLOW VELOCITY CALCULATIONS September 2019

Equation

v = K (dh/dl) where: v = ground water velocity K = hydraulic conductivity

dh/dl = hydraulic gradient P_e = effective porosity

Values Used in Calculation

	Value		Source
K =	7.9E-04 2.24	cm/sec ft/day	See note 1.
			Hydraulic gradient from
i ₁ =	0.007	unitless	GWA-1A to PZ-2
i ₂ =	0.007	unitless	GWA-1A to GWC-1
i ₃ =	0.002	unitless	GWA-3A to GWC-2
dh/dl =	0.006	unitless	Average of i_1 , i_2 , i_3
P _e =	0.20	unitless	See note 2.

Calculated Flow Velocity

$$v = (2.24) (0.006)$$

0.20
 $v = 0.062$ ft/day, or 23 ft/year

- (1) Slug tests performed by Southern Company Services, Inc. (2002)
- (2) Default value for silty sands from Interim Final RCRA Investigation (EPA, 1989)



Table 4B HORIZONTAL GROUNDWATER FLOW VELOCITY CALCULATIONS March 2020

Equation

v = K (dh/dl) where: v = ground water velocityR = K (dh/dl) where: V = ground water velocity

dh/dl = hydraulic gradient P_e = effective porosity

Values Used in Calculation

	Value		Source
K =	7.9E-04 2.24	cm/sec ft/day	See note 1.
			Hydraulic gradient from
i ₁ =	0.004	unitless	GWA-5 to GWC-2
i ₂ =	0.004	unitless	GWA-3A to PZ-1
dh/dl =	0.004	unitless	Average of i_1 , i_2 , i_3
P _e =	0.20	unitless	See note 2.

Calculated Flow Velocity

$$v = \frac{(2.24)(0.004)}{0.20}$$

 $v = 0.046 \text{ ft/day, or } 17 \text{ ft/year}$

- (1) Slug tests performed by Southern Company Services, Inc. (2002)
- (2) Default value for silty sands from Interim Final RCRA Investigation (EPA, 1989)

Table 5A
Plant McIntosh Inactive Landfill No. 3
Summary of Groundwater Analytical Data
September 2019

					We	II ID			
:	Substance	GWA-1A	GWA-2A	GWA-2B	GWA-3A	GWA-3B	GWA-3B	GWA-4	GWA-5
		9/11/2019	9/11/2019	9/12/2019	9/12/2019	9/12/2019	12/17/2019	9/12/2019	9/12/2019
	Boron	<0.039	<0.039	0.65	<0.039	<0.039		<0.039	0.048 J
	Calcium	1.6	3.3	15	2.3	3.2		0.84	1.9
≡ ×	Chloride	7.1	12	7.6	16	24		6.1	9.1
APPENDIX III	Fluoride	<0.026	<0.026	0.036 J	<0.026	0.050 J		0.035 J	0.052 J
APPI	pН	5.10	0	5.57	4.99	5.00	4.59	4.92	4.54
	Sulfate	<0.38	<0.38	59	0.69 J	1.5		3.7	10
	TDS	53	74	89	<10	34		10	20
	Barium	0.022	0.040	0.049	0.073	0.076		0.044	0.086
ţ	Beryllium	0.00019 J	0.00028 J	0.00088 J	0.00084 J	0.00035 J		<0.00018	0.00036 J
ermit	Chromium	0.0076	0.0040	<0.0015	<0.0015	<0.0015		<0.0015	0.0032
Ь	Cobalt	0.00032 J	0.00040 J	0.0023	0.0015	0.0014		0.00091	0.00074
red	Copper	<0.00063	0.0012 J	0.0038	0.0024	0.0032	0.00070 J	0.0022	0.0011 J
Required by	Lead	<0.00013	0.00019 J	<0.00013	<0.00013	0.00069 J		<0.00013	0.00082 J
~	Vanadium	0.0014	0.0016	0.0021	0.0020	0.0041		0.0017	0.0040
	Zinc	0.0062	0.0057	0.0075	0.0081	0.010		0.0073	0.0074

- 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. -- indicates substance not analyzed.
- 4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- 5. TDS indicates total dissolved solids.
- 6. Appendix III = indicator parameters evaluated during Detection Monitoring.
- 7. Parameters required by permit are Appendix I parameters included to meet EPD Rule 391-3-4-.14 requirements.

Table 5A
Plant McIntosh Inactive Landfill No. 3
Summary of Groundwater Analytical Data
September 2019

					We	ell ID			
9	Substance	GWA-7	GWA-7	GWA-7A	GWC-1	GWC-2	GWC-2	GWC-3	GWC-4A
		9/12/2019	12/17/2019	9/12/2019	9/12/2019	9/12/2019	12/17/2019	9/12/2019	9/12/2019
	Boron	<0.039		1.6	<0.039	0.045 J		<0.039	<0.039
	Calcium	0.83		19	<0.13	2.0		1.9	0.30 J
= ×	Chloride	5.3		6.8	4.9	5.2		9.4	9.9
APPENDIX	Fluoride	0.026 J		<0.026	<0.026	<0.026		<0.026	<0.026
APPI	рН	5.12	4.97	5.10	4.95	5.14	4.80	5.31	4.89
	Sulfate	0.50 J		81	0.78 J	0.43 J		0.49 J	1.1
	TDS	14		140	29	28		73	<10
	Barium	0.015		0.077	0.016	0.060		0.037	0.026
<u></u>	Beryllium	0.00024 J		0.00097 J	0.00043 J	<0.00018		0.00026 J	0.00028 J
ermit	Chromium	0.0035		<0.0015	<0.0015	0.0048	0.0064	0.0039	0.0028
by P	Cobalt	0.00048 J		0.0043	0.00027 J	0.00090		0.00050	0.00044 J
	Copper	0.0026	<0.00063	0.0041	0.0024	0.0020		0.0015 J	<0.00063
Required	Lead	0.00036 J		<0.00013	<0.00013	<0.00013		<0.00013	<0.00013
~	Vanadium	0.0037		0.0020	0.0023	0.0018		0.0022	0.0021
	Zinc	0.0059		0.014	0.0039 J	0.0089		0.0058	0.0093

- 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. -- indicates substance not analyzed.
- 4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- 5. TDS indicates total dissolved solids.
- 6. Appendix III = indicator parameters evaluated during Detection Monitoring.
- 7. Parameters required by permit are Appendix I parameters included to meet EPD Rule 391-3-4-.14 requirements.

Table 5A Plant McIntosh Inactive Landfill No. 3 Summary of Groundwater Analytical Data September 2019

			We	II ID		
	Substance	GWC-5	GWC-5	GWC-6	GWC-6	
		9/12/2019	12/17/2019	9/12/2019	12/17/2019	
	Boron	<0.039		<0.039		
	Calcium	9.1		1.7		
≡ ×	Chloride	7.6		7.7		
APPENDIX III	Fluoride	0.078 J		<0.026		
АРР	рН	5.96	5.57	4.96	4.88	
	Sulfate	4.9		1.0		
	TDS	110		80		
	Barium	0.59		0.052		
<u></u>	Beryllium	0.0017		0.00025 J		
ermi	Chromium	0.0051	0.0028	0.0022		
by P	Cobalt	0.013	0.015	0.00077		
Required by Permit	Copper	0.00084 J		0.0030	0.00064 J	
equi	Lead	0.00024 J		0.00065 J		
~	Vanadium	0.0044		0.0043		
	Zinc	0.033		0.011		

- 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. -- indicates substance not analyzed.
- 4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- 5. TDS indicates total dissolved solids.
- 6. Appendix III = indicator parameters evaluated during Detection Monitoring.
- 7. Parameters required by permit are Appendix I parameters included to meet EPD Rule 391-3-4-.14 requirements.

Table 5B
Plant McIntosh Inactive Landfill No. 3
Summary of Groundwater Analytical Data
March 2020

					We	II ID			
9	Substance	GWA-1A	GWA-2A	GWA-2B	GWA-3A	GWA-3A	GWA-3B	GWA-4	GWA-5
		3/10/2020	3/10/2020	3/10/2020	3/10/2020	4/2/2020	3/11/2020	3/10/2020	3/10/2020
	Boron	<0.039	<0.039	0.64	0.059 J	0.084	<0.039	<0.039	0.066 J
	Calcium	2.0	3.4	14	2.8	3.0	4.4	1.1	2.9
≡ ×	Chloride	8.1	13	8.0	19	20	4.8	5.0	3.7
APPENDIX	Fluoride	<0.026	<0.026	<0.026	0.026 J	0.051 J	0.037 J	0.066 J	0.051 J
APPI	pН	5.48	5.39	5.56	4.79	4.75	5.38	4.59	4.81
	Sulfate	1.5	2.3	57	3.0	<0.38	7.3	7.2	15
	TDS	67	68	130	49	61	43	39	67
	Barium	0.018	0.044	0.047	0.082	0.088	0.035	0.058	0.081
+	Beryllium	0.00018 J	0.00035 J	0.00087 J	0.00058 J	0.00062 J	<0.00018	0.00029 J	0.00028 J
ermit	Chromium	0.0041	0.0028	<0.0015	<0.0015	0.0031	0.0017 J	<0.0015	0.0031
by P	Cobalt	0.00028 J	0.00044 J	0.0030	0.0019	0.0017 J	0.00038 J	0.00090	0.00099
	Copper	<0.00063	<0.00063	0.0021	0.00082 J	0.0019 J	0.00067 J	<0.00063	0.0019 J
Required	Lead	0.00015 J	<0.00013	<0.00013	0.00013 J	0.00062 J	0.0011	0.00031 J	0.0022
~	Vanadium	<0.00099	<0.00099	<0.00099	<0.00099	0.0013	0.0028	<0.00099	0.010
	Zinc	<0.0032	<0.0032	0.0061	0.0079	0.011	0.0055	0.0079	0.0071

- 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. -- indicates substance not analyzed.
- 4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- 5. TDS indicates total dissolved solids.
- 6. Appendix III = indicator parameters evaluated during Detection Monitoring.
- 7. Parameters required by permit are Appendix I parameters included to meet EPD Rule 391-3-4-.14 requirements.

Table 5B
Plant McIntosh Inactive Landfill No. 3
Summary of Groundwater Analytical Data
March 2020

					We	II ID			
9	Substance	GWA-7	GWA-7A	GWC-1	GWC-2	GWC-4A	GWC-4B	GWC-5	GWC-5
		3/11/2020	3/11/2020	3/11/2020	3/31/2020	3/31/2020	3/31/2020	3/31/2020	6/30/2020
	Boron	0.055 J	1.9	0.040 J	0.046 J	<0.039	<0.039	<0.039	
	Calcium	0.88	20	1.6	8.3	0.48 J	0.26 J	12	
≡ ×	Chloride	5.8	6.9	6.4	5.7	14	39	8.2	
APPENDIX III	Fluoride	<0.026	<0.026	<0.026	0.043 J	0.028 J	<0.026	0.16	
APPI	pН	5.27	5.05	5.21	5.64	4.66	4.63	6.17	6.20
	Sulfate	0.97 J	110	3.5	1.0	2.5	1.9	11	
	TDS	76	180	37	50	52	85	750	710
	Barium	0.014	0.067	0.027	0.077	0.036	0.052	0.67	
	Beryllium	<0.00018	0.00078 J	<0.00018	<0.00018	<0.00018	<0.00018	0.00060 J	
Permit	Chromium	0.0053	<0.0015	<0.0015	0.0050	<0.0015	<0.0015	<0.0015	
by P	Cobalt	0.00033 J	0.0056	0.00026 J	0.00061 J	0.00033 J	0.00028 J	0.012	
red	Copper	<0.00063	0.0032	<0.00063	<0.00063	<0.00063	<0.00063	<0.00063	
Required	Lead	0.00015 J	<0.00013	<0.00013	<0.00013	<0.00013	0.00018 J	<0.00013	
∝	Vanadium	0.0013	<0.00099	<0.00099	<0.00099	<0.00099	0.0011	0.0016	
	Zinc	<0.0032	0.0099	<0.0032	0.0065	<0.0032	<0.0032	0.025	

- 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. -- indicates substance not analyzed.
- 4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- 5. TDS indicates total dissolved solids.
- 6. Appendix III = indicator parameters evaluated during Detection Monitoring.
- 7. Parameters required by permit are Appendix I parameters included to meet EPD Rule 391-3-4-.14 requirements.

Table 5B Plant McIntosh Inactive Landfill No. 3 Summary of Groundwater Analytical Data March 2020

	Well II	
Substance		GWC-6
		3/11/2020
APPENDIX III	Boron	<0.039
	Calcium	1.7
	Chloride	7.6
	Fluoride	<0.026
	рН	5.23
	Sulfate	2.2
	TDS	67
Required by Permit	Barium	0.048
	Beryllium	0.00030 J
	Chromium	<0.0015
	Cobalt	0.00073
	Copper	<0.00063
	Lead	<0.00013
	Vanadium	<0.00099
	Zinc	0.0047 J

- 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. -- indicates substance not analyzed.
- 4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- 5. TDS indicates total dissolved solids.
- 6. Appendix III = indicator parameters evaluated during Detection Monitoring.
- 7. Parameters required by permit are Appendix I parameters included to meet EPD Rule 391-3-4-.14 requirements.

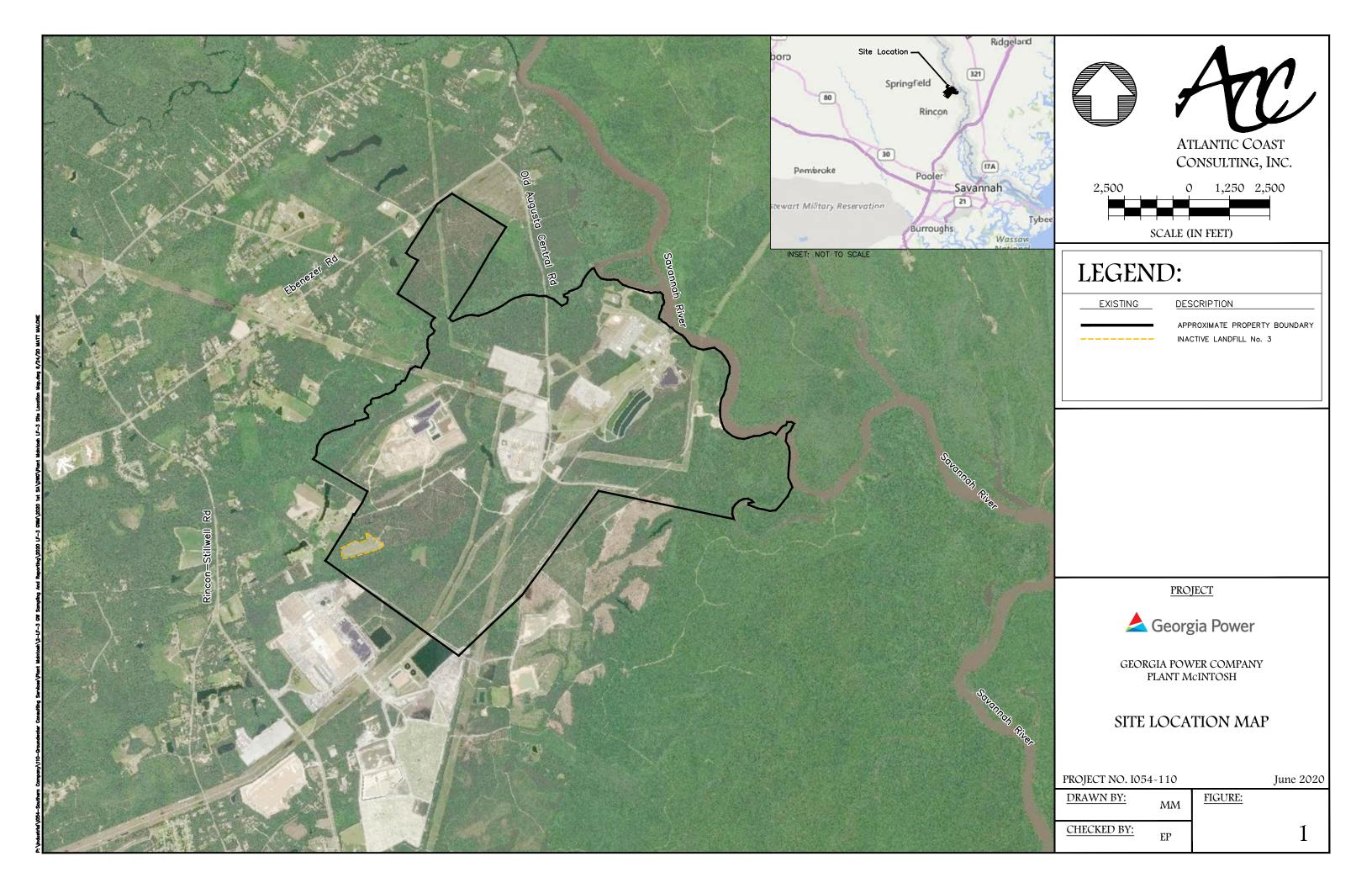


Table 6 Statistical Method Summary

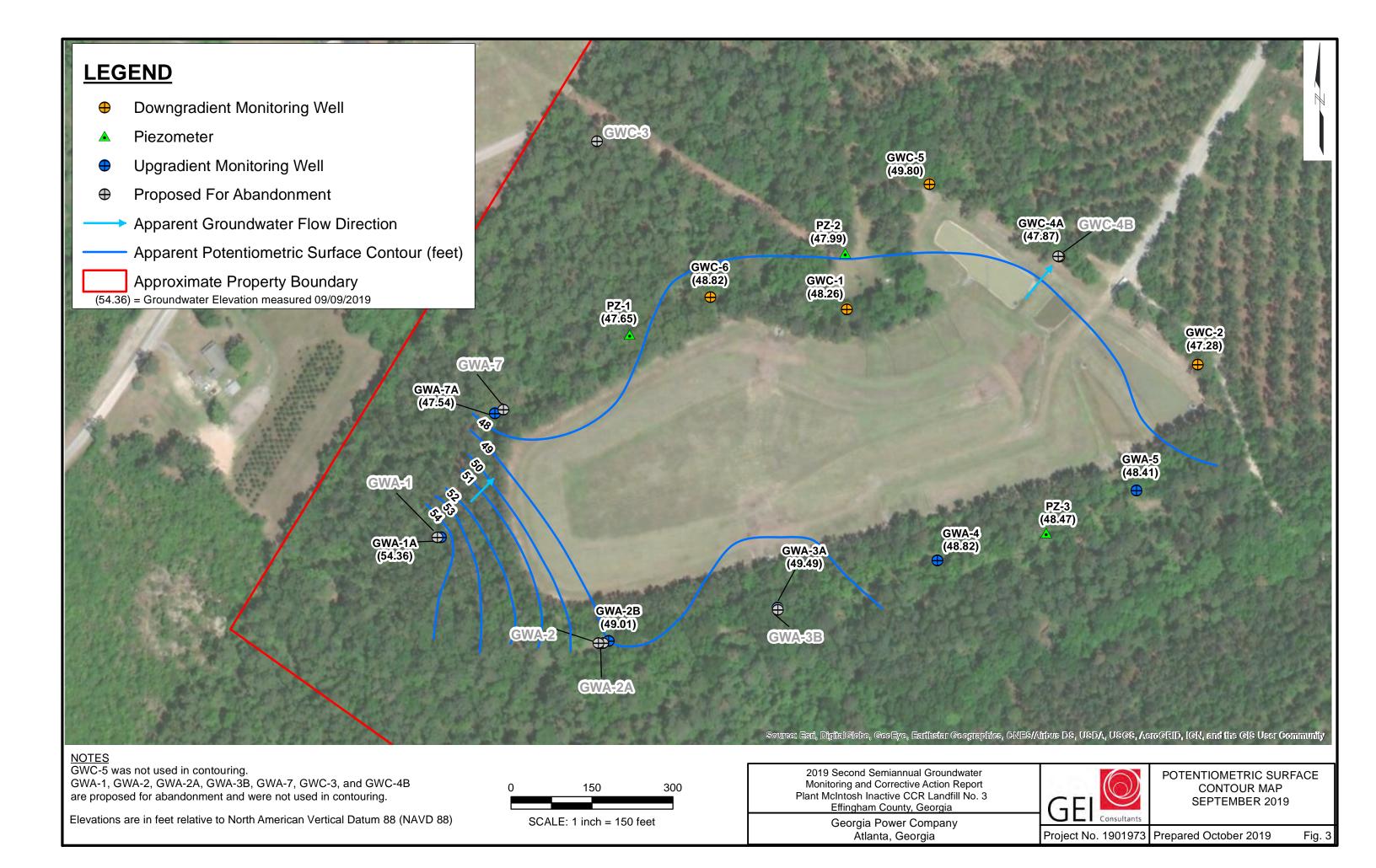
Plant McIntosh Inactive Landfill No. 3 Statistical Method Summary			
Monitoring Well Network	Upgradient Wells	GWA-1A, GWA-2A, GWA-2B, GWA-3A, GWA-3B, GWA-4, GWA-5, GWA-7, GWA-7A	
	Downgradient Wells	GWC-1, GWC-2, GWC-3, GWC-4A, GWC-4B, GWC-5, GWC-6	
CCR Monitoring Parameters	Appendix III (Detection Monitoring)	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 (boron, calcium, and fluoride) or intrawell (chloride, pH, sulfate, TDS, and EPD Permit Metals) statistical limits are on constituent specific basis, depending on the appropriateness of the method as determined by the Analysis of Variance	

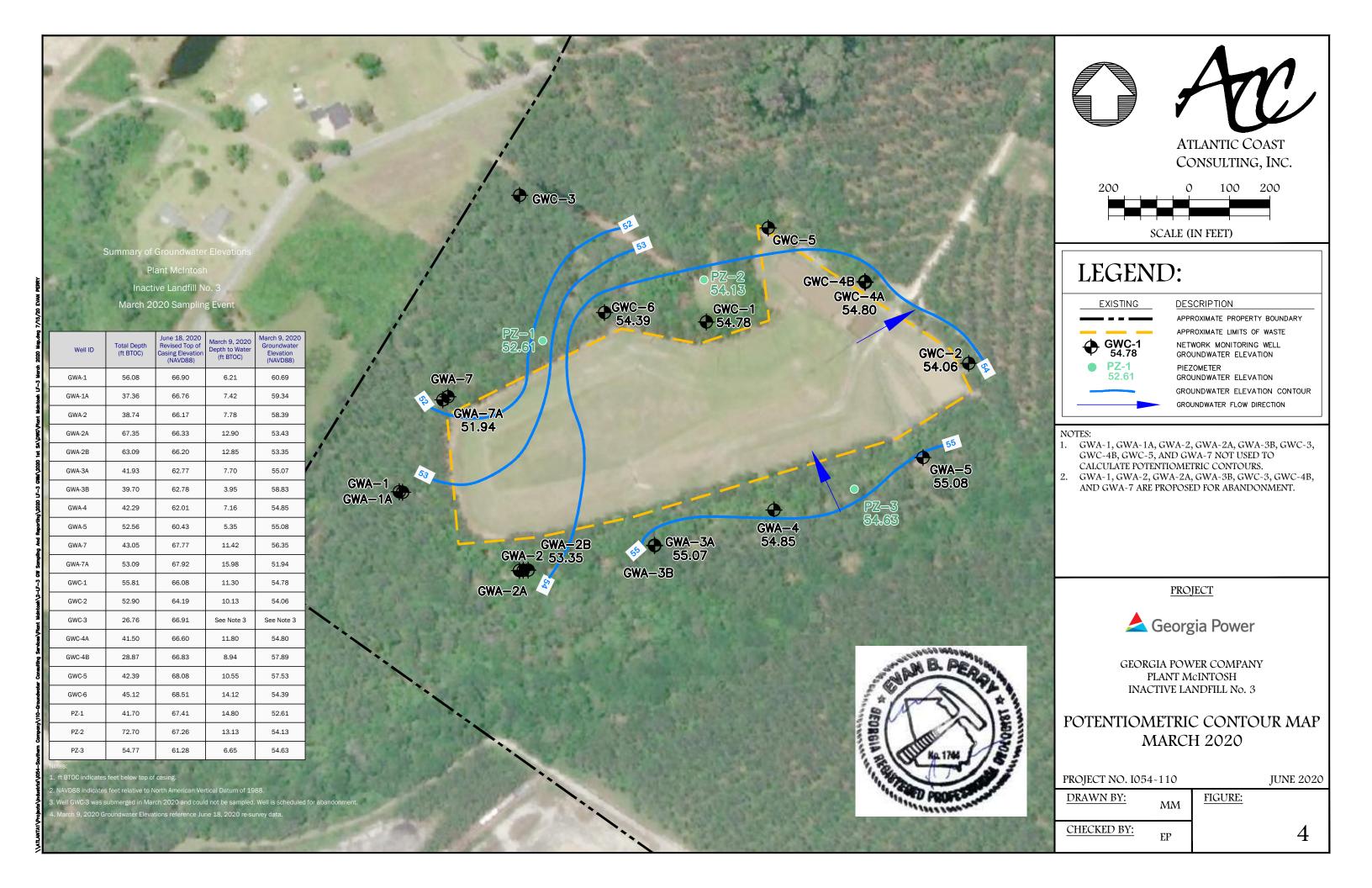


FIGURES











APPENDICES



APPENDIX A

LABORATORY ANALYTICAL AND FIELD SAMPLING REPORTS

Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 180-95560-1

Client Project/Site: CCR - Plant McIntosh Ash Landfill #3

Revision: 1

For:

Southern Company PO BOX 2641 GSC8 Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Veronica portot

Authorized for release by: 10/18/2019 5:54:37 PM

Veronica Bortot, Senior Project Manager (412)963-2435

veronica.bortot@testamericainc.com

LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com

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

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

PA Lab ID: 02-00416



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Client: Southern Company Project/Site: CCR - Plant McIntosh Ash Landfill #3 Laboratory Job ID: 180-95560-1

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-95560-1

Job ID: 180-95560-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-95560-1

Revised: to change RLs to routine

Comments

No additional comments.

Receipt

The samples were received on 9/12/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.9° C and 3.2° C.

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

Metals

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

General Chemistry

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

Definitions/Glossary

Client: Southern Company Job ID: 180-95560-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Qualifiers

Metals

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

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
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)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

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Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-95560-1

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-19
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-19
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	12-31-19
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-30-19
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	01-31-20
Wisconsin	State	998027800	08-31-20

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Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-95560-1	GWA-1A	Water	09/11/19 16:20	09/12/19 09:00	
180-95560-2	GWA-2A	Water	09/11/19 17:05	09/12/19 09:00	

Job ID: 180-95560-1

Method Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

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Job ID: 180-95560-1

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Lab Chronicle

Client: Southern Company Job ID: 180-95560-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-1A

Lab Sample ID: 180-95560-1 Date Collected: 09/11/19 16:20

Matrix: Water

Date Received: 09/12/19 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at ID: CHICS2000		1			291418	09/17/19 00:47	CMR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020 nt ID: A		1			293231	09/29/19 21:52	WTR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT

Client Sample ID: GWA-2A Lab Sample ID: 180-95560-2

Date Collected: 09/11/19 17:05 **Matrix: Water**

Date Received: 09/12/19 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291418	09/17/19 01:32	CMR	TAL PIT
	Instrumer	t ID: CHICS2000								
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:55	WTR	TAL PIT
	Instrumer	t ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291598	09/17/19 10:39	AVS	TAL PIT
	Instrumer	t ID: NOEQUIP								

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KAK = Kayla Kalamasz

Batch Type: Analysis

AVS = Abbey Smith

CMR = Carl Reagle

WTR = Bill Reinheimer

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-1A

Date Collected: 09/11/19 16:20 Date Received: 09/12/19 09:00

Lab Sample ID: 180-95560-1

Matrix: Water

Job ID: 180-95560-1

Method: EPA 300.0 R2.1	1 - Anions, Ion Chromatograp	ohy						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.1	1.0	0.71	mg/L			09/17/19 00:47	1
Fluoride	<0.026	0.10	0.026	mg/L			09/17/19 00:47	1
Sulfate	<0.38	1.0	0.38	mg/L			09/17/19 00:47	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.022		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:52	1
Beryllium	0.00019	J	0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:52	1
Cobalt	0.00032	J	0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:52	1
Chromium	0.0076		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:52	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:52	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:52	1
Vanadium	0.0014		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:52	1
Zinc	0.0062		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:52	1
Calcium	1.6		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:52	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:52	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	53		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWA-2A Lab Sample ID: 180-95560-2 **Matrix: Water**

Date Collected: 09/11/19 17:05

Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		1.0	0.71	mg/L			09/17/19 01:32	1
Fluoride	<0.026		0.10	0.026	mg/L			09/17/19 01:32	1
Sulfate	<0.38		1.0	0.38	mg/L			09/17/19 01:32	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.040		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:55	1
Beryllium	0.00028	J	0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:55	1
Cobalt	0.00040	J	0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:55	1
Chromium	0.0040		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:55	1
Copper	0.0012	J	0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:55	1
Lead	0.00019	J	0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:55	1
Vanadium	0.0016		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:55	1
Zinc	0.0057		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:55	1
Calcium	3.3		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:55	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:55	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	74	10	10 mg/L			09/17/19 10:39	1

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Lab Sample ID: MB 180-291418/56

Matrix: Water

Analysis Batch: 291418

Client Sample ID: Method Blank

Prep Type: Total/NA

Job ID: 180-95560-1

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride 1.0 0.71 mg/L 09/16/19 21:04 <0.71 Fluoride 0.10 0.026 mg/L 09/16/19 21:04 < 0.026 Sulfate 09/16/19 21:04 < 0.38 1.0 0.38 mg/L

Lab Sample ID: LCS 180-291418/55

Matrix: Water

Analysis Batch: 291418

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	25.0	25.3		mg/L		101	90 - 110	
Fluoride	1.25	1.22		mg/L		97	90 - 110	
Sulfate	25.0	23.9		mg/L		96	90 - 110	

Lab Sample ID: 180-95560-1 MS

Client Sample ID: GWA-1A **Matrix: Water** Prep Type: Total/NA Analysis Batch: 291418

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	7.1		25.0	34.3		mg/L		109	80 - 120	
Fluoride	<0.026		1.25	1.23		mg/L		98	80 - 120	
Sulfate	<0.38		25.0	25.3		mg/L		101	80 - 120	

Lab Sample ID: 180-95560-1 MSD

Matrix: Water

Analysis Batch: 291418	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	7.1		25.0	34.9		mg/L		111	80 - 120	2	20	
Fluoride	<0.026		1.25	1.24		mg/L		99	80 - 120	1	20	
Sulfate	<0.38		25.0	25.6		mg/L		102	80 - 120	1	20	

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-291656/1-A

Matrix: Water

Analysis Batch: 293231

Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 291656

Client Sample ID: GWA-1A

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 20:30	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 20:30	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 20:30	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 20:30	1
Copper	< 0.00063		0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 20:30	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 20:30	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 20:30	1
Zinc	<0.0032		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 20:30	1
Calcium	<0.13		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 20:30	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 20:30	1

Eurofins TestAmerica, Pittsburgh

Job ID: 180-95560-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client: Southern Company

Matrix: Water

Lab Sample ID: LCS 180-291656/2-A

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

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

Analysis Batch: 293231	Spike	LCS	LCS			-1 31	Prep Batch: 291656 %Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Barium	1.00	1.02		mg/L		102	80 - 120
Beryllium	0.500	0.518		mg/L		104	80 - 120
Cobalt	0.500	0.570		mg/L		114	80 - 120
Chromium	0.500	0.562		mg/L		112	80 - 120
Copper	0.500	0.573		mg/L		115	80 - 120
Lead	0.500	0.541		mg/L		108	80 - 120
Vanadium	0.500	0.551		mg/L		110	80 - 120
Zinc	0.250	0.298		mg/L		119	80 - 120
Calcium	25.0	26.7		mg/L		107	80 - 120
Boron	1.25	1.17		mg/L		94	80 - 120

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

Lab Sample ID: MB 180-291588/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 291588

MB MB RL **MDL** Unit Analyte Result Qualifier Prepared Analyzed Dil Fac Total Dissolved Solids 10 09/17/19 10:16 <10 10 mg/L

Lab Sample ID: LCS 180-291588/1 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 291588

Spike LCS LCS %Rec. Result Qualifier Analyte Added Unit D %Rec Limits **Total Dissolved Solids** 633 558 mg/L 88 80 - 120

Lab Sample ID: MB 180-291598/2 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 291598

MB MB Result Qualifier RL **MDL** Unit Analyte Prepared Analyzed Dil Fac Total Dissolved Solids 10 09/17/19 10:39 <10 10 mg/L

Lab Sample ID: LCS 180-291598/1 **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA**

Analysis Batch: 291598

LCS LCS Spike %Rec. Added Analyte Result Qualifier Unit %Rec Limits Total Dissolved Solids 633 610 96 80 - 120 mg/L

Eurofins TestAmerica, Pittsburgh

QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

HPLC/IC

Analysis Batch: 291418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95560-1	GWA-1A	Total/NA	Water	EPA 300.0 R2.1	
180-95560-2	GWA-2A	Total/NA	Water	EPA 300.0 R2.1	
MB 180-291418/56	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-291418/55	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-95560-1 MS	GWA-1A	Total/NA	Water	EPA 300.0 R2.1	
180-95560-1 MSD	GWA-1A	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 291656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95560-1	GWA-1A	Total Recoverable	Water	3005A	<u> </u>
180-95560-2	GWA-2A	Total Recoverable	Water	3005A	
MB 180-291656/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-291656/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 293231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95560-1	GWA-1A	Total Recoverable	Water	EPA 6020	291656
180-95560-2	GWA-2A	Total Recoverable	Water	EPA 6020	291656
MB 180-291656/1-A	Method Blank	Total Recoverable	Water	EPA 6020	291656
LCS 180-291656/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	291656

General Chemistry

Analysis Batch: 291588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95560-1	GWA-1A	Total/NA	Water	SM 2540C	
MB 180-291588/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-291588/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 291598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95560-2	GWA-2A	Total/NA	Water	SM 2540C	-
MB 180-291598/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-291598/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Pittsburgh

Job ID: 180-95560-1

Chain of Custody Record

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

eurofins Environment Testing Testamerica

		Lab PM:	Carrier Tracking No(s):	COC No:
Client Information	Noles L	COKEM Bortot, Veronica		180-54270-10409.1
Cilent Contact: Lauren Petty	Phone UNY-592-0094	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of B
Company: Southern Company Services, Inc		Analys	Analysis Requested	Job #:
Address: 3535 Colonnade Parkway	Due Date Requested:	Ho		73
City: Birmingham	TAT Requested (days):	-,-,,		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsnaO2
State, Zip: AL, 35243				
Phone: 205-992-5417(Tel)	PO#: SCS10382606	2007		
Email: Impetty@southernco.com	WO#:	No)		
Project Name: CCR - Plant McIntosh Ash Landfill #3	Project #: 18019950	etals	enistr	K - EDTA L - EDA
Site: Georgia	SSOW#:	SD (Y	ot cor	Other:
Samula Idantification	Sample Type Sample (C=comp.	ield Filtered M\SM myore	ved Number	oof Custod
	Preserva	9 0		Shair
GN 9-12	9/11/19 1620 G	义 2. 2.		0 099
6W A-2A	9/1/19 17105 6	Water X X X		996-0
		Water		981
		Water		
Possible Hazard Identification Non-Hazard — Flammable — Skin Irritant — Poison B	ison B Unknown Radiological	Sample Disposal (A fee n	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	etained longer than 1 month) Archive For
		Special Instructions/QC Requirements		
nquished by:	Date:	Time:	Method of Shipment:	
Relinquished by:	Unla 1900	Company Received PK	Date/Time:	Company
Relinquished by."	, ,	Company Received by: HUU	Mullaton Date Times -1	H Mudding 61-8
	Date/Time:	Company Received by:	Date/Time:	Or O Company
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks	nd Other Remarks:	
				Ver: 01/16/2019

Client: Southern Company Job Number: 180-95560-1

Login Number: 95560 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

eroniori italogrij Bodaro		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	
s 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	

Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 180-95640-1

Client Project/Site: CCR - Plant McIntosh Ash Landfill #3

For:

Southern Company PO BOX 2641 GSC8 Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Unucu Borbst

Authorized for release by: 10/18/2019 7:01:10 PM

Veronica Bortot, Senior Project Manager (412)963-2435

veronica.bortot@testamericainc.com

LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com

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

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

PA Lab ID: 02-00416

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4.0

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Client: Southern Company Project/Site: CCR - Plant McIntosh Ash Landfill #3 Laboratory Job ID: 180-95640-1

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-95640-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-95640-1

Comments

No additional comments.

Receipt

The samples were received on 9/13/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.1° C and 2.9° C.

GC Semi VOA

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

Metals

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

General Chemistry

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

Job ID: 180-95640-1

Definitions/Glossary

Client: Southern Company Job ID: 180-95640-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Qualifiers

			•	•	_
п	_	_	•	"	•

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

B Compound was found in the blank and sample.

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

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
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)

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

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Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-95640-1

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-19
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-19
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	12-31-19
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-30-19
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	01-31-20
Wisconsin	State	998027800	08-31-20

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Sample Summary

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

FB-LF3-02

180-95640-19

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-95640-1	GWC-4A	Water	09/12/19 14:40	09/13/19 09:00	
180-95640-2	GWC-5	Water	09/12/19 13:25	09/13/19 09:00	
180-95640-3	GWA-5	Water	09/12/19 12:05	09/13/19 09:00	
180-95640-4	GWA-4	Water	09/12/19 11:05	09/13/19 09:00	
180-95640-5	GWA-3B	Water	09/12/19 10:00	09/13/19 09:00	
180-95640-6	GWA-3A	Water	09/12/19 09:15	09/13/19 09:00	
180-95640-7	GWA-7A	Water	09/12/19 12:00	09/13/19 09:00	
180-95640-8	GWA-7	Water	09/12/19 10:45	09/13/19 09:00	
180-95640-9	GWA-2B	Water	09/12/19 09:35	09/13/19 09:00	
180-95640-10	GWC-1	Water	09/12/19 14:15	09/13/19 09:00	
180-95640-11	GWC-6	Water	09/12/19 14:45	09/13/19 09:00	
180-95640-12	GWC-3	Water	09/12/19 13:30	09/13/19 09:00	
180-95640-13	GWC-2	Water	09/12/19 14:45	09/13/19 09:00	
180-95640-14	DUP-LF3-02	Water	09/12/19 00:00	09/13/19 09:00	
180-95640-15	LF3-DUP-01	Water	09/12/19 00:00	09/13/19 09:00	
180-95640-16	FERB-LF3-01	Water	09/12/19 15:20	09/13/19 09:00	
180-95640-17	FERB-LF3-02	Water	09/12/19 15:25	09/13/19 09:00	
180-95640-18	FB-LF3-01	Water	09/12/19 15:30	09/13/19 09:00	

Water

09/12/19 15:35 09/13/19 09:00

Job ID: 180-95640-1

Method Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

Job ID: 180-95640-1

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Job ID: 180-95640-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWC-4A

Client: Southern Company

Date Collected: 09/12/19 14:40 Date Received: 09/13/19 09:00

Lab Sample ID: 180-95640-1

Matrix: Water

Batch Batch Dil Initial Final **Batch** Prepared Method Factor **Prep Type** Type Run Amount Amount Number or Analyzed Analyst Lab Total/NA EPA 300.0 R2.1 292035 CMR Analysis 09/20/19 15:30 TAL PIT Instrument ID: CHIC2100A Total Recoverable 3005A 50 mL 50 mL 291941 09/19/19 12:36 MWW TAL PIT Total Recoverable Analysis EPA 6020 292150 09/20/19 17:40 RSK TAL PIT 1 Instrument ID: A Analysis Total/NA 100 mL 100 ml 291934 09/19/19 12:24 AVS TAI PIT SM 2540C Instrument ID: NOEQUIP

Lab Sample ID: 180-95640-2

Client Sample ID: GWC-5 Date Collected: 09/12/19 13:25 **Matrix: Water**

Date Received: 09/13/19 09:00

Prep Type Total/NA	Batch Type Analysis Instrumen	Batch Method EPA 300.0 R2.1 at ID: CHIC2100A	Run	Pactor 1	Initial Amount	Final Amount	Batch Number 292035	Prepared or Analyzed 09/20/19 16:18	Analyst CMR	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumer	3005A EPA 6020 nt ID: A		1	50 mL	50 mL	291941 292150	09/19/19 12:36 09/20/19 17:44		TAL PIT TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	291934	09/19/19 12:24	AVS	TAL PIT

Client Sample ID: GWA-5 Lab Sample ID: 180-95640-3 Date Collected: 09/12/19 12:05 **Matrix: Water**

Date Received: 09/13/19 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHIC2100A		1			292035	09/20/19 16:34	CMR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	292052	09/20/19 10:22	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293054	09/27/19 22:52	WTR	TAL PIT
	Instrumen	t ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	292052	09/20/19 10:22	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293128	09/28/19 15:09	RSK	TAL PIT
	Instrumen	t ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291934	09/19/19 12:24	AVS	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: GWA-4 Lab Sample ID: 180-95640-4 Date Collected: 09/12/19 11:05 **Matrix: Water**

Date Received: 09/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			292035	09/20/19 16:49	CMR	TAL PIT
	Instrumen	t ID: CHIC2100A								

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Job ID: 180-95640-1

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

Client Sample ID: GWA-4

Date Collected: 09/12/19 11:05 Date Received: 09/13/19 09:00

Lab Sample ID: 180-95640-4

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	292055	09/20/19 10:28	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	294722	10/12/19 03:51	WTR	TAL PIT
	Instrument	ID: M								
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	291934	09/19/19 12:24	AVS	TAL PIT

Client Sample ID: GWA-3B Lab Sample ID: 180-95640-5

Date Collected: 09/12/19 10:00 Date Received: 09/13/19 09:00

Matrix: Water

Prep Type Total/NA	Batch Type Analysis Instrumer	Batch Method EPA 300.0 R2.1 at ID: CHIC2100A	Run	Pactor 1	Initial Amount	Final Amount	Batch Number 292035	Prepared or Analyzed 09/20/19 17:05	Analyst CMR	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis	3005A EPA 6020		1	50 mL 1.0 mL	50 mL 1.0 mL	292055 294722	09/20/19 10:28 10/12/19 03:56		TAL PIT TAL PIT
Total/NA	Instrumer Analysis Instrumer	st ID: M SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	291934	09/19/19 12:24	AVS	TAL PIT

Client Sample ID: GWA-3A Lab Sample ID: 180-95640-6 Date Collected: 09/12/19 09:15

Matrix: Water

Date Received: 09/13/19 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1		-	292035	09/20/19 17:21	CMR	TAL PIT
	Instrumer	nt ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	292055	09/20/19 10:28	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	294722	10/12/19 04:01	WTR	TAL PIT
	Instrumer	nt ID: M								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291934	09/19/19 12:24	AVS	TAL PIT
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: GWA-7A Lab Sample ID: 180-95640-7 Date Collected: 09/12/19 12:00 Matrix: Water

Date Received: 09/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at ID: CHIC2100A		1			292035	09/20/19 18:09	CMR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	292055	09/20/19 10:28	MWW	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020 at ID: M		1	1.0 mL	1.0 mL	294722	10/12/19 04:05	WTR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	291934	09/19/19 12:24	AVS	TAL PIT

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Client: Southern Company

SM 2540C

Instrument ID: NOEQUIP

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Analysis

Client Sample ID: GWA-7

Total/NA

Date Collected: 09/12/19 10:45 Date Received: 09/13/19 09:00

Lab Sample ID: 180-95640-8

09/19/19 12:24 AVS

Matrix: Water

TAI PIT

Job ID: 180-95640-1

Batch Batch Dil Initial Final **Batch** Prepared Method Factor or Analyzed **Prep Type** Type Run Amount Amount Number Analyst Lab Total/NA EPA 300.0 R2.1 292035 09/20/19 18:24 CMR TAL PIT Analysis Instrument ID: CHIC2100A Total Recoverable Prep 3005A 50 mL 50 mL 292055 09/20/19 10:28 MWW TAL PIT Total Recoverable Analysis EPA 6020 1.0 mL 1.0 mL 294722 10/12/19 04:10 WTR TAL PIT 1 Instrument ID: M

Client Sample ID: GWA-2B Lab Sample ID: 180-95640-9

100 ml

291934

100 mL

Date Collected: 09/12/19 09:35 **Matrix: Water** Date Received: 09/13/19 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			292035	09/20/19 18:40	CMR	TAL PIT
	Instrumer	t ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	292055	09/20/19 10:28	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	294722	10/12/19 04:15	WTR	TAL PIT
	Instrumer	nt ID: M								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291934	09/19/19 12:24	AVS	TAL PIT
	Instrumer	t ID: NOEQUIP								

Client Sample ID: GWC-1 Lab Sample ID: 180-95640-10 Date Collected: 09/12/19 14:15 **Matrix: Water**

Date Received: 09/13/19 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			292035	09/20/19 18:56	CMR	TAL PIT
	Instrumen	t ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	292055	09/20/19 10:28	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	294722	10/12/19 04:20	WTR	TAL PIT
	Instrumen	t ID: M								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291739	09/18/19 10:36	AVS	TAL PIT
	Instrumen	t ID: NOEQUIP								

Lab Sample ID: 180-95640-11 **Client Sample ID: GWC-6**

Date Collected: 09/12/19 14:45 Date Received: 09/13/19 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at ID: CHIC2100A		1			292035	09/20/19 19:12	CMR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	292055	09/20/19 10:28	MWW	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020 at ID: M		1	1.0 mL	1.0 mL	294722	10/12/19 04:24	WTR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	291739	09/18/19 10:36	AVS	TAL PIT

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Matrix: Water

Lab Chronicle

Client: Southern Company Job ID: 180-95640-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWC-3

Date Collected: 09/12/19 13:30 Date Received: 09/13/19 09:00

Lab Sample ID: 180-95640-12

Matrix: Water

Batch Batch Dil Initial Final **Batch Prepared** Method **Prep Type** Type Run **Factor Amount** Amount Number or Analyzed Analyst Lab 292035 Total/NA EPA 300.0 R2.1 CMR Analysis 09/20/19 19:59 TAL PIT Instrument ID: CHIC2100A Total Recoverable Prep 3005A 50 mL 50 mL 292055 09/20/19 10:28 MWW TAL PIT Total Recoverable Analysis EPA 6020 1.0 mL 1.0 mL 294722 10/12/19 04:29 WTR TAL PIT 1 Instrument ID: M Total/NA 100 ml 100 ml 291739 09/18/19 10:36 AVS TAI PIT Analysis SM 2540C Instrument ID: NOEQUIP

Lab Sample ID: 180-95640-13 Client Sample ID: GWC-2 Date Collected: 09/12/19 14:45 **Matrix: Water**

Date Received: 09/13/19 09:00

Total/NA

Dil Batch Batch Initial Final Batch **Prepared Prep Type** Type Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA EPA 300.0 R2.1 292035 09/20/19 20:15 CMR TAL PIT Analysis Instrument ID: CHIC2100A Total Recoverable Prep 3005A 50 mL 50 mL 292055 09/20/19 10:28 MWW TAL PIT Total Recoverable Analysis EPA 6020 1.0 mL 1.0 mL 294722 10/12/19 04:43 WTR TAL PIT 1 Instrument ID: M

Analysis

SM 2540C

Instrument ID: NOEQUIP

Lab Sample ID: 180-95640-14 Client Sample ID: DUP-LF3-02 Date Collected: 09/12/19 00:00 **Matrix: Water** Date Received: 09/13/19 09:00

100 mL

100 mL

291739

09/18/19 10:36 AVS

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			292035	09/20/19 20:31	CMR	TAL PIT
	Instrumer	t ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	292055	09/20/19 10:28	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	294722	10/12/19 04:48	WTR	TAL PIT
	Instrumer	nt ID: M								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291739	09/18/19 10:36	AVS	TAL PIT
	Instrumer	t ID: NOEQUIP								

Client Sample ID: LF3-DUP-01 Lab Sample ID: 180-95640-15 Date Collected: 09/12/19 00:00 **Matrix: Water**

Date Received: 09/13/19 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at ID: CHIC2100A		1			292035	09/20/19 21:18	CMR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	292055	09/20/19 10:28	MWW	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020 at ID: M		1	1.0 mL	1.0 mL	294722	10/12/19 04:53	WTR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	291739	09/18/19 10:36	AVS	TAL PIT

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TAL PIT

10/18/2019

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: FERB-LF3-01

Lab Sample ID: 180-95640-16 Date Collected: 09/12/19 15:20 **Matrix: Water**

Date Received: 09/13/19 09:00

Prep Type Total/NA	Batch Type Analysis Instrumen	Batch Method EPA 300.0 R2.1 t ID: CHIC2100A	Run	Factor 1	Initial Amount	Final Amount	Batch Number 292035	Prepared or Analyzed 09/20/19 21:34	Analyst CMR	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020 t ID: M		1	50 mL 1.0 mL	50 mL 1.0 mL	292055 294722	09/20/19 10:28 10/12/19 04:58		TAL PIT TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	291739	09/18/19 10:36	AVS	TAL PIT

Lab Sample ID: 180-95640-17 **Client Sample ID: FERB-LF3-02**

Date Collected: 09/12/19 15:25 **Matrix: Water** Date Received: 09/13/19 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			292035	09/20/19 21:50	CMR	TAL PIT
	Instrumer	t ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	292055	09/20/19 10:28	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	294722	10/12/19 05:02	WTR	TAL PIT
	Instrumer	t ID: M								
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	291739	09/18/19 10:36	AVS	TAL PIT

Client Sample ID: FB-LF3-01 Lab Sample ID: 180-95640-18 **Matrix: Water**

Date Collected: 09/12/19 15:30 Date Received: 09/13/19 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			292035	09/20/19 22:06	CMR	TAL PIT
	Instrumen	t ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	292055	09/20/19 10:28	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1	1.0 mL	1.0 mL	294722	10/12/19 05:07	WTR	TAL PIT
	Instrumen	t ID: M								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291739	09/18/19 10:36	AVS	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: FB-LF3-02 Lab Sample ID: 180-95640-19

Date Collected: 09/12/19 15:35 Date Received: 09/13/19 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at ID: CHIC2100A		1			292035	09/20/19 22:22	CMR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	292055	09/20/19 10:28	MWW	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020 at ID: M		1	1.0 mL	1.0 mL	294722	10/12/19 05:12	WTR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	291739	09/18/19 10:36	AVS	TAL PIT

Eurofins TestAmerica, Pittsburgh

Matrix: Water

Job ID: 180-95640-1

Lab Chronicle

Client: Southern Company Job ID: 180-95640-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MWW = Margaret Wanyoike

Batch Type: Analysis

AVS = Abbey Smith

CMR = Carl Reagle

RSK = Robert Kurtz

WTR = Bill Reinheimer

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Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWC-4A

Client: Southern Company

Lab Sample ID: 180-95640-1

Date Collected: 09/12/19 14:40 **Matrix: Water** Date Received: 09/13/19 09:00

Method: EPA 300.0 R2.1 -	Anions, Ion Chromatograp	hy						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.9	1.0	0.71	mg/L			09/20/19 15:30	1
Fluoride	<0.026	0.20	0.026	mg/L			09/20/19 15:30	1
Sulfate	1.1	1.0	0.38	mg/L			09/20/19 15:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.026		0.010	0.0016	mg/L		09/19/19 12:36	09/20/19 17:40	1
Beryllium	0.00028	J B	0.0010	0.00018	mg/L		09/19/19 12:36	09/20/19 17:40	1
Cobalt	0.00044	J B	0.00050	0.000075	mg/L		09/19/19 12:36	09/20/19 17:40	1
Chromium	0.0028		0.0020	0.0015	mg/L		09/19/19 12:36	09/20/19 17:40	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/19/19 12:36	09/20/19 17:40	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/19/19 12:36	09/20/19 17:40	1
Vanadium	0.0021		0.0010	0.00099	mg/L		09/19/19 12:36	09/20/19 17:40	1
Zinc	0.0093		0.0050	0.0032	mg/L		09/19/19 12:36	09/20/19 17:40	1
Calcium	0.30	J	0.50	0.13	mg/L		09/19/19 12:36	09/20/19 17:40	1
Boron	<0.039		0.080	0.039	mg/L		09/19/19 12:36	09/20/19 17:40	1

General Chemistry	D 14	0 1151	D.	MDI	1114	_	B	A I	D!! E
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/19/19 12:24	1

Client Sample ID: GWC-5 Lab Sample ID: 180-95640-2 Date Collected: 09/12/19 13:25 **Matrix: Water**

Date Received: 09/13/19 09:00

Method: EPA 300.0 R2	2.1 - Anions, Ion Chr	omatograph	ny						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.6		1.0	0.71	mg/L			09/20/19 16:18	1
Fluoride	0.078	J	0.20	0.026	mg/L			09/20/19 16:18	1
Sulfate	4.9		1.0	0.38	mg/L			09/20/19 16:18	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.59		0.010	0.0016	mg/L		09/19/19 12:36	09/20/19 17:44	1
Beryllium	0.0017	В	0.0010	0.00018	mg/L		09/19/19 12:36	09/20/19 17:44	1
Cobalt	0.013	В	0.00050	0.000075	mg/L		09/19/19 12:36	09/20/19 17:44	1
Chromium	0.0051		0.0020	0.0015	mg/L		09/19/19 12:36	09/20/19 17:44	1
Copper	0.00084	J	0.0020	0.00063	mg/L		09/19/19 12:36	09/20/19 17:44	1
Lead	0.00024	JB	0.0010	0.00013	mg/L		09/19/19 12:36	09/20/19 17:44	1
Vanadium	0.0044		0.0010	0.00099	mg/L		09/19/19 12:36	09/20/19 17:44	1
Zinc	0.033		0.0050	0.0032	mg/L		09/19/19 12:36	09/20/19 17:44	1
Calcium	9.1		0.50	0.13	mg/L		09/19/19 12:36	09/20/19 17:44	1
Boron	<0.039		0.080	0.039	mg/L		09/19/19 12:36	09/20/19 17:44	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110	10	10 mg/L			09/19/19 12:24	1

10/18/2019

Client: Southern Company Job ID: 180-95640-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-5 Lab Sample ID: 180-95640-3

Date Collected: 09/12/19 12:05

Matrix: Water

Date Received: 09/13/19 09:00

Method: EPA 300.0 R2.1 - An	ions, Ion Chron	natography						
Analyte	Result Qu	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.1	1.0	0.71	mg/L			09/20/19 16:34	1
Fluoride	0.052 J	0.20	0.026	mg/L			09/20/19 16:34	1
Sulfate	10	1.0	0.38	mg/L			09/20/19 16:34	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.086		0.010	0.0016	mg/L		09/20/19 10:22	09/28/19 15:09	1
Beryllium	0.00036	J	0.0010	0.00018	mg/L		09/20/19 10:22	09/27/19 22:52	1
Cobalt	0.00074		0.00050	0.000075	mg/L		09/20/19 10:22	09/27/19 22:52	1
Chromium	0.0032		0.0020	0.0015	mg/L		09/20/19 10:22	09/27/19 22:52	1
Copper	0.0011	J	0.0020	0.00063	mg/L		09/20/19 10:22	09/27/19 22:52	1
Lead	0.00082	J	0.0010	0.00013	mg/L		09/20/19 10:22	09/27/19 22:52	1
Vanadium	0.0040		0.0010	0.00099	mg/L		09/20/19 10:22	09/27/19 22:52	1
Zinc	0.0074		0.0050	0.0032	mg/L		09/20/19 10:22	09/27/19 22:52	1
Calcium	1.9		0.50	0.13	mg/L		09/20/19 10:22	09/27/19 22:52	1
Boron	0.048	J	0.080	0.039	mg/L		09/20/19 10:22	09/27/19 22:52	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	20		10	10	mg/L			09/19/19 12:24	1

Client Sample ID: GWA-4

Date Collected: 09/12/19 11:05

Lab Sample ID: 180-95640-4

Matrix: Water

Date Received: 09/13/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography										
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	6.1	1.0	0.71 mg/L			09/20/19 16:49	1			
Fluoride	0.035 J	0.20	0.026 mg/L			09/20/19 16:49	1			
Sulfate	3.7	1.0	0.38 mg/L			09/20/19 16:49	1			

Analyte	Result Q	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.044	0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 03:51	1
Beryllium	<0.00018	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 03:51	1
Cobalt	0.00091	0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 03:51	1
Chromium	<0.0015	0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 03:51	1
Copper	0.0022	0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 03:51	1
Lead	<0.00013	0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 03:51	1
Vanadium	0.0017	0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 03:51	1
Zinc	0.0073	0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 03:51	1
Calcium	0.84	0.50	0.13	mg/L		09/20/19 10:28	10/12/19 03:51	1
Boron	<0.039	0.080	0.039	mg/L		09/20/19 10:28	10/12/19 03:51	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10	10	10 mg/L			09/19/19 12:24	1

Eurofins TestAmerica, Pittsburgh

10/18/2019

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-3B

Lab Sample ID: 180-95640-5

Matrix: Water

Date Collected: 09/12/19 10:00 Date Received: 09/13/19 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		1.0	0.71	mg/L			09/20/19 17:05	1
Fluoride	0.050	J	0.20	0.026	mg/L			09/20/19 17:05	1
Sulfate	1.5		1.0	0.38	mg/L			09/20/19 17:05	1
Method: EPA 6020 - Metals	s (ICP/MS) - Tot	al Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.076		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 03:56	1
Beryllium	0.00035	J	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 03:56	1
Cobalt	0.0014		0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 03:56	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 03:56	1
Copper	0.0032		0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 03:56	1
Lead	0.00069	J	0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 03:56	1
Vanadium	0.0041		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 03:56	1
Zinc	0.010		0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 03:56	1
Calcium	3.2		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 03:56	1
Boron	<0.039		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 03:56	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	34		10	10	mg/L			09/19/19 12:24	1

Client Sample ID: GWA-3A

Date Collected: 09/12/19 09:15

Lab Sample ID: 180-95640-6

Matrix: Water

Date Collected: 09/12/19 09:15 Date Received: 09/13/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	16	1.0	0.71	mg/L			09/20/19 17:21	1	
Fluoride	<0.026	0.20	0.026	mg/L			09/20/19 17:21	1	
Sulfate	0.69 J	1.0	0.38	mg/L			09/20/19 17:21	1	

- Sunate	0.03	3	1.0	0.50	IIIg/L			03/20/13 17.21	
Method: EPA 6020 -	Metals (ICP/MS) - Tot	al Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.073		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 04:01	1
Beryllium	0.00084	J	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 04:01	1
Cobalt	0.0015		0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 04:01	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 04:01	1
Copper	0.0024		0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 04:01	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 04:01	1
Vanadium	0.0020		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 04:01	1
Zinc	0.0081		0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 04:01	1
Calcium	2.3		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 04:01	1
Boron	<0.039		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 04:01	1

General Chemistry Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10	10	10 mg/L			09/19/19 12:24	1

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-7A

Lab Sample ID: 180-95640-7 Date Collected: 09/12/19 12:00 **Matrix: Water**

Date Received: 09/13/19 09:00

Method: EPA 300.0 R2.1 - A	nions, Ion Chr	omatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.8		1.0	0.71	mg/L			09/20/19 18:09	1
Fluoride	<0.026		0.20	0.026	mg/L			09/20/19 18:09	1
Sulfate	81		1.0	0.38	mg/L			09/20/19 18:09	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.077		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 04:05	1
Beryllium	0.00097	J	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 04:05	1
Cobalt	0.0043		0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 04:05	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 04:05	1
Copper	0.0041		0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 04:05	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 04:05	1
Vanadium	0.0020		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 04:05	1
Zinc	0.014		0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 04:05	1
Calcium	19		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 04:05	1
Boron	1.6		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 04:05	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	140		10	10	mg/L			09/19/19 12:24	1

Lab Sample ID: 180-95640-8 **Client Sample ID: GWA-7 Matrix: Water**

Date Collected: 09/12/19 10:45

Date Received: 09/13/19 09:00

	_ Method: EPA 300.0 R2.1 - Anions,	lon Ch	romatography							
ı	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	5.3		1.0	0.71	mg/L			09/20/19 18:24	1
l	Fluoride	0.026	J	0.20	0.026	mg/L			09/20/19 18:24	1
	Sulfate	0.50	J	1.0	0.38	mg/L			09/20/19 18:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.015		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 04:10	1
Beryllium	0.00024	J	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 04:10	1
Cobalt	0.00048	J	0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 04:10	1
Chromium	0.0035		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 04:10	1
Copper	0.0026		0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 04:10	1
Lead	0.00036	J	0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 04:10	1
Vanadium	0.0037		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 04:10	1
Zinc	0.0059		0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 04:10	1
Calcium	0.83		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 04:10	1
Boron	<0.039		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 04:10	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	14	10	10 mg/L			09/19/19 12:24	1

Client Sample ID: GWA-2B

Date Collected: 09/12/19 09:35 Date Received: 09/13/19 09:00 Lab Sample ID: 180-95640-9

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	7.6	1.0	0.71	mg/L			09/20/19 18:40	1	
Fluoride	0.036 J	0.20	0.026	mg/L			09/20/19 18:40	1	
Sulfate	59	1.0	0.38	mg/L			09/20/19 18:40	1	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.049		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 04:15	1
Beryllium	0.00088	J	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 04:15	1
Cobalt	0.0023		0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 04:15	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 04:15	1
Copper	0.0038		0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 04:15	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 04:15	1
Vanadium	0.0021		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 04:15	1
Zinc	0.0075		0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 04:15	1
Calcium	15		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 04:15	1
Boron	0.65		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 04:15	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	89	10	10 mg/L			09/19/19 12:24	1

Client Sample ID: GWC-1 Lab Sample ID: 180-95640-10

Date Collected: 09/12/19 14:15

Date Received: 09/13/19 09:00

Matrix: Water

Method: EPA 300.0 R2.1	- Anions, Ion Chromatograp	hy						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.9	1.0	0.71	mg/L			09/20/19 18:56	1
Fluoride	<0.026	0.20	0.026	mg/L			09/20/19 18:56	1
Sulfate	0.78 J	1.0	0.38	mg/L			09/20/19 18:56	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.016		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 04:20	1
Beryllium	0.00043	J	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 04:20	1
Cobalt	0.00027	J	0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 04:20	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 04:20	1
Copper	0.0024		0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 04:20	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 04:20	1
Vanadium	0.0023		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 04:20	1
Zinc	0.0039	J	0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 04:20	1
Calcium	<0.13		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 04:20	1
Boron	<0.039		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 04:20	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	29		10	10	mg/L			09/18/19 10:36	1

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10/18/2019

Client Sample ID: GWC-6

Date Collected: 09/12/19 14:45

Lab Sample ID: 180-95640-11

Matrix: Water

Date Received: 09/13/19 09:00

Job ID: 180-95640-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography										
Analyte	Result	Qualifier R	L MDI	_ Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	7.7	1	0.7	1 mg/L			09/20/19 19:12	1		
Fluoride	<0.026	0.2	0.026	3 mg/L			09/20/19 19:12	1		
Sulfate	1.0	1	0 0.38	3 mg/L			09/20/19 19:12	1		
_										

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.052		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 04:24	1
Beryllium	0.00025	J	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 04:24	1
Cobalt	0.00077		0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 04:24	1
Chromium	0.0022		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 04:24	1
Copper	0.0030		0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 04:24	1
Lead	0.00065	J	0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 04:24	1
Vanadium	0.0043		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 04:24	1
Zinc	0.011		0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 04:24	1
Calcium	1.7		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 04:24	1
Boron	<0.039		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 04:24	1

	General Chemistry									
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Total Dissolved Solids	80		10	10	mg/L			09/18/19 10:36	1

Client Sample ID: GWC-3

Date Collected: 09/12/19 13:30

Lab Sample ID: 180-95640-12

Matrix: Water

Date Received: 09/13/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	9.4		1.0	0.71	mg/L			09/20/19 19:59	1
	Fluoride	<0.026		0.20	0.026	mg/L			09/20/19 19:59	1
	Sulfate	0.49	J	1.0	0.38	mg/L			09/20/19 19:59	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.037		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 04:29	1
Beryllium	0.00026	J	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 04:29	1
Cobalt	0.00050		0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 04:29	1
Chromium	0.0039		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 04:29	1
Copper	0.0015	J	0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 04:29	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 04:29	1
Vanadium	0.0022		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 04:29	1
Zinc	0.0058		0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 04:29	1
Calcium	1.9		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 04:29	1
Boron	<0.039		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 04:29	1

General Chemistry									
Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	73		10	10	mg/L			09/18/19 10:36	1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWC-2

Date Collected: 09/12/19 14:45 Date Received: 09/13/19 09:00

Lab Sample ID: 180-95640-13

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography										
	Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
	Chloride	5.2	1.0	0.71	mg/L			09/20/19 20:15	1	
	Fluoride	<0.026	0.20	0.026	mg/L			09/20/19 20:15	1	
	Sulfate	0.43 J	1.0	0.38	mg/L			09/20/19 20:15	1	

Analyte	Result Q	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.060	0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 04:43	1
Beryllium	<0.00018	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 04:43	1
Cobalt	0.00090	0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 04:43	1
Chromium	0.0048	0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 04:43	1
Copper	0.0020	0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 04:43	1
Lead	<0.00013	0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 04:43	1
Vanadium	0.0018	0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 04:43	1
Zinc	0.0089	0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 04:43	1
Calcium	2.0	0.50	0.13	mg/L		09/20/19 10:28	10/12/19 04:43	1
Boron	0.045 J	0.080	0.039	mg/L		09/20/19 10:28	10/12/19 04:43	1

General Chemistry Analyte Total Dissolved Solids	Result Qualifier	RL	MDL Unit 10 mg/L	<u>D</u> -	Prepared	Analyzed 09/18/19 10:36	Dil Fac
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Client Sample ID: DUP-LF3-02

Date Collected: 09/12/19 00:00

Date Received: 09/13/19 09:00

Matrix: Water

Method: EPA 300.0 R2	.1 - Anions, Ion Chr	omatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.3		1.0	0.71	mg/L			09/20/19 20:31	1
Fluoride	<0.026		0.20	0.026	mg/L			09/20/19 20:31	1
Sulfate	0.48	J	1.0	0.38	mg/L			09/20/19 20:31	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.057		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 04:48	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 04:48	1
Cobalt	0.00087		0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 04:48	1
Chromium	0.0050		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 04:48	1
Copper	0.0018	J	0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 04:48	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 04:48	1
Vanadium	0.0024		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 04:48	1
Zinc	0.011		0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 04:48	1
Calcium	2.1		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 04:48	1
Boron	0.045	J	0.080	0.039	mg/L		09/20/19 10:28	10/12/19 04:48	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	42	10	10 mg/L			09/18/19 10:36	1

Job ID: 180-95640-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: LF3-DUP-01

Lab Sample ID: 180-95640-15 Date Collected: 09/12/19 00:00

Matrix: Water

Date Received: 09/13/19 09:00

Client: Southern Company

Method: EPA 300.0 R2.	1 - Anions, Ion Chron	natography						
Analyte	Result Qu	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.9	1.0	0.71	mg/L			09/20/19 21:18	1
Fluoride	<0.026	0.20	0.026	mg/L			09/20/19 21:18	1
Sulfate	0.65 J	1.0	0.38	mg/L			09/20/19 21:18	1
Method: EPA 6020 - Me	tals (ICP/MS) - Total I	Recoverable						
Analyte	Result Qu	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.016		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 04:53	1
Beryllium	0.00020	J	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 04:53	1
Cobalt	0.00022	J	0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 04:53	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 04:53	1
Copper	0.0019	J	0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 04:53	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 04:53	1
Vanadium	0.0023		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 04:53	1
Zinc	0.0040	J	0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 04:53	1
Calcium	<0.13		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 04:53	1
Boron	<0.039		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 04:53	1

General Chemistry						_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	31		10	10	mg/L			09/18/19 10:36	1

Client Sample ID: FERB-LF3-01

Lab Sample ID: 180-95640-16 Date Collected: 09/12/19 15:20 **Matrix: Water**

Date Received: 09/13/19 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L		-	09/20/19 21:34	1
Fluoride	< 0.026		0.20	0.026	mg/L			09/20/19 21:34	1
Sulfate	<0.38		1.0	0.38	mg/L			09/20/19 21:34	1
- Method: EPA 6020 - Metal	s (ICP/MS) - Tot	al Recove	rable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 04:58	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 04:58	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 04:58	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 04:58	1
Copper	0.0016	J	0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 04:58	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 04:58	1
Vanadium	0.0019		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 04:58	1
Zinc	< 0.0032		0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 04:58	1
Calcium	<0.13		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 04:58	1
Boron	<0.039		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 04:58	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	14		10	10	mg/L			09/18/19 10:36	1

10/18/2019

Lab Sample ID: 180-95640-17

Client Sample ID: FERB-LF3-02

Matrix: Water

Job ID: 180-95640-1

Date Collected: 09/12/19 15:25 Date Received: 09/13/19 09:00

Method: EPA 300.0 R								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71	1.0	0.71	mg/L			09/20/19 21:50	1
Fluoride	<0.026	0.20	0.026	mg/L			09/20/19 21:50	1
Sulfate	<0.38	1.0	0.38	mg/L			09/20/19 21:50	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 05:02	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 05:02	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 05:02	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 05:02	1
Copper	0.0017	J	0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 05:02	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 05:02	1
Vanadium	0.0020		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 05:02	1
Zinc	0.0039	J	0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 05:02	1
Calcium	<0.13		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 05:02	1
Boron	<0.039		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 05:02	1

General Chemistry								
Analyte	Result Qualifie	er RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10	10	10	mg/L			09/18/19 10:36	1

Lab Sample ID: 180-95640-18 **Client Sample ID: FB-LF3-01** Date Collected: 09/12/19 15:30 **Matrix: Water**

Date Received: 09/13/19 09:00

Method: EPA 300.0 R2	2.1 - Anions, Ion Chromat	ography						
Analyte	Result Qualif	ier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71	1.0	0.71	mg/L			09/20/19 22:06	1
Fluoride	<0.026	0.20	0.026	mg/L			09/20/19 22:06	1
Sulfate	<0.38	1.0	0.38	mg/L			09/20/19 22:06	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 05:07	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 05:07	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 05:07	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 05:07	1
Copper	0.0013	J	0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 05:07	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 05:07	1
Vanadium	0.0022		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 05:07	1
Zinc	0.0042	J	0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 05:07	1
Calcium	<0.13		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 05:07	1
Boron	< 0.039		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 05:07	1

General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids	<10		10	10	mg/L			09/18/19 10:36	1	

Client Sample Results

Client: Southern Company Job ID: 180-95640-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: FB-LF3-02

Date Collected: 09/12/19 15:35 Date Received: 09/13/19 09:00

Lab Sample ID: 180-95640-19

Matrix: Water

Method: EPA 300.0 R2.1 - Anio	ns, Ion Chr	omatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/20/19 22:22	1
Fluoride	<0.026		0.20	0.026	mg/L			09/20/19 22:22	1
Sulfate	<0.38		1.0	0.38	mg/L			09/20/19 22:22	1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016	0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 05:12	1
Beryllium	<0.00018	0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 05:12	1
Cobalt	<0.000075	0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 05:12	1
Chromium	<0.0015	0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 05:12	1
Copper	0.0024	0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 05:12	1
Lead	<0.00013	0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 05:12	1
Vanadium	0.0018	0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 05:12	1
Zinc	<0.0032	0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 05:12	1
Calcium	<0.13	0.50	0.13	mg/L		09/20/19 10:28	10/12/19 05:12	1
Boron	<0.039	0.080	0.039	mg/L		09/20/19 10:28	10/12/19 05:12	1

General Chemistry Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10	10	10 mg/L			09/18/19 10:36	1

10/18/2019

Job ID: 180-95640-1

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Lab Sample ID: MB 180-292035/18

Matrix: Water

Analysis Batch: 292035

Client Sample ID: Method Blank

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client Sample ID: GWC-4A

Client Sample ID: GWC-4A

Client Sample ID: GWC-6

Client Sample ID: GWC-6

Prep Type: Total/NA

10/18/2019

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/20/19 14:59	1
Fluoride	<0.026		0.20	0.026	mg/L			09/20/19 14:59	1
Sulfate	<0.38		1.0	0.38	mg/L			09/20/19 14:59	1
_									

Lab Sample ID: LCS 180-292035/17

Matrix: Water

Analysis Batch: 292035

Alialysis Datoll. 202000							
_	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier U	Jnit D	%Rec	Limits	
Chloride	25.0	26.3		ng/L	105	90 - 110	
Fluoride	1.25	1.35	r	ng/L	108	90 - 110	
Sulfate	25.0	25.5	r	ng/L	102	90 - 110	

Lab Sample ID: 180-95640-1 MS

Matrix: Water

Analysis Batch: 292035

_	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	9.9		25.0	34.6		mg/L		99	80 - 120	
Fluoride	<0.026		1.25	1.32		mg/L		106	80 - 120	
Sulfate	1.1		25.0	26.4		mg/L		101	80 - 120	

Lab Sample ID: 180-95640-1 MSD

Matrix: Water

Analysis Batch: 292035

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	9.9		25.0	34.0		mg/L		96	80 - 120	2	20	
Fluoride	<0.026		1.25	1.30		mg/L		104	80 - 120	2	20	
Sulfate	1.1		25.0	25.5		mg/L		97	80 - 120	4	20	

Lab Sample ID: 180-95640-11 MS

Matrix: Water

Analysis Batch: 292035

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	7.7		25.0	32.5		mg/L		99	80 - 120	
Fluoride	<0.026		1.25	1.30		mg/L		104	80 - 120	
Sulfate	1.0		25.0	25.9		mg/L		99	80 - 120	

Lab Sample ID: 180-95640-11 MSD

Matrix: Water

Analysis Batch: 292035

Allalysis Datoli. 202000											
_	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	7.7		25.0	32.9		mg/L		101	80 - 120	1	20
Fluoride	<0.026		1.25	1.29		mg/L		103	80 - 120	1	20
Sulfate	1.0		25.0	26.1		mg/L		100	80 - 120	1	20

Eurofins TestAmerica, Pittsburgh

Job ID: 180-95640-1

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

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-291941/1-A

Matrix: Water

Analysis Batch: 292150

Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 291941

Client Sample ID: Lab Control Sample

MB	MB							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.0016		0.010	0.0016	mg/L		09/19/19 12:36	09/20/19 17:06	1
0.000451	J	0.0010	0.00018	mg/L		09/19/19 12:36	09/20/19 17:06	1
0.000243	J	0.00050	0.000075	mg/L		09/19/19 12:36	09/20/19 17:06	1
<0.0015		0.0020	0.0015	mg/L		09/19/19 12:36	09/20/19 17:06	1
<0.00063		0.0020	0.00063	mg/L		09/19/19 12:36	09/20/19 17:06	1
0.000267	J	0.0010	0.00013	mg/L		09/19/19 12:36	09/20/19 17:06	1
<0.00099		0.0010	0.00099	mg/L		09/19/19 12:36	09/20/19 17:06	1
<0.0032		0.0050	0.0032	mg/L		09/19/19 12:36	09/20/19 17:06	1
<0.13		0.50	0.13	mg/L		09/19/19 12:36	09/20/19 17:06	1
0.0502	J	0.080	0.039	mg/L		09/19/19 12:36	09/20/19 17:06	1
	Result <0.0016 0.000451 0.000243 <0.0015 <0.00063 0.000267 <0.00099 <0.0032 <0.13	0.000451 J 0.000243 J <0.0015 <0.00063 0.000267 J <0.00099 <0.0032	Result Qualifier RL <0.0016	Result Qualifier RL MDL <0.0016	Result Qualifier RL MDL Unit <0.0016	Result Qualifier RL MDL mg/L Unit mg/L D 0.000451 J 0.0010 0.00018 mg/L mg/L 0.000243 J 0.00050 0.000075 mg/L <0.0015	Result Qualifier RL MDL Unit D Prepared <0.0016	Result Qualifier RL MDL Unit D Prepared Analyzed <0.0016

Lab Sample ID: LCS 180-291941/2-A

Matrix: Water

Analysis Batch: 292150

Prep Type: Total Recoverable Prep Batch: 291941

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec Barium 1.00 1.03 mg/L 80 - 120 103 Beryllium 0.500 0.539 108 mg/L 80 - 120 Cobalt 0.500 0.536 107 mg/L 80 - 120 Chromium 0.500 0.533 107 80 - 120 mg/L Copper 0.500 0.526 mg/L 105 80 - 120 Lead 0.500 0.565 mg/L 113 80 - 120 Vanadium 0.500 0.531 mg/L 106 80 - 120 Zinc 0.250 0.269 mg/L 107 80 - 120 Calcium 25.0 27.4 mg/L 110 80 - 120 Boron 1.25 1.36 mg/L 109 80 - 120

Lab Sample ID: MB 180-292052/1-A

Matrix: Water

Analysis Batch: 293054

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 292052**

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		09/20/19 10:22	09/27/19 21:41	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/20/19 10:22	09/27/19 21:41	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/20/19 10:22	09/27/19 21:41	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/20/19 10:22	09/27/19 21:41	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/20/19 10:22	09/27/19 21:41	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:22	09/27/19 21:41	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		09/20/19 10:22	09/27/19 21:41	1
Zinc	<0.0032		0.0050	0.0032	mg/L		09/20/19 10:22	09/27/19 21:41	1
Calcium	<0.13		0.50	0.13	mg/L		09/20/19 10:22	09/27/19 21:41	1
Boron	<0.039		0.080	0.039	mg/L		09/20/19 10:22	09/27/19 21:41	1

Lab Sample ID: LCS 180-292052/2-A

				P	rep ıy	pe: Lotal	Recoverable
						Prep B	atch: 292052
Spike	LCS	LCS				%Rec.	
Added	Result	Qualifier	Unit	D	%Rec	Limits	
1.00	1.03		mg/L		103	80 - 120	
	Added	Added Result	Added Result Qualifier	Added Result Qualifier Unit	Spike LCS LCS Added Result Qualifier Unit D	Spike LCS LCS Added Result Qualifier Unit D %Rec	Spike LCS LCS %Rec. Added Result Qualifier Unit D %Rec Limits

Eurofins TestAmerica, Pittsburgh

Client Sample ID: Lab Control Sample

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Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Lab Sample ID: LCS 180-292052/2-A

Matrix: Water

Analysis Batch: 293054

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 292052

Job ID: 180-95640-1

_	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Beryllium	0.500	0.510		mg/L		102	80 - 120	
Cobalt	0.500	0.475		mg/L		95	80 - 120	
Chromium	0.500	0.522		mg/L		104	80 - 120	
Copper	0.500	0.467		mg/L		93	80 - 120	
Lead	0.500	0.514		mg/L		103	80 - 120	
Vanadium	0.500	0.518		mg/L		104	80 - 120	
Zinc	0.250	0.238		mg/L		95	80 - 120	
Calcium	25.0	25.4		mg/L		102	80 - 120	
Boron	1.25	1.19		mg/L		95	80 - 120	

Lab Sample ID: LCS 180-292052/2-A

Matrix: Water

Analysis Batch: 293128

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

Prep Batch: 292052 %Rec. 10

 Analyte
 Added Barium
 Result 1.00
 Qualifier 1.00
 Unit mg/L
 D mg/L
 %Rec Limits 1.00
 Bo - 120

Lab Sample ID: MB 180-292055/1-A

Matrix: Water

Analysis Batch: 294722

Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 292055

7 ., 0.0 = 0.00 = 0 ==									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		09/20/19 10:28	10/12/19 03:46	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/20/19 10:28	10/12/19 03:46	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/20/19 10:28	10/12/19 03:46	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/20/19 10:28	10/12/19 03:46	1
Copper	< 0.00063		0.0020	0.00063	mg/L		09/20/19 10:28	10/12/19 03:46	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/20/19 10:28	10/12/19 03:46	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		09/20/19 10:28	10/12/19 03:46	1
Zinc	< 0.0032		0.0050	0.0032	mg/L		09/20/19 10:28	10/12/19 03:46	1
Calcium	<0.13		0.50	0.13	mg/L		09/20/19 10:28	10/12/19 03:46	1
Boron	<0.039		0.080	0.039	mg/L		09/20/19 10:28	10/12/19 03:46	1

Lab Sample ID: LCS 180-292055/2-A

Matrix: Water

Analysis Batch: 294722

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 292055

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Barium	1.00	0.965		mg/L		96	80 - 120	
Beryllium	0.500	0.437		mg/L		87	80 - 120	
Cobalt	0.500	0.499		mg/L		100	80 - 120	
Chromium	0.500	0.502		mg/L		100	80 - 120	
Copper	0.500	0.514		mg/L		103	80 - 120	
Lead	0.500	0.522		mg/L		104	80 - 120	
Vanadium	0.500	0.467		mg/L		93	80 - 120	
Zinc	0.250	0.263		mg/L		105	80 - 120	
Calcium	25.0	22.4		mg/L		89	80 - 120	
Boron	1.25	1.18		mg/L		94	80 - 120	

Eurofins TestAmerica, Pittsburgh

10/18/2019

Client: Southern Company Job ID: 180-95640-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Lab Sample ID: MB 180-291739/2 **Client Sample ID: Method Blank**

Matrix: Water

Analysis Batch: 291739

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 10 Total Dissolved Solids 10 mg/L 09/18/19 10:36 <10

Lab Sample ID: LCS 180-291739/1 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 291739

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 633 **Total Dissolved Solids** 604 mg/L 95 80 - 120

Lab Sample ID: MB 180-291934/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 291934

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac **Total Dissolved Solids** 10 10 mg/L 09/19/19 12:24 <10

Lab Sample ID: LCS 180-291934/1

Matrix: Water

Analysis Batch: 291934

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte D %Rec Unit **Total Dissolved Solids** 633 542 mg/L 86 80 - 120

Lab Sample ID: 180-95640-2 DU

Matrix: Water

Analysis Batch: 291934

Sample Sample DU DU **RPD** Result Qualifier Analyte Result Qualifier Unit D **RPD** Limit **Total Dissolved Solids** 110 0.9 111 mg/L

Eurofins TestAmerica, Pittsburgh

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client Sample ID: GWC-5

Prep Type: Total/NA

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Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

HPLC/IC

Analysis Batch: 292035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep	Batch
180-95640-1	GWC-4A	Total/NA	Water	EPA 300.0 R2.1	
180-95640-2	GWC-5	Total/NA	Water	EPA 300.0 R2.1	
180-95640-3	GWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-95640-4	GWA-4	Total/NA	Water	EPA 300.0 R2.1	
180-95640-5	GWA-3B	Total/NA	Water	EPA 300.0 R2.1	
180-95640-6	GWA-3A	Total/NA	Water	EPA 300.0 R2.1	
180-95640-7	GWA-7A	Total/NA	Water	EPA 300.0 R2.1	
180-95640-8	GWA-7	Total/NA	Water	EPA 300.0 R2.1	
180-95640-9	GWA-2B	Total/NA	Water	EPA 300.0 R2.1	
180-95640-10	GWC-1	Total/NA	Water	EPA 300.0 R2.1	
180-95640-11	GWC-6	Total/NA	Water	EPA 300.0 R2.1	
180-95640-12	GWC-3	Total/NA	Water	EPA 300.0 R2.1	
180-95640-13	GWC-2	Total/NA	Water	EPA 300.0 R2.1	
180-95640-14	DUP-LF3-02	Total/NA	Water	EPA 300.0 R2.1	
180-95640-15	LF3-DUP-01	Total/NA	Water	EPA 300.0 R2.1	
180-95640-16	FERB-LF3-01	Total/NA	Water	EPA 300.0 R2.1	
180-95640-17	FERB-LF3-02	Total/NA	Water	EPA 300.0 R2.1	
180-95640-18	FB-LF3-01	Total/NA	Water	EPA 300.0 R2.1	
180-95640-19	FB-LF3-02	Total/NA	Water	EPA 300.0 R2.1	
MB 180-292035/18	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-292035/17	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-95640-1 MS	GWC-4A	Total/NA	Water	EPA 300.0 R2.1	
180-95640-1 MSD	GWC-4A	Total/NA	Water	EPA 300.0 R2.1	
180-95640-11 MS	GWC-6	Total/NA	Water	EPA 300.0 R2.1	
180-95640-11 MSD	GWC-6	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 291941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95640-1	GWC-4A	Total Recoverable	Water	3005A	
180-95640-2	GWC-5	Total Recoverable	Water	3005A	
MB 180-291941/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-291941/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 292052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95640-3	GWA-5	Total Recoverable	Water	3005A	
MB 180-292052/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-292052/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 292055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95640-4	GWA-4	Total Recoverable	Water	3005A	
180-95640-5	GWA-3B	Total Recoverable	Water	3005A	
180-95640-6	GWA-3A	Total Recoverable	Water	3005A	
180-95640-7	GWA-7A	Total Recoverable	Water	3005A	
180-95640-8	GWA-7	Total Recoverable	Water	3005A	
180-95640-9	GWA-2B	Total Recoverable	Water	3005A	
180-95640-10	GWC-1	Total Recoverable	Water	3005A	
180-95640-11	GWC-6	Total Recoverable	Water	3005A	

Eurofins TestAmerica, Pittsburgh

Job ID: 180-95640-1

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QC Association Summary

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

Metals (Continued)

Pren	Batch:	292055	(Continued)
1 1 6 10	Dateii.	LJLUUU	1 Outlinea

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95640-12	GWC-3	Total Recoverable	Water	3005A	
180-95640-13	GWC-2	Total Recoverable	Water	3005A	
180-95640-14	DUP-LF3-02	Total Recoverable	Water	3005A	
180-95640-15	LF3-DUP-01	Total Recoverable	Water	3005A	
180-95640-16	FERB-LF3-01	Total Recoverable	Water	3005A	
180-95640-17	FERB-LF3-02	Total Recoverable	Water	3005A	
180-95640-18	FB-LF3-01	Total Recoverable	Water	3005A	
180-95640-19	FB-LF3-02	Total Recoverable	Water	3005A	
MB 180-292055/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-292055/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 292150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95640-1	GWC-4A	Total Recoverable	Water	EPA 6020	291941
180-95640-2	GWC-5	Total Recoverable	Water	EPA 6020	291941
MB 180-291941/1-A	Method Blank	Total Recoverable	Water	EPA 6020	291941
LCS 180-291941/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	291941

Analysis Batch: 293054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95640-3	GWA-5	Total Recoverable	Water	EPA 6020	292052
MB 180-292052/1-A	Method Blank	Total Recoverable	Water	EPA 6020	292052
LCS 180-292052/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	292052

Analysis Batch: 293128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95640-3	GWA-5	Total Recoverable	Water	EPA 6020	292052
LCS 180-292052/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	292052

Analysis Batch: 294722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95640-4	GWA-4	Total Recoverable	Water	EPA 6020	292055
180-95640-5	GWA-3B	Total Recoverable	Water	EPA 6020	292055
180-95640-6	GWA-3A	Total Recoverable	Water	EPA 6020	292055
180-95640-7	GWA-7A	Total Recoverable	Water	EPA 6020	292055
180-95640-8	GWA-7	Total Recoverable	Water	EPA 6020	292055
180-95640-9	GWA-2B	Total Recoverable	Water	EPA 6020	292055
180-95640-10	GWC-1	Total Recoverable	Water	EPA 6020	292055
180-95640-11	GWC-6	Total Recoverable	Water	EPA 6020	29205
180-95640-12	GWC-3	Total Recoverable	Water	EPA 6020	292055
180-95640-13	GWC-2	Total Recoverable	Water	EPA 6020	292055
180-95640-14	DUP-LF3-02	Total Recoverable	Water	EPA 6020	29205
180-95640-15	LF3-DUP-01	Total Recoverable	Water	EPA 6020	292055
180-95640-16	FERB-LF3-01	Total Recoverable	Water	EPA 6020	292055
180-95640-17	FERB-LF3-02	Total Recoverable	Water	EPA 6020	292055
180-95640-18	FB-LF3-01	Total Recoverable	Water	EPA 6020	29205
180-95640-19	FB-LF3-02	Total Recoverable	Water	EPA 6020	29205
MB 180-292055/1-A	Method Blank	Total Recoverable	Water	EPA 6020	292055
LCS 180-292055/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	292055

Eurofins TestAmerica, Pittsburgh

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Job ID: 180-95640-1

QC Association Summary

Client: Southern Company Job ID: 180-95640-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

General Chemistry

Analysis Batch: 291739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95640-10	GWC-1	Total/NA	Water	SM 2540C	
180-95640-11	GWC-6	Total/NA	Water	SM 2540C	
180-95640-12	GWC-3	Total/NA	Water	SM 2540C	
180-95640-13	GWC-2	Total/NA	Water	SM 2540C	
180-95640-14	DUP-LF3-02	Total/NA	Water	SM 2540C	
180-95640-15	LF3-DUP-01	Total/NA	Water	SM 2540C	
180-95640-16	FERB-LF3-01	Total/NA	Water	SM 2540C	
180-95640-17	FERB-LF3-02	Total/NA	Water	SM 2540C	
180-95640-18	FB-LF3-01	Total/NA	Water	SM 2540C	
180-95640-19	FB-LF3-02	Total/NA	Water	SM 2540C	
MB 180-291739/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-291739/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 291934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95640-1	GWC-4A	Total/NA	Water	SM 2540C	
180-95640-2	GWC-5	Total/NA	Water	SM 2540C	
180-95640-3	GWA-5	Total/NA	Water	SM 2540C	
180-95640-4	GWA-4	Total/NA	Water	SM 2540C	
180-95640-5	GWA-3B	Total/NA	Water	SM 2540C	
180-95640-6	GWA-3A	Total/NA	Water	SM 2540C	
180-95640-7	GWA-7A	Total/NA	Water	SM 2540C	
180-95640-8	GWA-7	Total/NA	Water	SM 2540C	
180-95640-9	GWA-2B	Total/NA	Water	SM 2540C	
MB 180-291934/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-291934/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-95640-2 DU	GWC-5	Total/NA	Water	SM 2540C	

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Cooler Temperature(s) °C and Other Remarks:

Received by: Received by:

Company Company

Chain of Custody Record

eurofins Environment Testing TestAmerica

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

	Phone (412) 963-7058 Fax (412) 963-2468					
	Client Information	Sampler Survey S. R.	S. Wayes R. Add Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-54270-10409.1	-
	Client Contact: Lauren Petty	Phone:	E-Mail: veronica.bortot@testamericainc.com	E	Page:	
	Company: Southern Company Services, Inc		Analy	Analysis Requested	Job #:	
	Address: 3535 Colonnade Parkway	Due Date Requested:	H C		ion Code	
	City: Birmingham	TAT Requested (days):	otelli			M - Hexane N - None O - AsNaO2
	State, Zp: AL, 35243		z Vdq.		D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3
	Phone: 205-992-5417(Tel)	PO#: SCS10382606	10001		Acid	S - N2SO4 T - TSP Dodecahydrate
	Email: Impetty@southernco.com	WO#:	No) BaBeC		I - Ice J - DI Water	U - Acetone V - MCAA
	Project Name: CCR - Plant McIntosh Ash Landfill #3	Project #: 18019950	os or slate		K-EDIA L-EDA	W - pH 4-5 Z - other (specify)
	Site: Georgia	SSOW#:	SD (Y		of co Other:	
I	Samulo Idantification	Sample Type Sample (C=comp.	ield Filtered M\SM m1ohe		180	ġ
Pa	כמוואם וספונווים	Preserva	o C			
ge 3	GWC-4A	9/12/19 1440 0	义~~		640 0	
1 of	SI 330	1375 G	water A		hain	
33	OWA-D	1705 6	Water X		of C	
	D. AH	1105 6	Water XX		usto	
	GWA-38	0 0001	Water X X		dy	
	GWA-3A	0915 6	Water			
	GWA-7A	1200 6	Water XX			,
	C-MMS	107B C	Water X			
	GWA-28	093S G	water XX			
	0.00-1	1415 6	water K			
	GWC-10		water			
	Possible Hazard Identification	Woodal		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	etained longer than 1	month)
	sted: I, II, III, IV, Other (specify)		Speci			
	Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
	Relinquished by:	036/ 1/3 1/3/ 1/9 1/9/20	Company (Received by Salary	Date/Time:		Сотрапу
1	Dallaminhad hu	Date/Time:	Company Received by:	Date/Timbe //	C. 0.	Company

rquished by:

Custody Seals Intact: Custody Seal No.:

Environment Testing TestAmerica 💸 eurofins

Sarrier Tracking No(s)

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

Phone (412) 963-7058 Fax (412) 963-2468

M - Hexane
N - None
O - AsNaO2
P - Na2O45
Q - Na2SO3
R - Na2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone V - MCAA W - pH 4-5 Z - other (specify) Special Instructions/Note: Ver: 01/16/2019 Company Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Monti COC No: 180-54270-10409.1 reservation Codes A - HCL
B - NaOH
C - Zn Acetate
C - Nitric Acid
E - NahSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid Page: I - Ice J - DI Water K - EDTA L - EDA Total Number of containers Date/Time:(Date/Time: Method of Shipment un **Analysis Requested** Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: veronica.bortot@testamericainc.com Received by COLON Received by Received by: 2 8 200 9 2640C_Calcd, TDS 300_Chloride, Fluoride, Sulfate 3 Lab PM: Bortot, Veronica 72 BaBeCrCoCuPbV Zn Time: Perform MS/MSD (Yes or No) E-Mail: Company (W=water, S=solid, O=waste/oil, Water Water Water Water Water Matrix Preservation Code Water Water Water Water Water Water Company Sompany Coker, J. Mors, J. Adesch Radiological (C=comp, G=grab) Type 0 1900 0 0 0 0 1520 530 1330 1525 533 1445 Sample Time Date: Unknown Date/Tige (7) 1 9 AT Requested (days): Due Date Requested: 6112116 PO#: SCS10382606 0 Sample Date 9/12/19 15/19 9/12/19 2 9/12/19 Project #: 18019950 SSOW#: Date/Time: Poison B Skin Irritant Deliverable Requested: I, III, III, IV, Other (specify) Custody Seal No. FERB-43-02 FERB-43-0 F3-DUP-01 3-02 101 DUP-Lf3-67 Project Name: CCR - Plant McIntosh Ash Landfill #3 men Flammable Company: Southern Company Services, Inc. Possible Hazard Identification GWC-3 Empty Kit Relinquished by: DNC-7 Impetty@southernco.com 3535 Colonnade Parkway Custody Seals Intact: △ Yes △ No F8-1 Client Information Sample Identification Mon-Hazard 205-992-5417(Tel) Relinquished by: elinquished by: elinquished by: Client Contact: Lauren Petty Birmingham State, Zip: AL, 35243 Georgia

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Client: Southern Company Job Number: 180-95640-1

Login Number: 95640 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

orcator. Watson, Debbie		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	



Site: Georgia Power Plant, Landfill 3
Laboratory: Test America, Pittsburgh, PA
Report Nos.: 180-95560-1 and 180-95640-1
Reviewer: Lorie MacKinnon/GEI Consultants

Date: October 28, 2019

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
GWC-4A	180-95640-01	Metals, Anions, TDS
GWC-5	180-95640-02	Metals, Anions, TDS
GWA-5	180-95640-03	Metals, Anions, TDS
GWA-4	180-95640-04	Metals, Anions, TDS
GWA-3B	180-95640-05	Metals, Anions, TDS
GWA-3A	180-95640-06	Metals, Anions, TDS
GWA-7A	180-95640-07	Metals, Anions, TDS
GWA-7	180-95640-08	Metals, Anions, TDS
GWA-2B	180-95640-09	Metals, Anions, TDS
GWC-1	180-95640-10	Metals, Anions, TDS
GWC-6	180-95640-11	Metals, Anions, TDS
GWC-3	180-95640-12	Metals, Anions, TDS
GWC-2	180-95640-13	Metals, Anions, TDS
DUP-LF3-02	180-95640-14	Metals, Anions, TDS
LF3-DUP-01	180-95640-15	Metals, Anions, TDS
FERB-LF3-01	180-95640-16	Metals, Anions, TDS
FERB-LF3-02	180-95640-17	Metals, Anions, TDS
FB-LF3-01	180-95640-18	Metals, Anions, TDS
FB-LF3-02	180-95640-19	Metals, Anions, TDS
GWA-1A	180-95560-01	Metals, Anions, TDS
GWA-2A	180-95560-02	Metals, Anions, TDS

QC Samples:

Field/Equipment blanks: FB-LF3-01, FB-LF3-02, FERB-LF3-01, FERB-LF3-02

Field Duplicate pairs: GWC-1/LF3-DUP-01 and GWC-2/DUP-LF3-02

The above-listed aqueous samples, equipment blanks, and field blank samples were collected on September 11 and 12, 2019 and were analyzed for select total recoverable metals by SW-846 method 6020B, total dissolved solids (TDS) by Standard Methods SM 2540C, and anions (chloride, fluoride, and sulfate) by EPA method 300. The data were reviewed based on the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review, January 2017 (USEPA-540-R-2017-001), as well as by the methods referenced and professional and technical judgment.

Date: October 28, 2019

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Laboratory and Field Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Field Duplicate Results
- Quantitation Limits

All results are usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers. All results were considered valid; even though some were qualified as discussed below. The validation findings were based on the following information.

Data Completeness

The level 2 (reduced deliverable) data package was complete as received by the laboratory and included sample results, method blank, MS/MSD, laboratory duplicate, and LCS results.

Holding Times and Sample Preservation

All criteria were met.

Laboratory and Field Blanks

Laboratory Blanks

Contaminants were not detected in the associated laboratory method blanks except where noted below. The following table summarizes the contamination detected, blank action levels, and validation actions taken.

Analyte	Blank ID/ Associated Samples	Level Detected (mg/L)	2X Blank Level (mg/L)	10X Blank Level (mg/L)	Validation Actions
Beryllium	Method MB 180- 291941: GWC- 4A, GWC-5	0.000451 J	0.000902	0.00451	Qualify result for beryllium in sample GWC-4A as nondetect (U) at the RL. Estimate (J) the positive result for beryllium in sample GWC-5; High bias.
Cobalt		0.000243 J	0.000486	0.00243	Qualify result for cobalt in sample GWC-4A as nondetect (U) at the RL.
Lead		0.000267 J	0.000534	0.00267	Qualify result for lead in sample GWC-5 as nondetect (U) at the RL.
Boron		0.0502 J	0.104	0.502	Validation actions were not required.

Blank Actions:

If the sample result is < reporting limit (RL); report the result as nondetect (U) at the RL.

If the sample result is \geq RL and <2x blank contamination detected; professional judgment was taken to report the result as nondetect (U) at the reported sample level.

If the sample result is ≥ 2x Blank Level (or RL) and < 10x Blank Level; report the sample result as estimated (J); biased high.

If the sample result is nondetect or > 10x Blank Level; validation action was not required.

Date: October 28, 2019

Field Blanks

Low level contamination was detected in the associated field and equipment blank samples and is listed below. The field blank samples, FB-LF3-01, FB-LF3-02, FERB-LF3-01, FERB-LF3-02, were collected on 09/12/19 and were used in the evaluation of Landfill 3 samples collected 09/11 and 09/12/19, which were reported in 180-95560-1 and 180-95640-1. The following table summarizes the maximum level of contamination detected in bold, blank action levels, and the field blank qualification actions taken.

Analyte	Concentration Detected (mg/L)	Field Blank ID	2X Blank Level (mg/L)	10X Blank Level (mg/L)	Validation Actions
	0.0016 J	FERB-LF3-01	0.0032	0.016	Qualify results for copper as nondetect (U) at
	0.0017 J	FERB-LF3-02	0.0034	0.017	the RL or reported values in samples GWC-5, GWA-5, GWA-4, GWA-3B, GWA-3A,
Copper	0.0013 J	FB-LF3-01	0.0026	0.013	GWA-7A, GWA-7, GWA-2B, GWC-1, GWC-6, GWC-3, GWC-2, DUP-LF3-02,
	0.0024	FB-LF3-02	0.0048	0.024	LF3-DUP-01, and GWA-2A.
	0.0019	FERB-LF3-01	0.0038	0.019	Qualify results for vanadium as nondetect (U)
	0.0020	FERB-LF3-02	0.0040	0.020	at the reported values in samples GWC-4A, GWC-5, GWA-5, GWA-4, GWA-3B, GWA-
Vanadium	0.0022	FB-LF3-01	0.0044	0.022	3A, GWA-7A, GWA-7, GWA-2B, GWC-1, GWC-6, GWC-3, GWC-2, DUP-LF3-02,
	0.0018	FB-LF3-02	0.0036	0.018	LF3-DUP-01, GWA-1A, and GWA-2A.
Zinc —	0.0039 J	FERB-LF3-02	0.0078	0.039	Qualify results for zinc as nondetect (U) at the RL or reported values in samples GWA-5, GWA-4, GWA-3A, GWA-7, GWA-2B, GWC-1, GWC-3, LF3-DUP-01, GWA-1A, and GWA-2A.
	0.0042 J	FB-LF3-01	0.0084	0.042	Estimate (J) the positive results for zinc in samples GWC-4A, GWC-5, GWA-3B, GWA-7A, GWC-6, GWC-2, and DUP-LF3-02; High bias.

Blank Actions:

If the sample result is < reporting limit (RL); report the result as nondetect (U) at the RL.

If the sample result is $\geq RL$ and <2x blank contamination detected; professional judgment was taken to report the result as nondetect (U) at the reported sample level.

If the sample result is $\geq 2x$ Blank Level (or RL) and $\leq 10x$ Blank Level; report the sample result as estimated (J); biased high. If the sample result is nondetect or > 10x Blank Level; validation action was not required.

Total dissolved solids were detected at 14 mg/L in field blank sample FERB-LF3-01. TDS results were not blank-qualified on the basis of contamination detected, but professional judgment was taken to qualify results, less than or equal to ten times the contaminant level of 140 mg/L, as estimated (J) due to the potential high bias. The positive results for TDS were estimated (J) in samples GWC-5, GWA-5,GWA-4, GWA-3B, GWA-7A, GWA-7, GWA-2B, GWC-1, GWC-6, GWC-3, GWC-2, DUP-LF3-02, LF3-DUP-01, GWA-1A, and GWA-2A.

Date: October 28, 2019

MS/MSD Results

MS/MSD analyses were performed on samples GWA-4A, GWC-6, and GWA-1A for anions. All criteria were met.

Laboratory Duplicate Results

A laboratory duplicate analysis was performed on sample GWC-5 for total dissolved solids. All criteria were met.

LCS Results

All criteria were met.

Field Duplicate Results

Samples GWC-1 and LF3-DUP-01 were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair, which were within the acceptance criteria.

Analyte	GWC-1 (mg/L)	LF3-DUP-01 (mg/L)	RPD (%)
Chloride	4.9	4.9	0
Sulfate	0.78 J	0.65 J	18.2
Barium	0.016	0.016	0
Beryllium	0.00043 J	0.00020 J	73, Within the RL
Cobalt	0.00027 J	0.00022 J	20.4
Total Dissolved Solids	29	31	6.7

NC – Not calculable

Criteria: When both results are $\ge 5x$ the RL, RPDs must be < 30%.

When results are < 5x the RL, professional judgement was taken to estimate results if the absolute difference between the original and field duplicate >RL.

Samples GWC-2 and DUP-LF3-02 were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair, which were within the acceptance criteria except for total dissolved solids. The positive results for total dissolved solids in samples GWC-2 and DUP-LF3-02 were qualified as estimated (J). The direction of the bias cannot be determined from this nonconformance.

Analyte	GWC-2 (mg/L)	DUP-LF3-02 (mg/L)	RPD (%)
Chloride	5.2	5.3	1.9
Sulfate	0.43 J	0.48 J	11.0
Barium	0.060	0.057	5.1
Cobalt	0.00090	0.00087	3.4
Chromium	0.0048	0.0050	4.1

Date: October 28, 2019

Analyte	GWC-2 (mg/L)	DUP-LF3-02 (mg/L)	RPD (%)
Zinc	0.0089	0.011	21.1
Calcium	2.0	2.1	4.9
Boron	0.045 J	0.045 J	0
Total Dissolved Solids	28	42	40

NC – Not calculable

Criteria: When both results are $\ge 5x$ the RL, RPDs must be < 30%.

When results are < 5x the RL, professional judgement was taken to estimate results if the absolute difference between the original and field duplicate >RL.

Quantitation Limits

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

Date: October 28, 2019

DATA VALIDATION QUALIFIERS

- U The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.
- UJ The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.
- NJ The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.
- R Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

Date: 2019-09-11 16:20:27

Project Information:

Pump Information: Operator Name L.Coker Pump Model/Type

Alexis Peristaltic Company Name GEI **Tubing Type LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 32 ft

Latitude 00 0' 0" 00 0' 0" Longitude 445707 Sonde SN

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate 200 mL/min Well ID GWA-1A Well diameter 2 in Total System Volume 0.2328295 L Calculated Sample Rate Well Total Depth 38.12 ft 300 sec Screen Length 10 ft Stabilization Drawdown 4.68 in Depth to Water **Total Volume Pumped** 12.42 ft 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 0.2	+/- 0
Last 5	15:52:36	600.02	23.64	5.21	47.76	0.75	12.71	1.11	200.30
Last 5	15:57:36	900.02	23.53	5.15	47.93	0.81	12.75	1.11	200.71
Last 5	16:07:36	1500.03	23.27	5.12	47.65	0.32	12.78	1.07	198.52
Last 5	16:12:36	1800.02	23.25	5.12	47.71	0.40	12.80	1.08	195.76
Last 5	16:17:36	2100.03	23.43	5.10	47.60	0.51	12.81	1.07	194.84
Variance 0			-0.26	-0.03	-0.28			-0.04	-2.19
Variance 1			-0.02	0.00	0.06			0.01	-2.76
Variance 2			0.18	-0.02	-0.11			-0.01	-0.92

Notes

Samples at 1620

Date: 2019-09-11 16:54:57

Project Information:

Pump Information: Operator Name J.Noles Pump Model/Type

Alexis Peristaltic Company Name GEI **Tubing Type LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 50 ft

Latitude 00 0' 0" 00 0' 0" Longitude Sonde SN 369557

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate 100 mL/min Well ID GWA-2A Well diameter 2 in Total System Volume 0.3131711 L Calculated Sample Rate Well Total Depth 43 ft 300 sec Screen Length 10 ft Stabilization Drawdown 1.8 in Depth to Water **Total Volume Pumped** 17.30 ft 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- O	+/- 0.1	+/- 5%	+/- O		+/- 10%	+/- O
Last 5	16:32:28	600.02	23.24	5.26	74.55	1.58	17.55	0.88	91.89
Last 5	16:37:28	900.02	23.13	5.30	74.29	1.54	17.55	0.82	86.46
Last 5	16:42:28	1200.02	23.19	5.24	73.02	1.47	17.55	0.69	87.38
Last 5	16:47:28	1500.02	23.11	5.29	72.44	1.36	17.55	0.61	83.96
Last 5	16:52:28	1800.02	23.64	5.25	72.35	1.15	17.55	0.58	85.05
Variance 0			0.06	-0.06	-1.27			-0.13	0.92
Variance 1			-0.08	0.05	-0.58			-0.08	-3.42
Variance 2			0.53	-0.03	-0.09			-0.03	1.10

Notes

Sampled at 1705

Date: 2019-09-12 09:21:47

Project Information:

Pump Information: Operator Name Pump Model/Type J.Noles

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 55 ft

Latitude 00 0' 0" 00 0' 0" Longitude Sonde SN 369557

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Well Information: Pumping Information:

Final Pumping Rate 100 mL/min Well ID GWA-2B Well diameter 2 in Total System Volume 0.3354883 L Calculated Sample Rate Well Total Depth 52 ft 300 sec Screen Length 10 ft Stabilization Drawdown 9.36 in Depth to Water **Total Volume Pumped** ft 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	pH SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- O		+/- 10%	+/- O
Last 5	08:59:27	600.02	22.12	5.67	190.65	0.87	18.40	0.67	101.86
Last 5	09:04:27	900.02	22.17	5.66	188.96	0.93	18.55	0.55	95.36
Last 5	09:09:27	1200.02	22.18	5.57	187.91	0.81	18.70	0.43	94.97
Last 5	09:14:27	1500.02	22.26	5.57	187.35	0.78	18.78	0.37	95.32
Last 5	09:19:27	1800.02	22.15	5.57	185.71	0.73	18.93	0.33	92.79
Variance 0			0.01	-0.09	-1.05			-0.11	-0.38
Variance 1			0.08	-0.01	-0.55			-0.06	0.34
Variance 2			-0.11	0.00	-1.65			-0.04	-2.53

Notes

Sampled at 0935

Date: 2019-09-12 09:15:15

Project Information:

Pump Information: Operator Name Pump Model/Type J.Adcock

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 30 ft

Latitude 00 0' 0" 00 0' 0" Longitude 596190 Sonde SN

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate 200 mL/min Well ID GWA-3A Well diameter Total System Volume 0.2239027 L 2 in Calculated Sample Rate Well Total Depth 33.90 ft 300 sec Screen Length 10 ft Stabilization Drawdown 16.44 in Depth to Water **Total Volume Pumped** 13.36 ft 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- O	+/- 0.1	+/- 5%	+/- O		+/- 10%	+/- O
Last 5	08:52:41	600.03	21.85	5.11	77.12	1.68	14.24	0.35	120.98
Last 5	08:57:40	900.02	21.64	5.05	77.04	1.36	14.44	0.27	119.67
Last 5	09:02:40	1200.02	21.82	5.01	77.07	2.33	14.53	0.26	118.61
Last 5	09:07:40	1500.02	21.70	5.00	76.67	2.54	14.63	0.24	117.79
Last 5	09:12:40	1800.02	21.73	4.99	76.60	1.43	14.73	0.23	116.79
Variance 0			0.18	-0.04	0.02			-0.01	-1.06
Variance 1			-0.12	-0.02	-0.39			-0.02	-0.83
Variance 2			0.03	-0.01	-0.08			-0.01	-1.00

Notes Sampled at 0915

Date: 2019-09-12 09:58:10

Project Information:

Pump Information: Operator Name Pump Model/Type J.Adcock

Alexis Peristaltic Company Name GEI **Tubing Type LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 17 ft

Latitude 00 0' 0" 00 0' 0" Longitude 596190 Sonde SN

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate Well ID GWA-3B 150 mL/min Well diameter 2 in Total System Volume 0.1658782 L Calculated Sample Rate Well Total Depth 18.61 ft 300 sec Screen Length 10 ft Stabilization Drawdown 8.52 in Depth to Water **Total Volume Pumped** 4.5 L 11.33 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- O	+/- 0.1	+/- 5%	+/- O		+/- 10%	+/- O
Last 5	09:36:16	599.90	22.49	4.96	106.22	4.75	11.71	0.26	60.40
Last 5	09:41:16	899.90	22.62	4.97	106.64	4.49	11.79	0.26	64.18
Last 5	09:46:16	1199.90	22.71	4.98	106.93	4.83	11.86	0.27	63.44
Last 5	09:51:16	1499.90	22.71	4.99	107.77	3.91	11.96	0.25	58.42
Last 5	09:56:16	1799.90	22.72	5.00	109.24	4.23	12.06	0.25	53.63
Variance 0			0.09	0.01	0.29			0.01	-0.74
Variance 1			-0.00	0.02	0.84			-0.02	-5.02
Variance 2			0.01	0.01	1.47			-0.00	-4.79

Notes Sampled at 1000

Date: 2019-09-12 11:02:39

Project Information:

Pump Information: Operator Name Pump Model/Type J.Adcock

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 27 ft

Latitude 00 0' 0" 00 0' 0" Longitude Sonde SN 596190

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Well ID Final Pumping Rate GWA-4 150 mL/min Well diameter 2 in Total System Volume 0.2105124 L Calculated Sample Rate Well Total Depth 29.17 ft 300 sec Stabilization Drawdown Screen Length 5 ft 34.08 in Depth to Water 4.5 L 13.19 ft **Total Volume Pumped**

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- O	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- O
Last 5	10:40:16	600.02	23.02	4.92	44.93	0.86	14.71	2.38	108.44
Last 5	10:45:16	900.02	23.02	4.94	44.66	0.74	15.18	2.60	107.75
Last 5	10:50:16	1200.02	23.43	4.95	44.54	1.63	15.48	2.76	107.78
Last 5	10:55:16	1500.02	23.56	4.94	44.87	1.24	15.77	2.75	108.22
Last 5	11:00:16	1800.02	23.61	4.92	44.76	1.04	16.03	2.71	108.52
Variance 0			0.40	0.01	-0.11			0.16	0.03
Variance 1			0.13	-0.01	0.33			-0.01	0.44
Variance 2			0.05	-0.02	-0.11			-0.04	0.30

Notes Sampled at 1105

Date: 2019-09-12 12:05:13

Project Information:

Pump Information: Operator Name Pump Model/Type J.Adcock

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 26 ft

Latitude 00 0' 0" 00 0' 0" Longitude 596190 Sonde SN

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Well Information: Pumping Information:

Final Pumping Rate 150 mL/min Well ID GWA-5 Well diameter 2 in Total System Volume 0.206049 L Calculated Sample Rate Well Total Depth 28.48 ft 300 sec Screen Length 5 ft Stabilization Drawdown 22.55 in Depth to Water **Total Volume Pumped** 12.08 ft 4.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Elapsed Temp C pH SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV		
Stabilization			+/- O	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- O
Last 5	11:42:55	600.02	24.84	4.54	73.90	5.92	13.06	0.43	130.57
Last 5	11:47:55	900.02	24.60	4.53	73.95	3.64	13.33	0.36	130.19
Last 5	11:52:55	1200.02	24.69	4.55	74.02	3.87	13.55	0.31	130.07
Last 5	11:57:55	1500.02	24.53	4.54	73.87	2.73	13.77	0.29	131.29
Last 5	12:02:55	1800.02	24.56	4.54	73.78	2.57	13.96	0.28	134.96
Variance 0			0.09	0.03	0.07			-0.05	-0.11
Variance 1			-0.16	-0.02	-0.15			-0.02	1.21
Variance 2			0.02	-0.00	-0.09			-0.01	3.68

Notes Sampled at 1205

Date: 2019-09-12 10:32:46

Project Information:

Pump Information: Operator Name Pump Model/Type J.Noles

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 35 ft

Latitude 00 0' 0" 00 0' 0" Longitude Sonde SN 369557

Turbidity Make/Model LaMotte2020we Pump placement from TOC ft

Well Information: Pumping Information:

Final Pumping Rate 100 mL/min Well ID GWA-7 Well diameter 2 in Total System Volume 0.2462198 L Calculated Sample Rate Well Total Depth 33 ft 300 sec Screen Length 10 ft Stabilization Drawdown 1.2 in Depth to Water **Total Volume Pumped** 3.5 L 16.40 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed			DTW ft	RDO mg/L	ORP mV		
Stabilization			+/- O	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- O
Last 5	10:11:31	900.02	22.73	5.21	32.24	4.51	16.50	0.50	96.80
Last 5	10:16:31	1200.02	22.70	5.22	32.50	4.12	16.50	0.47	94.21
Last 5	10:21:31	1500.02	22.82	5.19	33.01	5.11	16.50	0.50	94.34
Last 5	10:26:31	1800.02	22.87	5.17	32.67	4.64	16.50	0.58	95.41
Last 5	10:31:31	2100.02	22.84	5.12	32.65	4.44	16.50	0.56	96.75
Variance 0			0.12	-0.02	0.52			0.03	0.13
Variance 1			0.05	-0.02	-0.35			0.08	1.07
Variance 2			-0.03	-0.05	-0.02			-0.02	1.34

Notes

Sampled at 1045

Date: 2019-09-12 11:45:36

Project Information:

Pump Information: Operator Name J.Noles Pump Model/Type

Alexis Peristaltic Company Name GEI **Tubing Type LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 50 ft

Latitude 00 0' 0" 00 0' 0" Longitude Sonde SN 369557

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Well ID Final Pumping Rate 100 mL/min GWA-7A Well diameter 2 in Total System Volume 0.3131711 L Calculated Sample Rate Well Total Depth 47 ft 300 sec Stabilization Drawdown Screen Length 10 ft 9.6 in Depth to Water 4.5 L 20.70 ft **Total Volume Pumped**

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- O	+/- 0.1	+/- 5%	+/- O		+/- 10%	+/- O
Last 5	11:23:50	1500.02	23.06	5.57	198.63	0.90	21.50	0.31	61.94
Last 5	11:28:50	1800.02	22.97	5.22	235.04	0.76	21.50	0.28	91.20
Last 5	11:33:50	2100.02	23.15	5.12	243.19	0.51	21.50	0.26	93.05
Last 5	11:38:50	2400.02	23.24	5.12	243.03	0.39	21.50	0.25	86.18
Last 5	11:43:50	2700.02	23.17	5.10	245.06	0.27	21.50	0.24	83.33
Variance 0			0.18	-0.10	8.14			-0.02	1.85
Variance 1			0.09	0.00	-0.16			-0.01	-6.87
Variance 2			-0.07	-0.02	2.04			-0.01	-2.85

Notes

Sampled at 1200

Date: 2019-09-12 14:01:21

Project Information:

Pump Information: Operator Name J.Noles Pump Model/Type

Alexis Peristaltic Company Name GEI **Tubing Type LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 36 ft

Latitude 00 0' 0" 00 0' 0" Longitude Sonde SN 369557

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate 100 mL/min Well ID GWC-1 Well diameter 2 in Total System Volume 0.2506832 L Calculated Sample Rate Well Total Depth 33 ft 300 sec Screen Length 7 ft Stabilization Drawdown 0.6 in Depth to Water **Total Volume Pumped** 17.90 ft 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- O		+/- 10%	+/- O
Last 5	13:39:30	600.02	22.81	4.94	37.74	0.87	17.95	0.82	98.68
Last 5	13:44:30	900.02	22.88	4.93	37.45	0.62	17.95	0.79	96.62
Last 5	13:49:30	1200.02	22.78	4.95	37.26	0.33	17.95	0.75	94.89
Last 5	13:54:30	1500.02	22.91	4.95	36.95	0.29	17.95	0.71	94.50
Last 5	13:59:30	1800.02	22.97	4.95	37.24	0.21	17.95	0.70	94.41
Variance 0			-0.10	0.02	-0.19			-0.04	-1.73
Variance 1			0.13	-0.00	-0.31			-0.03	-0.39
Variance 2			0.06	0.00	0.29			-0.01	-0.09

Notes

Sampled at 1415 LF3-DUP-01 taken here

Date: 2019-09-12 14:43:41

Project Information:

Pump Information: Operator Name L.Coker Pump Model/Type

Alexis Peristaltic Company Name GEI **Tubing Type LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 32 ft

Latitude 00 0' 0" 00 0' 0" Longitude 445707 Sonde SN

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate 200 mL/min Well ID GWC-2 Well diameter 2 in Total System Volume 0.2328295 L Calculated Sample Rate Well Total Depth 37.35 ft 300 sec Screen Length 10 ft Stabilization Drawdown 3.84 in Depth to Water **Total Volume Pumped** 16.93 ft 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 0.2	+/- 0
Last 5	14:21:47	1200.10	23.28	5.17	42.67	0.60	17.23	2.49	191.82
Last 5	14:26:47	1500.10	23.25	5.13	41.47	0.66	17.24	2.58	189.70
Last 5	14:31:47	1800.10	23.61	5.12	47.63	0.71	17.24	1.85	188.96
Last 5	14:36:47	2100.10	23.75	5.12	47.34	0.81	17.24	1.82	186.67
Last 5	14:41:47	2400.10	23.57	5.14	47.18	0.70	17.25	1.82	183.55
Variance 0			0.36	-0.01	6.16			-0.74	-0.74
Variance 1			0.14	-0.01	-0.29			-0.03	-2.29
Variance 2			-0.18	0.03	-0.15			0.00	-3.13

Notes

Sampled at 1445 DUP-LF3-02 taken here

Date: 2019-09-12 13:59:45

Project Information:

Pump Information: Operator Name L.Coker Pump Model/Type

Alexis Peristaltic Company Name Tubing Type GEI LDPE Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 30 ft

Latitude 00 0' 0" 00 0' 0" Longitude 445707 Sonde SN

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate 200 mL/min Well ID GWC3 Well diameter 2 in Total System Volume 0.2239027 L Calculated Sample Rate Well Total Depth 36.72 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0 in Depth to Water **Total Volume Pumped** 0 L 20.52 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 0.2	+/- 0
Last 5	13:04:47	1200.02	21.97	5.58	52.94	0.26	20.71	1.07	204.19
Last 5	13:09:47	1500.02	21.78	5.45	53.03	0.35	20.71	1.05	203.39
Last 5	13:14:47	1800.02	21.68	5.38	53.64	0.71	20.72	1.03	196.36
Last 5	13:19:47	2100.02	21.73	5.35	53.64	0.83	20.72	1.02	193.33
Last 5	13:24:47	2400.02	21.76	5.31	54.16	0.98	20.73	1.00	190.86
Variance 0			-0.11	-0.07	0.61			-0.02	-7.03
Variance 1			0.05	-0.03	0.00			-0.01	-3.03
Variance 2			0.03	-0.04	0.52			-0.02	-2.48

Notes

Sampledat1330

Date: 2019-09-12 14:37:12

Project Information:

Pump Information: Operator Name Pump Model/Type J.Adcock

Alexis Peristaltic Company Name GEI **Tubing Type LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 32 ft

Latitude 00 0' 0" 00 0' 0" Longitude 596190 Sonde SN

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate Well ID Gwc-4A 150 mL/min Well diameter 2 in Total System Volume 0.2328295 L Calculated Sample Rate Well Total Depth 36.99 ft 300 sec Screen Length 10 ft Stabilization Drawdown 14.4 in Depth to Water **Total Volume Pumped** 5.25 L 18.80 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	sed Temp C pH SpCond μS		cm Turb NTU	DTW ft	RDO mg/L	ORP mV	
Stabilization			+/- O	+/- 0.1	+/- 5%	+/- O		+/- 10%	+/- O
Last 5	14:14:38	900.02	26.44	6.28	55.21	1.87	19.32	2.39	184.94
Last 5	14:19:38	1200.02	26.05	5.09	55.81	2.11	19.35	1.49	195.10
Last 5	14:24:38	1500.02	25.90	4.92	55.07	2.16	19.37	0.90	198.00
Last 5	14:29:38	1799.90	25.69	4.88	54.55	2.76	19.39	0.47	192.34
Last 5	14:34:38	2099.97	25.80	4.89	53.00	1.00	19.40	0.32	195.16
Variance 0			-0.15	-0.16	-0.74			-0.59	2.90
Variance 1			-0.21	-0.04	-0.52			-0.43	-5.66
Variance 2			0.11	0.01	-1.55			-0.16	2.82

Notes Sampled 1440

Date: 2019-09-12 13:23:38

Project Information:

Pump Information: Operator Name Pump Model/Type J.Adcock

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 27 ft

Latitude 00 0' 0" 00 0' 0" Longitude 596190 Sonde SN

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Well Information: Pumping Information:

Final Pumping Rate Well ID GWC-5 150 mL/min Well diameter Total System Volume 0.2105124 L 2 in Calculated Sample Rate Well Total Depth 30.59 ft 300 sec Screen Length 10 ft Stabilization Drawdown 30.48 in Depth to Water **Total Volume Pumped** 18.25 ft 6.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- O	+/- 0.1	+/- 5%	+/- O		+/- 10%	+/- O
Last 5	13:00:49	1500.02	25.10	6.41	682.58	0.52	20.25	0.46	114.29
Last 5	13:05:49	1800.02	25.66	6.14	682.42	0.76	20.50	0.55	110.30
Last 5	13:10:49	2100.02	26.21	6.02	684.30	0.81	20.62	0.37	106.93
Last 5	13:15:49	2400.02	25.96	6.00	675.57	0.74	20.72	0.35	105.69
Last 5	13:20:49	2700.02	25.73	5.96	663.34	0.96	20.79	0.32	103.94
Variance 0			0.56	-0.12	1.88			-0.18	-3.37
Variance 1			-0.25	-0.02	-8.73			-0.02	-1.24
Variance 2			-0.23	-0.04	-12.23			-0.04	-1.75

Notes Sampled 1325

Date: 2019-09-12 13:02:18

Project Information:

Pump Information: Operator Name Pump Model/Type J.Noles

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 36 ft

Latitude 00 0' 0" 00 0' 0" Longitude Sonde SN 369557

Turbidity Make/Model Pump placement from TOC LaMotte2020we 2 ft

Pumping Information: Well Information:

Final Pumping Rate Well ID GWC-6 200 mL/min Well diameter Total System Volume 0.2506832 L 2 in Calculated Sample Rate Well Total Depth 33 ft 300 sec Stabilization Drawdown Screen Length 6 ft 153 in Depth to Water 19.90 ft **Total Volume Pumped** 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- O		+/- 10%	+/- O
Last 5	12:41:07	900.02	21.41	4.86	41.20	0.97	27.55	1.27	102.46
Last 5	12:46:07	1200.02	21.54	4.85	41.25	0.54	28.90	1.55	106.06
Last 5	12:51:07	1500.02	21.74	4.90	42.99	0.44	30.10	1.98	106.80
Last 5	12:56:07	1800.02	21.92	4.87	43.79	0.39	31.87	2.21	104.99
Last 5	13:01:07	2100.08	22.17	4.96	45.33		32.65	2.12	97.93
Variance 0			0.20	0.05	1.73			0.44	0.74
Variance 1			0.18	-0.03	0.80			0.23	-1.81
Variance 2			0.25	0.09	1.54			-0.09	-7.06

Notes

Dry at 1310. Will sample once recharged, unable to record last turbidity

ANALYTICAL REPORT

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

Laboratory Job ID: 180-100138-1

Client Project/Site: CCR - Plant McIntosh Ash Landfill #3

For:

Southern Company PO BOX 2641 GSC8 Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Unucu Borbst

Authorized for release by: 12/26/2019 5:13:08 PM

Veronica Bortot, Senior Project Manager (412)963-2435

veronica.bortot@testamericainc.com

.....LINKS

Review your project results through

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Have a Question?



Visit us at: www.testamericainc.com

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

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

PA Lab ID: 02-00416

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-100138-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-100138-1

Comments

No additional comments.

Receipt

The samples were received on 12/18/2019 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

Metals

Methods, 6020, : The ICSAB for batch 180-302411 was outside the acceptance limits for element: strontium. An elevated concentration in the stock solution is suspected. All other QC for the target analyte passes; so the results have been reported.

Methods 6020: The continuing calibration verification (CCV) associated with batch 180-302411 recovered above the upper control limit for beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Job ID: 180-100138-1

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Definitions/Glossary

Client: Southern Company Job ID: 180-100138-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Qualifiers

M	eta	Is

Qualifier Qualifier Description

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

Glossary

Appreviation	These commonly used appreviations 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
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)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

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Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-100138-1

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-19
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-19
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	12-31-19
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-30-19
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	01-31-20
Wisconsin	State	998027800	08-31-20

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Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-100138-1	GWA-3B	Water	12/17/19 10:05	12/18/19 10:30	
180-100138-2	GWC-6	Water	12/17/19 10:20	12/18/19 10:30	
180-100138-3	GWA-7	Water	12/17/19 11:15	12/18/19 10:30	
180-100138-4	GWC-5	Water	12/17/19 11:30	12/18/19 10:30	
180-100138-5	GWC-2	Water	12/17/19 12:30	12/18/19 10:30	

Job ID: 180-100138-1

Method Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Method	Method Description	Protocol	Laboratory
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

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

Laboratory References:

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

Job ID: 180-100138-1

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1:

Job ID: 180-100138-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-3B

Client: Southern Company

Date Collected: 12/17/19 10:05 Date Received: 12/18/19 10:30

Lab Sample ID: 180-100138-1

Matrix: Water

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	302056	12/19/19 20:36	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			302411	12/21/19 19:04	RSK	TAL PIT
	Instrument	ID: A								

Client Sample ID: GWC-6 Lab Sample ID: 180-100138-2 Date Collected: 12/17/19 10:20

Matrix: Water

Date Received: 12/18/19 10:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	302056	12/19/19 20:36	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			302411	12/21/19 19:08	RSK	TAL PIT
	Instrumen	t ID: A								

Client Sample ID: GWA-7 Lab Sample ID: 180-100138-3

Matrix: Water

Date Collected: 12/17/19 11:15 Date Received: 12/18/19 10:30

Batch Batch Dil Initial Final Batch Prepared Method Number or Analyzed **Prep Type** Type Run **Factor** Amount Amount **Analyst** Lab 3005A 302056 **Total Recoverable** Prep 50 mL 50 mL 12/19/19 20:36 MWW **TAL PIT** 12/21/19 19:11 RSK Total Recoverable Analysis EPA 6020 302411 TAL PIT 1 Instrument ID: A

Client Sample ID: GWC-5 Lab Sample ID: 180-100138-4 Date Collected: 12/17/19 11:30

Matrix: Water

Date Received: 12/18/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	302056	12/19/19 20:36	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			302411	12/21/19 19:21	RSK	TAL PIT
	Instrumer	nt ID· Δ								

Client Sample ID: GWC-2 Lab Sample ID: 180-100138-5

Date Collected: 12/17/19 12:30 Matrix: Water Date Received: 12/18/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	302056	12/19/19 20:36	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			302411	12/21/19 19:25	RSK	TAL PIT
	Instrumer	nt ID: A								

Laboratory References:

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

12/26/2019

Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MWW = Margaret Wanyoike

Batch Type: Analysis RSK = Robert Kurtz Job ID: 180-100138-1

Lab Sample ID: 180-100138-1

Matrix: Water

Date Collected: 12/17/19 10:05 Date Received: 12/18/19 10:30

Client: Southern Company

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00070	J	0.0020	0.00063	mg/L		12/19/19 20:36	12/21/19 19:04	1

Client Sample ID: GWC-6 Lab Sample ID: 180-100138-2 Date Collected: 12/17/19 10:20 **Matrix: Water**

Date Received: 12/18/19 10:30

Method: EPA 6020 - Metals (IC	P/MS) - Total Recovera	ıble					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00064 J	0.0020	0.00063 mg/L		12/19/19 20:36	12/21/19 19:08	1

Client Sample ID: GWA-7 Lab Sample ID: 180-100138-3 **Matrix: Water**

Date Collected: 12/17/19 11:15 Date Received: 12/18/19 10:30

Method: EPA 6020 - Metals (IC	P/MS) - Tota	al Recover	able						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	<0.00063		0.0020	0.00063	mg/L		12/19/19 20:36	12/21/19 19:11	1

Lab Sample ID: 180-100138-4 **Client Sample ID: GWC-5 Matrix: Water**

Date Collected: 12/17/19 11:30

Date Received: 12/18/19 10:30

Method: EPA 6020 - Metals (IC	P/MS) - Total Recover	able						Dil Fac
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.015	0.00050	0.000075	mg/L		12/19/19 20:36	12/21/19 19:21	1
Chromium	0.0028	0.0020	0.0015	mg/L		12/19/19 20:36	12/21/19 19:21	1

Lab Sample ID: 180-100138-5 **Client Sample ID: GWC-2 Matrix: Water**

Date Collected: 12/17/19 12:30 Date Received: 12/18/19 10:30

	P/MS) - Total Recover	rable						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.0064	0.0020	0.0015	mg/L		12/19/19 20:36	12/21/19 19:25	1

QC Sample Results

Client: Southern Company Job ID: 180-100138-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-302056/1-A

Matrix: Water

Analysis Batch: 302411

Client Sample ID: Method Blank Prep Type: Total Recoverable

Prep Batch: 302056

		1410							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.000075		0.00050	0.000075	mg/L		12/19/19 20:36	12/21/19 18:31	1
Chromium	<0.0015		0.0020	0.0015	mg/L		12/19/19 20:36	12/21/19 18:31	1
Copper	<0.00063		0.0020	0.00063	mg/L		12/19/19 20:36	12/21/19 18:31	1

MR MR

Lab Sample ID: LCS 180-302056/2-A

Matrix: Water

Analysis Batch: 302411

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Prep Batch: 302056

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Cobalt 0.500 0.558 mg/L 112 80 - 120 0.500 Chromium 0.555 mg/L 111 80 - 120 0.500 0.465 93 80 - 120 Copper mg/L

10

QC Association Summary

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

Metals

Prep Batch: 302056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-100138-1	GWA-3B	Total Recoverable	Water	3005A	_
180-100138-2	GWC-6	Total Recoverable	Water	3005A	
180-100138-3	GWA-7	Total Recoverable	Water	3005A	
180-100138-4	GWC-5	Total Recoverable	Water	3005A	
180-100138-5	GWC-2	Total Recoverable	Water	3005A	
MB 180-302056/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-302056/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 302411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-100138-1	GWA-3B	Total Recoverable	Water	EPA 6020	302056
180-100138-2	GWC-6	Total Recoverable	Water	EPA 6020	302056
180-100138-3	GWA-7	Total Recoverable	Water	EPA 6020	302056
180-100138-4	GWC-5	Total Recoverable	Water	EPA 6020	302056
180-100138-5	GWC-2	Total Recoverable	Water	EPA 6020	302056
MB 180-302056/1-A	Method Blank	Total Recoverable	Water	EPA 6020	302056
LCS 180-302056/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	302056

Job ID: 180-100138-1

Eurofins TestAmerica, Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468	0	hain o	of Cust	Chain of Custody Record	cord			nta	681-Atlanta	💸 eurofins		Environment Testing TestAmerica
Client Information	Sampler.	J. Nole	es	Lab PM Bortot	Lab PM: Bortot, Veronica			Carrier Tracking No(s):	ting No(s):	COC No: 180-5681	COC No: 180-56818-10411.1	
Glient Contact. BaterAdems Lavren Petts	Phone:	2-00	the	E-Mail: veroni	E-Mail: veronica.bortot@testamericainc.com	estamerica	ainc.com			Page:	f.	
							Analysis	Analysis Requested		Job #.		
Address: 1375 Peachtree Street NE Suite A15 BO Box 2041 GSC8		Ü								Preservat	8	
City.	TAT Requested (days):	/s):					_	_	_	B - NaOH		
State Zip:	Rush									C - Zn Acetate D - Nitric Acid E - NaHSO4	tate 0 - AsNaO2 cid P - Na2O4S 04 Q - Na2SO3	
-	PO #. SCS10382606									F - MeOH G - Amchlor	3	
Hant	WO#:				0)10					I - Ice J - DI Water	2	carryonate
Project Name: CCR - Plant McIntosh Ash Landfill # 3	Project #: 18019955									K-EDIA L-EDA	W - pH 4-5 Z - other (spi	cify)
Site: Oscargia Plant McIntosh	SSOW#.								_	of con		
		Sample			eld Filterad	nsV 0209 - 020	0207 - CO			redmulf late		
Sample Identification	Sample Date	IIIIe	G=grab) e	BT=Tissue, A=Air)	9 a	9 0	7				Special Instructions/Note:	Note:
GWA-3B	12/17/19	5001	61	Water	NN		×					
GWC-6	12/17/19	0701	9	Water	_		X					
1	12/17/19	1115	6	Water			×					
S-N C-S	12/17/19	1130	ی	Water	X		8					
GWC - 2		1230	C	Water	×				_			
				Water								
				Water								
				Water						180-100138 Chain of Custody	Custody	
				Water								
				Water								
				Water		=				4		
ant	Poison B Unknown		Radiological		Sample	le Disposal (A t Return To Client	A fee may	beassessed if san	f samples are	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Mon	than 1 month) Months	
Deliverable Requested: I, III, IV, Other (specify)					Special I	nstructions	Special Instructions/QC Requirements:	ements:				
Empty Kit Relinquished by:		Date:		П	Time:			Metho	Method of Shipment:	,		
Relinquished Y.	1227119	1630		Company	Receiv	Received by:			Date/Tinle:	19 1030	Company	· A
Relinquished by:	Date/Time:		<u> </u>	Company	Received by	red by:			Date/Time:		Company	
Relinquished by:	Date/Time:			Company	Receiv	Received by:			Date/Time:		Company	
Custody Seals Intact: Custody Seal No.:					Coole	. Temperature	Cooler Temperature(s) °C and Other Remarks.	ier Remarks:				
DI O O O			-		$\frac{1}{1}$				-		Ver: 01/16/2019	2019



SHIP DATE: 17DEC19 ACTMGT: 26.80 LB CAD: 6994919/SSFE2021 DIMS: 24x13x14 IN BILL THIRD PARTY

ORIGIN ID:SAVA (706) 945-4889 JENNIFER BASH TO VERONICA BORTOT PITTSBURGH, PA 15238 UNITED STATES US 301 ALPHA DR

Part # 15628 2850700817212957 10/19

PITTSBURGH PA 15238

TEST AMERICA 301 ALPHA DR DEPT:

FedEx

PRIORITY OVERNIGHT WED - 18 DEC 10:30A

10 of 10

15238

PA-US

Uncorrected temp Thermometer ID

O Initials SF

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

180-100138 Waybill

Client: Southern Company

Job Number: 180-100138-1

Login Number: 100138

List Number: 1 Creator: Say, Thomas C List Source: Eurofins TestAmerica, Pittsburgh

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

Date: 2019-12-17 10:29:03

Pump Information:

Alexis Peristaltic

Project Information:

Operator Name J. Noles

Pump Model/Type Company Name Tubing Type GEI LDPE Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name Plant McIntosh ft

Latitude 00 0' 0" 00 0' 0" Longitude Sonde SN 369557

Turbidity Make/Model LaMotte 2020we Pump placement from TOC ft

Pumping Information: Well Information:

Final Pumping Rate 100 mL/min Well ID GWA-3B Well diameter 2 in Total System Volume 0.09 L Calculated Sample Rate Well Total Depth 18 ft 300 sec Screen Length 10 ft Stabilization Drawdown 7.56 in Depth to Water **Total Volume Pumped** 7.95 ft 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:06:29	600.03	19.81	4.58	116.83	3.48	8.39	2.42	222.26
Last 5	10:11:29	900.03	20.05	4.59	117.70	3.81	8.45	2.46	208.70
Last 5	10:16:29	1200.03	20.02	4.58	117.60	3.42	8.47	2.56	196.37
Last 5	10:21:29	1500.02	20.02	4.59	118.15	3.72	8.55	2.61	187.79
Last 5	10:26:29	1800.03	20.05	4.59	117.86	3.60	8.58	2.68	182.46
Variance 0			-0.03	-0.01	-0.09			0.09	-12.32
Variance 1			0.01	0.01	0.55			0.05	-8.58
Variance 2			0.03	0.00	-0.29			0.07	-5.33

Notes

Sampled at 1005

Date: 2019-12-17 11:34:51

Project Information:

Pump Information: Operator Name J. Noles Pump Model/Type

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name Plant McIntosh 36 ft

Latitude 00 0' 0" 00 0' 0" Longitude Sonde SN 369557

Turbidity Make/Model LaMotte 2020we Pump placement from TOC ft

Pumping Information: Well Information:

Final Pumping Rate 100 mL/min Well ID GWA-7 Well diameter 2 in Total System Volume 0.2506832 L Calculated Sample Rate Well Total Depth 32 ft 300 sec Screen Length 10 ft Stabilization Drawdown 1.32 in Depth to Water **Total Volume Pumped** 15.23 ft 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:13:18	600.02	21.19	4.93	36.59	0.89	15.33	0.37	125.33
Last 5	11:18:18	900.02	21.23	4.93	36.62	0.86	15.34	0.29	122.11
Last 5	11:23:18	1200.02	21.14	4.94	36.56	1.00	15.34	0.27	119.94
Last 5	11:28:18	1500.02	21.12	4.95	36.37	0.94	15.34	0.24	118.46
Last 5	11:33:18	1800.02	21.14	4.97	36.08	1.47	15.34	0.29	117.49
Variance 0			-0.09	0.01	-0.06			-0.02	-2.17
Variance 1			-0.03	0.00	-0.18			-0.03	-1.48
Variance 2			0.03	0.03	-0.29			0.04	-0.97

Notes

Sampled at 1115

Date: 2019-12-17 12:45:39

Project Information:

Pump Information: Operator Name J. Noles Pump Model/Type

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name Plant McIntosh 36 ft

Latitude 00 0' 0" 00 0' 0" Longitude Sonde SN 369557

Turbidity Make/Model LaMotte 2020we Pump placement from TOC ft

Pumping Information: Well Information:

Final Pumping Rate 100 mL/min Well ID GWC-2 Well diameter 2 in Total System Volume 0.2506832 L Calculated Sample Rate Well Total Depth 36 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0.24 in Depth to Water **Total Volume Pumped** 15.05 ft 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:24:39	600.02	21.68	4.83	51.62	0.96	15.12	1.55	135.92
Last 5	12:29:39	900.02	21.73	4.79	50.71	0.79	15.12	1.53	133.63
Last 5	12:34:39	1200.02	21.76	4.78	50.44	0.73	15.12	1.52	132.44
Last 5	12:39:39	1500.02	21.77	4.79	50.72	0.96	15.12	1.47	131.11
Last 5	12:44:39	1800.02	21.72	4.80	50.01	0.71	15.12	1.46	130.21
Variance 0			0.04	-0.01	-0.28			-0.01	-1.19
Variance 1			0.00	0.01	0.29			-0.05	-1.32
Variance 2			-0.05	0.02	-0.71			-0.01	-0.91

Notes

Sampled at 1230

Date: 2019-12-17 11:34:13

Pumping Information:

Project Information:

Pump Information: Operator Name L. Coker Pump Model/Type

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 25 ft 00 0' 0" Latitude

00 0' 0" Longitude 445707 Sonde SN

Turbidity Make/Model LaMotte2020we Pump placement from TOC 3 ft

Well Information:

Well ID Final Pumping Rate 120 mL/min GWC-5 Well diameter 2 in Total System Volume 0.2015856 L Calculated Sample Rate Well Total Depth 300 sec ft Stabilization Drawdown Screen Length 10 ft 26.64 in Depth to Water **Total Volume Pumped** 4.8 L 17.66 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- O	+/- 0.1	+/- 5%	+/- O		+/- 10%	+/- O
Last 5	11:04:35	1200.02	21.60	5.43	445.19	0.57	20.14	0.64	123.26
Last 5	11:09:35	1500.02	21.80	5.57	548.89	0.21	20.35	3.28	125.01
Last 5	11:14:35	1800.02	21.46	5.55	589.70	0.34	20.65	0.29	112.14
Last 5	11:19:35	2100.02	21.40	5.56	600.56	0.89	20.84	0.23	108.31
Last 5	11:24:35	2400.02	21.41	5.57	598.14	0.64	20.93	0.23	105.93
Variance 0			-0.34	-0.02	40.82			-2.99	-12.87
Variance 1			-0.06	0.01	10.86			-0.06	-3.83
Variance 2			0.01	0.01	-2.42			-0.00	-2.39

Notes

Sampled at 1130

Date: 2019-12-17 10:29:03

Project Information:

Pump Information: Operator Name J.Noles Pump Model/Type

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 28 ft Latitude 00 0' 0"

00 0' 0" Longitude 445707 Sonde SN

Turbidity Make/Model LaMotte2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate 180 mL/min Well ID GWC-6 Well diameter 2 in Total System Volume 0.2149758 L Calculated Sample Rate Well Total Depth 300 sec ft Screen Length 10 ft Stabilization Drawdown 106.92 in Depth to Water **Total Volume Pumped** 19.18 ft 7.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- O	+/- 0.1	+/- 5%	+/- O		+/- 10%	+/- O
Last 5	09:53:49	1499.96	20.89	4.92	47.79	0.32	25.43	2.83	189.95
Last 5	09:58:49	1799.96	20.93	4.91	47.82	0.64	26.15	3.16	187.49
Last 5	10:03:49	2099.96	21.01	4.88	48.20	0.48	27.40	3.31	187.18
Last 5	10:08:49	2399.96	21.01	4.86	48.75	0.65	28.36	3.54	185.46
Last 5	10:13:49	2699.96	21.06	4.88	48.69	1.66	29.25	3.29	177.03
Variance 0			0.08	-0.03	0.38			0.15	-0.32
Variance 1			-0.00	-0.02	0.56			0.23	-1.71
Variance 2			0.05	0.02	-0.06			-0.25	-8.43

Notes

Sampled at 1020



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 180-103436-1

Client Project/Site: CCR - Plant McIntosh Ash Landfill #3

Revision: 2

For:

Southern Company PO BOX 2641 GSC8 Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

(Halfman)

Authorized for release by: 5/14/2020 5:40:44 PM

Shali Brown, Project Manager II (615)301-5031

shali.brown@testamericainc.com

····· LINKS ·····

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www.eurofinsus.com/Env

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

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

PA Lab ID: 02-00416

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-103436-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-103436-1

051420 Revised Report to correct the following sampke ID's at consultant request: GWA-3B FILTERED (180-103490-5) and GWA-3B (180-103490-6). This report replaces the report previously issued on 041520.

Revised: to correct sample IDs for 180-103490-3 and -4

Comments

No additional comments.

Receipt

The samples were received on 3/11/2020 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

Receipt Exceptions

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): GWA-1A (180-103436-7)

GC Semi VOA

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

Metals

Methods 200.8, 6020, 6020A, 6020B: The ICSAB for batch 180-311181 was outside the acceptance limits for element: strontium. An elevated concentration in the stock solution is suspected. All other QC for strontium passes; therefore, the data has been reported.

Method 6020B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-310431 and analytical batch 180-311181 were outside control limits for copper. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020B: The post digestion spike % recovery for copper and cobalt associated with batch 180-311181 was outside of control limits. The associated sample is: GWA-5 (180-103436-1).

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

General Chemistry

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

Job ID: 180-103436-1

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Definitions/Glossary

Client: Southern Company Job ID: 180-103436-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Qualifiers

1.00		_	
Hŀ	'L	.Ci	

 Qualifier
 Qualifier Description

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

Metals

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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
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)
1.00	11 11 (D. 1. 12 (D. D./DOF)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radio

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

Eurofins TestAmerica, Pittsburgh

Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-103436-1

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	03-31-20
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

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Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-103436-1	GWA-5	Water	03/10/20 16:00	03/11/20 09:00	
180-103436-2	GWA-5-FILTERED	Water	03/10/20 16:00	03/11/20 09:00	
180-103436-3	GWA-4	Water	03/10/20 15:25	03/11/20 09:00	
180-103436-4	GWA-3A	Water	03/10/20 17:00	03/11/20 09:00	
180-103436-5	GWA-2A	Water	03/10/20 17:00	03/11/20 09:00	
180-103436-6	GWA-2B	Water	03/10/20 17:55	03/11/20 09:00	
180-103436-7	GWA-1A	Water	03/10/20 17:35	03/11/20 09:00	
180-103490-1	GWC-1	Water	03/11/20 10:40	03/12/20 09:00	
180-103490-2	GWC-6	Water	03/11/20 09:30	03/12/20 09:00	
180-103490-3	GWA-7A	Water	03/11/20 10:35	03/12/20 09:00	
180-103490-4	GWA-7	Water	03/11/20 09:45	03/12/20 09:00	
180-103490-5	GWA-3B-FILTERED	Water	03/11/20 10:40	03/12/20 09:00	
180-103490-6	GWA-3B	Water	03/11/20 10:40	03/12/20 09:00	
180-103490-7	LF3-DUP-01	Water	03/11/20 00:00	03/12/20 09:00	

Job ID: 180-103436-1

Method Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

Job ID: 180-103436-1

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Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-5

Date Collected: 03/10/20 16:00 Date Received: 03/11/20 09:00 Lab Sample ID: 180-103436-1

Matrix: Water

Job ID: 180-103436-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHICS2100B		1			310689	03/21/20 23:45	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			311181	03/25/20 18:08	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	309763	03/12/20 12:25	AVS	TAL PIT

Client Sample ID: GWA-5-FILTERED Lab Sample ID: 180-103436-2

Date Collected: 03/10/20 16:00 **Matrix: Water** Date Received: 03/11/20 09:00

Prep Type Total/NA	Batch Type Analysis Instrumer	Batch Method EPA 300.0 R2.1 at ID: CHICS2100B	Run	Factor 1	Initial Amount	Final Amount	Batch Number 310689	Prepared or Analyzed 03/22/20 00:32	Analyst SAC	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumer	3005A EPA 6020B at ID: NEMO		1	50 mL	50 mL	310431 311181	03/19/20 08:30 03/25/20 18:34		TAL PIT TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	309763	03/12/20 12:25	AVS	TAL PIT

Client Sample ID: GWA-4 Lab Sample ID: 180-103436-3 **Matrix: Water**

Date Collected: 03/10/20 15:25 Date Received: 03/11/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			310689	03/22/20 00:48	SAC	TAL PIT
	Instrumer	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			311181	03/25/20 18:37	RSK	TAL PIT
	Instrumer	it ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	309877	03/13/20 10:05	AVS	TAL PIT
	Instrumer	t ID: NOEQUIP								

Client Sample ID: GWA-3A Lab Sample ID: 180-103436-4

Date Collected: 03/10/20 17:00

Date Received: 03/11/20 09:00

Prep Type Total/NA	Batch Type Analysis Instrumer	Batch Method EPA 300.0 R2.1 at ID: CHICS2100B	Run	Factor 1	Initial Amount	Final Amount	Batch Number 310689	Prepared or Analyzed 03/22/20 01:04	Analyst SAC	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumer	3005A EPA 6020B at ID: NEMO		1	50 mL	50 mL	310431 311181	03/19/20 08:30 03/25/20 18:39		TAL PIT TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	309877	03/13/20 10:05	AVS	TAL PIT

Matrix: Water

Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-2A

Date Collected: 03/10/20 17:00 Date Received: 03/11/20 09:00 Lab Sample ID: 180-103436-5

Matrix: Water

Job ID: 180-103436-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHICS2100B		1			310689	03/22/20 01:19	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			311181	03/25/20 18:42	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C		1	100 mL	100 mL	309877	03/13/20 10:05	AVS	TAL PIT

Client Sample ID: GWA-2B

Date Collected: 03/10/20 17:55

Date Received: 03/11/20 09:00

Lab Sample ID: 180-103436-6 Matrix: Water

Lab Sample ID: 180-103436-7

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			310688	03/22/20 00:20	SAC	TAL PIT
	Instrumer	nt ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			311181	03/25/20 18:49	RSK	TAL PIT
	Instrumer	nt ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	309877	03/13/20 10:05	AVS	TAL PIT
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: GWA-1A

Date Collected: 03/10/20 17:35

Date Received: 03/11/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			310688	03/22/20 02:09	SAC	TAL PIT
	Instrumen	t ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			311181	03/25/20 18:53	RSK	TAL PIT
	Instrumen	t ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	309877	03/13/20 10:05	AVS	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: GWC-1

Date Collected: 03/11/20 10:40

Date Received: 03/12/20 09:00

Lab Sample II	D: 180-103490-1
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Matrix: Water

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHIC2100A		1			310811	03/23/20 19:51	MJH	TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHICS2100B		1			310904	03/25/20 05:46	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			311181	03/25/20 18:56	RSK	TAL PIT

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Job ID: 180-103436-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWC-1

Client: Southern Company

Date Collected: 03/11/20 10:40 Date Received: 03/12/20 09:00

Lab Sample ID: 180-103490-1

Matrix: Water

Batch Batch Dil Initial Final **Batch** Prepared Method Factor Number or Analyzed **Prep Type** Type Run Amount Amount Analyst Lab Total/NA Analysis SM 2540C 309880 03/13/20 10:25 AVS TAL PIT 100 mL 100 mL

Client Sample ID: GWC-6

Date Collected: 03/11/20 09:30 Date Received: 03/12/20 09:00

Lab Sample ID: 180-103490-2

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrument	EPA 300.0 R2.1 ID: CHIC2100A		1			310811	03/23/20 20:37	MJH	TAL PIT
Total/NA	Analysis Instrument	EPA 300.0 R2.1 ID: CHICS2100B		1			310904	03/25/20 06:34	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B ID: NEMO		1			311181	03/25/20 18:58	RSK	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	309880	03/13/20 10:25	AVS	TAL PIT

Client Sample ID: GWA-7A

Date Collected: 03/11/20 10:35

Date Received: 03/12/20 09:00

Lab Sample ID: 180-103490-3

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHIC2100A		1			310811	03/23/20 20:52	MJH	TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHICS2100B		1			310904	03/25/20 06:49	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			311181	03/25/20 19:01	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C It ID: NOEQUIP		1	100 mL	100 mL	309880	03/13/20 10:25	AVS	TAL PIT

Client Sample ID: GWA-7

Date Collected: 03/11/20 09:45

Date Received: 03/12/20 09:00

.ab	Sam	pie	ID:	180-	103	490-4	

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			310811	03/23/20 21:08	MJH	TAL PIT
	Instrumer	it ID: CHIC2100A								
Total/NA	Analysis	EPA 300.0 R2.1		1			310904	03/25/20 07:05	MJH	TAL PIT
	Instrumer	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			311181	03/25/20 19:03	RSK	TAL PIT
	Instrumer	t ID: NEMO								

Eurofins TestAmerica, Pittsburgh

Job ID: 180-103436-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-7

Client: Southern Company

Date Collected: 03/11/20 09:45

Lab Sample ID: 180-103490-4 **Matrix: Water**

Date Received: 03/12/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	309880	03/13/20 10:25	AVS	TAL PIT

Client Sample ID: GWA-3B-FILTERED

Lab Sample ID: 180-103490-5 Date Collected: 03/11/20 10:40 **Matrix: Water**

Date Received: 03/12/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHIC2100A		1			310811	03/23/20 21:23	MJH	TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHICS2100B		1			310904	03/25/20 07:21	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			311181	03/25/20 19:06	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	310199	03/17/20 12:10	AVS	TAL PIT

Client Sample ID: GWA-3B Lab Sample ID: 180-103490-6 **Matrix: Water**

Date Collected: 03/11/20 10:40 Date Received: 03/12/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			310811	03/23/20 21:38	MJH	TAL PIT
	Instrumen	t ID: CHIC2100A								
Total/NA	Analysis	EPA 300.0 R2.1		1			310904	03/25/20 07:37	MJH	TAL PIT
	Instrumen	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			311181	03/25/20 19:08	RSK	TAL PIT
	Instrumen	t ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	310199	03/17/20 12:10	AVS	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: LF3-DUP-01 Lab Sample ID: 180-103490-7

Date Collected: 03/11/20 00:00 Date Received: 03/12/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			310811	03/23/20 22:24	MJH	TAL PIT
	Instrumen	t ID: CHIC2100A								
Total/NA	Analysis	EPA 300.0 R2.1		1			310904	03/25/20 08:24	MJH	TAL PIT
	Instrumen	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	310431	03/19/20 08:30	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			311181	03/25/20 19:11	RSK	TAL PIT
	Instrumen	t ID: NEMO								

Eurofins TestAmerica, Pittsburgh

Matrix: Water

Lab Chronicle

Client: Southern Company Job ID: 180-103436-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: LF3-DUP-01 Lab Sample ID: 180-103490-7

Date Collected: 03/11/20 00:00 **Matrix: Water** Date Received: 03/12/20 09:00

Batch Batch Dil Initial Final **Batch** Prepared Factor Method **Prep Type** Type Run Amount **Amount** Number or Analyzed Analyst Lab 310199 TAL PIT Total/NA Analysis SM 2540C 100 mL 100 mL 03/17/20 12:10 AVS

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Prep

RJR = Ron Rosenbaum

Batch Type: Analysis

AVS = Abbey Smith

MJH = Matthew Hartman

RSK = Robert Kurtz

SAC = Shawn Clemente

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-5

Date Collected: 03/10/20 16:00 Date Received: 03/11/20 09:00 Lab Sample ID: 180-103436-1

Lab Sample ID: 180-103436-2

Matrix: Water

Matrix: Water

Job ID: 180-103436-1

Method: EPA 300.0 R2.1 - A								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7	1.0	0.32	mg/L			03/21/20 23:45	1
Fluoride	0.051 J	0.10	0.026	mg/L			03/21/20 23:45	1
Sulfate	15	1.0	0.38	mg/L			03/21/20 23:45	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.081		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 18:08	1
Beryllium	0.00028	J	0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 18:08	1
Boron	0.066	J	0.080	0.039	mg/L		03/19/20 08:30	03/25/20 18:08	1
Calcium	2.9		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 18:08	1
Chromium	0.0031		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 18:08	1
Cobalt	0.00099		0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 18:08	1
Lead	0.0022		0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 18:08	1
Copper	0.0019	J F1 *	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 18:08	1
Vanadium	0.010		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 18:08	1
Zinc	0.0071		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 18:08	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	67		10	10	mg/L			03/12/20 12:25	1

Client Sample ID: GWA-5-FILTERED

Date Collected: 03/10/20 16:00

Date Received: 03/11/20 09:00

Method: EPA 300.0 R2.1	- Anions, Ion Chr	omatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7		1.0	0.32	mg/L			03/22/20 00:32	1
Fluoride	0.052	J	0.10	0.026	mg/L			03/22/20 00:32	1
Sulfate	15		1.0	0.38	mg/L			03/22/20 00:32	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.059		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 18:34	1
Beryllium	0.00026	J	0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 18:34	1
Boron	0.054	J	0.080	0.039	mg/L		03/19/20 08:30	03/25/20 18:34	1
Calcium	2.1		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 18:34	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 18:34	1
Cobalt	0.00058		0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 18:34	1
Lead	0.00044	J	0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 18:34	1
Copper	0.0088	*	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 18:34	1
Vanadium	0.0016		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 18:34	1
Zinc	0.010		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 18:34	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	72	10	10 mg/L			03/12/20 12:25	1

Client Sample ID: GWA-4

Date Collected: 03/10/20 15:25 Date Received: 03/11/20 09:00

Lab Sample ID: 180-103436-3

Matrix: Water

Job ID: 180-103436-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography										
Analyte	Result Qual	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	5.0	1.0	0.32	mg/L			03/22/20 00:48	1		
Fluoride	0.066 J	0.10	0.026	mg/L			03/22/20 00:48	1		
Sulfate	7.2	1.0	0.38	mg/L			03/22/20 00:48	1		

Analyte	- Metals (ICP/MS) - To Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.058		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 18:37	1
Beryllium	0.00029	J	0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 18:37	1
Boron	<0.039		0.080	0.039	mg/L		03/19/20 08:30	03/25/20 18:37	1
Calcium	1.1		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 18:37	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 18:37	1
Cobalt	0.00090		0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 18:37	1
Lead	0.00031	J	0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 18:37	1
Copper	<0.00063	*	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 18:37	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 18:37	1
Zinc	0.0079		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 18:37	1

General Chemistry Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	39	10	10 mg/L			03/13/20 10:05	1

Lab Sample ID: 180-103436-4 **Client Sample ID: GWA-3A Matrix: Water**

Date Collected: 03/10/20 17:00 Date Received: 03/11/20 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	19		1.0	0.32	mg/L			03/22/20 01:04	1
	Fluoride	0.026	J	0.10	0.026	mg/L			03/22/20 01:04	1
	Sulfate	3.0		1.0	0.38	mg/L			03/22/20 01:04	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.082		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 18:39	1
Beryllium	0.00058	J	0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 18:39	1
Boron	0.059	J	0.080	0.039	mg/L		03/19/20 08:30	03/25/20 18:39	1
Calcium	2.8		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 18:39	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 18:39	1
Cobalt	0.0019		0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 18:39	1
Lead	0.00013	J	0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 18:39	1
Copper	0.00082	J *	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 18:39	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 18:39	1
Zinc	0.0079		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 18:39	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	49	10	10 mg/L			03/13/20 10:05	1

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

Client Sample ID: GWA-2A

Date Collected: 03/10/20 17:00 Date Received: 03/11/20 09:00

Lab Sample ID: 180-103436-5

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
	Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	13	1.0	0.32	mg/L			03/22/20 01:19	1
	Fluoride	<0.026	0.10	0.026	mg/L			03/22/20 01:19	1
	Sulfate	2.3	1.0	0.38	mg/L			03/22/20 01:19	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.044		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 18:42	1
Beryllium	0.00035	J	0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 18:42	1
Boron	<0.039		0.080	0.039	mg/L		03/19/20 08:30	03/25/20 18:42	1
Calcium	3.4		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 18:42	1
Chromium	0.0028		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 18:42	1
Cobalt	0.00044	J	0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 18:42	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 18:42	1
Copper	<0.00063	*	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 18:42	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 18:42	1
Zinc	<0.0032		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 18:42	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	68		10	10	mg/L			03/13/20 10:05	1

Lab Sample ID: 180-103436-6 **Client Sample ID: GWA-2B** Date Collected: 03/10/20 17:55 **Matrix: Water**

Date Received: 03/11/20 09:00

Method: EPA 300.0 R2.1 -								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.0	1.0	0.32	mg/L			03/22/20 00:20	1
Fluoride	<0.026	0.10	0.026	mg/L			03/22/20 00:20	1
Sulfate	57	1.0	0.38	mg/L			03/22/20 00:20	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.047		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 18:49	1
Beryllium	0.00087	J	0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 18:49	1
Boron	0.64		0.080	0.039	mg/L		03/19/20 08:30	03/25/20 18:49	1
Calcium	14		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 18:49	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 18:49	1
Cobalt	0.0030		0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 18:49	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 18:49	1
Copper	0.0021	*	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 18:49	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 18:49	1
Zinc	0.0061		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 18:49	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	130	10	10 mg/L			03/13/20 10:05	1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-1A

Date Collected: 03/10/20 17:35 Date Received: 03/11/20 09:00 Lab Sample ID: 180-103436-7

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
	Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	8.1	1.0	0.32	mg/L			03/22/20 02:09	1
	Fluoride	<0.026	0.10	0.026	mg/L			03/22/20 02:09	1
	Sulfate	1.5	1.0	0.38	mg/L			03/22/20 02:09	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.018		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 18:53	1
Beryllium	0.00018	J	0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 18:53	1
Boron	<0.039		0.080	0.039	mg/L		03/19/20 08:30	03/25/20 18:53	1
Calcium	2.0		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 18:53	1
Chromium	0.0041		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 18:53	1
Cobalt	0.00028	J	0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 18:53	1
Lead	0.00015	J	0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 18:53	1
Copper	<0.00063	*	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 18:53	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 18:53	1
Zinc	<0.0032		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 18:53	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	67	10	10 mg/L			03/13/20 10:05	1

Client Sample ID: GWC-1

Date Collected: 03/11/20 10:40

Lab Sample ID: 180-103490-1

Matrix: Water

Date Received: 03/12/20 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	6.4		1.0	0.32	mg/L			03/25/20 05:46	1	
Fluoride	<0.026		0.10	0.026	mg/L			03/23/20 19:51	1	
Sulfate	3.5		1.0	0.38	mg/L			03/23/20 19:51	1	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.027		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 18:56	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 18:56	1
Boron	0.040	J	0.080	0.039	mg/L		03/19/20 08:30	03/25/20 18:56	1
Calcium	1.6		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 18:56	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 18:56	1
Cobalt	0.00026	J	0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 18:56	1
Copper	<0.00063	*	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 18:56	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 18:56	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 18:56	1
Zinc	<0.0032		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 18:56	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	37	10	10 mg/L			03/13/20 10:25	1

Client Sample ID: GWC-6

Lab Sample ID

Date Collected: 03/11/20 09:30 Date Received: 03/12/20 09:00

Lab Sample	ID: 180-103490-2
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Matrix: Water

Matrix: Water

03/23/20 20:52

Job ID: 180-103436-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	7.6	1.0	0.32	mg/L			03/25/20 06:34	1	
Fluoride	<0.026	0.10	0.026	mg/L			03/23/20 20:37	1	
Sulfate	2.2	1.0	0.38	mg/L			03/23/20 20:37	1	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.048		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 18:58	1
Beryllium	0.00030	J	0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 18:58	1
Boron	<0.039		0.080	0.039	mg/L		03/19/20 08:30	03/25/20 18:58	1
Calcium	1.7		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 18:58	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 18:58	1
Cobalt	0.00073		0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 18:58	1
Copper	<0.00063	*	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 18:58	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 18:58	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 18:58	1
Zinc	0.0047	J	0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 18:58	1

	General Chemistry									
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Total Dissolved Solids	67		10	10	mg/L			03/13/20 10:25	1

Client Sample ID: GWA-7A Lab Sample ID: 180-103490-3

Date Collected: 03/11/20 10:35 Date Received: 03/12/20 09:00

Sulfate

54to 1100011041 00/12/20 00100									
Method: EPA 300.0 R2	•	romatograp Qualifier	hy RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.9		1.0	0.32	mg/L		<u> </u>	03/25/20 06:49	1
Fluoride	<0.026		0.10	0.026	mg/L			03/23/20 20:52	1

1.0

110

0.38 mg/L

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.067		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 19:01	1
Beryllium	0.00078	J	0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 19:01	1
Boron	1.9		0.080	0.039	mg/L		03/19/20 08:30	03/25/20 19:01	1
Calcium	20		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 19:01	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 19:01	1
Cobalt	0.0056		0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 19:01	1
Copper	0.0032	*	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 19:01	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 19:01	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 19:01	1
Zinc	0.0099		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 19:01	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	180	10	10 mg/L			03/13/20 10:25	1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-7

Lab Sample ID: 180-103490-4

03/19/20 08:30 03/25/20 19:03

03/19/20 08:30 03/25/20 19:03

03/19/20 08:30 03/25/20 19:03

03/19/20 08:30 03/25/20 19:03

Lab Sample ID: 180-103490-5

Matrix: Water

Matrix: Water

Date Collected: 03/11/20 09:45 Date Received: 03/12/20 09:00

Method: EPA 300.0 R2	.1 - Anions, Ion Chi	romatogra	phy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.8		1.0	0.32	mg/L			03/25/20 07:05	1
Fluoride	<0.026		0.10	0.026	mg/L			03/23/20 21:08	1
Sulfate	0.97	J	1.0	0.38	mg/L			03/23/20 21:08	1
Method: FPA 6020B - M	Motals (ICP/MS) - To	otal Recov	orablo						
Method: EPA 6020B - Manalyte		otal Recov Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
				MDL 0.0016		D	Prepared 03/19/20 08:30		Dil Fac
Analyte	Result		RL		mg/L	D		03/25/20 19:03	Dil Fac
Analyte Barium	Result 0.014	Qualifier	RL 0.010	0.0016	mg/L mg/L	<u>D</u>	03/19/20 08:30 03/19/20 08:30	03/25/20 19:03	Dil Fac 1 1 1
Analyte Barium Beryllium	Result 0.014 <0.00018	Qualifier	0.010 0.0025	0.0016 0.00018 0.039	mg/L mg/L	<u>D</u>	03/19/20 08:30 03/19/20 08:30 03/19/20 08:30	03/25/20 19:03 03/25/20 19:03 03/25/20 19:03	Dil Fac 1 1 1 1
Analyte Barium Beryllium Boron	Result 0.014 <0.00018 0.055	Qualifier	0.010 0.0025 0.080	0.0016 0.00018 0.039	mg/L mg/L mg/L mg/L	<u>D</u>	03/19/20 08:30 03/19/20 08:30 03/19/20 08:30	03/25/20 19:03 03/25/20 19:03 03/25/20 19:03 03/25/20 19:03	Dil Fac 1 1 1 1 1 1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	76		10	10	mg/L			03/13/20 10:25	1

0.0020

0.0010

0.0010

0.0050

0.00063 mg/L

0.00013 mg/L

0.00099 mg/L

0.0032 mg/L

Client Sample ID: GWA-3B-FILTERED

<0.00063 *

0.00015 J

0.0013

< 0.0032

Date Collected: 03/11/20 10:40

Date Received: 03/12/20 09:00

Copper

Lead

Zinc

Vanadium

Method: EPA 300.0 R2.1 -	Anions, Ion Chro	omatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.7		1.0	0.32	mg/L			03/25/20 07:21	1
Fluoride	0.043	J	0.10	0.026	mg/L			03/23/20 21:23	1
Sulfate	8.0		1.0	0.38	mg/L			03/23/20 21:23	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.037		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 19:06	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 19:06	1
Boron	0.042	J	0.080	0.039	mg/L		03/19/20 08:30	03/25/20 19:06	1
Calcium	5.2		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 19:06	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 19:06	1
Cobalt	0.00038	J	0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 19:06	1
Copper	0.0014	J *	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 19:06	1
Lead	0.00052	J	0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 19:06	1
Vanadium	0.0027		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 19:06	1
Zinc	0.0032	J	0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 19:06	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	37	10	10 mg/L			03/17/20 12:10	1

Client Sample ID: GWA-3B

Date Collected: 03/11/20 10:40

Lab Sample ID: 180-103490-6

Matrix: Water

Job ID: 180-103436-1

Date Received: 03/12/20 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.8		1.0	0.32	mg/L			03/25/20 07:37	1
Fluoride	0.037	J	0.10	0.026	mg/L			03/23/20 21:38	1
Sulfate	7.3		1.0	0.38	mg/L			03/23/20 21:38	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.035		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 19:08	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 19:08	1
Boron	<0.039		0.080	0.039	mg/L		03/19/20 08:30	03/25/20 19:08	1
Calcium	4.4		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 19:08	1
Chromium	0.0017	J	0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 19:08	1
Cobalt	0.00038	J	0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 19:08	1
Copper	0.00067	J *	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 19:08	1
Lead	0.0011		0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 19:08	1
Vanadium	0.0028		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 19:08	1
Zinc	0.0055		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 19:08	1

General Chemistry Analyte	Result Qu	ıalifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	43	10	10	mg/L			03/17/20 12:10	1

Client Sample ID: LF3-DUP-01

Date Collected: 03/11/20 00:00 Date Received: 03/12/20 09:00 Lab Sample ID: 180-103490-7

Matrix: Water

Method: EPA 300.0 R	2.1 - Anions, Ion Ch	romatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.7		1.0	0.32	mg/L			03/25/20 08:24	1
Fluoride	<0.026		0.10	0.026	mg/L			03/23/20 22:24	1
Sulfate	1.5		1.0	0.38	mg/L			03/23/20 22:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.026		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 19:11	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 19:11	1
Boron	<0.039		0.080	0.039	mg/L		03/19/20 08:30	03/25/20 19:11	1
Calcium	1.5		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 19:11	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 19:11	1
Cobalt	0.00036	J	0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 19:11	1
Copper	<0.00063	*	0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 19:11	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 19:11	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 19:11	1
Zinc	<0.0032		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 19:11	1

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	35	10	10 mg/L			03/17/20 12:10	1

Job ID: 180-103436-1

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

Lab Sample ID: MB 180-310688/38

Matrix: Water

Analysis Batch: 310688

Client Sample ID: Method Blank

Prep Type: Total/NA

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			03/22/20 00:04	1
Fluoride	<0.026		0.10	0.026	mg/L			03/22/20 00:04	1
Sulfate	<0.38		1.0	0.38	mg/L			03/22/20 00:04	1

Lab Sample ID: LCS 180-310688/37

Matrix: Water

Analysis Batch: 310688

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

Client Sample ID: GWA-1A

Client Sample ID: GWA-1A

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Analysis Datem 5 10000								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	50.0	48.0		mg/L		96	90 - 110	
Fluoride	2.50	2.48		mg/L		99	90 - 110	
Sulfate	50.0	50.1		mg/L		100	90 - 110	

Lab Sample ID: 180-103436-7 MS

Matrix: Water

Analysis Batch: 310688

Alialysis Dalcil. 3 10000										
_	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	8.1		25.0	31.8		mg/L		95	80 - 120	
Fluoride	<0.026		1.25	1.29		mg/L		103	80 - 120	
Sulfate	1.5		25.0	26.4		mg/L		100	80 - 120	

Lab Sample ID: 180-103436-7 MSD

Matrix: Water

Analysis Batch: 310688

7 maryolo Zatom o rocco	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	8.1		25.0	31.8		mg/L		95	80 - 120	0	20
Fluoride	<0.026		1.25	1.28		mg/L		102	80 - 120	1	20
Sulfate	1.5		25.0	26.4		mg/L		100	80 - 120	0	20

Lab Sample ID: MB 180-310689/6

Matrix: Water

Analysis Batch: 310689

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

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			03/21/20 15:55	1
Fluoride	<0.026		0.10	0.026	mg/L			03/21/20 15:55	1
Sulfate	<0.38		1.0	0.38	mg/L			03/21/20 15:55	1

MR MR

Lab Sample ID: LCS 180-310689/5

Matrix: Water

Analysis Batch: 310689								
•	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	50.0	48.8		mg/L		98	90 - 110	
Fluoride	2.50	2.38		mg/L		95	90 - 110	
Sulfate	50.0	48.1		mg/L		96	90 - 110	

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Client Sample ID: Lab Control Sample

Job ID: 180-103436-1

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

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

Lab Sample ID: 180-103436-1 MS

Matrix: Water

Analysis Batch: 310689

Client Sample ID: GWA-5 Prep Type: Total/NA

MS MS Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Chloride 3.7 25.0 28.9 101 80 - 120 mg/L Fluoride 0.051 J 1.25 mg/L 1.30 100 80 - 120 Sulfate 15 25.0 39.2 mg/L 97 80 - 120

Lab Sample ID: 180-103436-1 MSD

Matrix: Water

Analysis Batch: 310689

Client Sample ID: GWA-5 Prep Type: Total/NA

•	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	3.7		25.0	28.2		mg/L		98	80 - 120	2	20
Fluoride	0.051	J	1.25	1.30		mg/L		100	80 - 120	0	20
Sulfate	15		25.0	37.7		mg/L		91	80 - 120	4	20

Lab Sample ID: MB 180-310811/51

Matrix: Water

Analysis Batch: 310811

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

Client Sample ID: Lab Control Sample

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Dil Fac Analyzed Chloride < 0.32 1.0 0.32 mg/L 03/23/20 19:36 Fluoride < 0.026 0.10 0.026 mg/L 03/23/20 19:36 Sulfate <0.38 1.0 0.38 mg/L 03/23/20 19:36

Lab Sample ID: LCS 180-310811/50

Matrix: Water

Analysis Batch: 310811

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	50.0	47.2		mg/L		94	90 - 110	
Fluoride	2.50	2.51		mg/L		100	90 - 110	
Sulfate	50.0	50.8		mg/L		102	90 - 110	

ah Cample ID: 190 102400 1 MC

Lab Sample ID: 160-103490	1-1 IVIO			Client Sample ID: GWC-1
Matrix: Water				Prep Type: Total/NA
Analysis Batch: 310811				
•	Sample Sample	Snika	MC MC	9/ Pag

	Sample	Sample	Spike	IVIS	IVIO				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Fluoride	<0.026		1.25	1.23		mg/L		99	80 - 120	
Sulfate	3.5		25.0	26.0		mg/L		90	80 - 120	

Lab Sample ID: 180-103490-1 MSD

Matrix: Water

Analysis Batch: 310811

Tillary Cic Batchin C 10011											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Fluoride	<0.026		1.25	1.25		mg/L		100	80 - 120	1	20
Sulfate	3.5		25.0	26.2		mg/L		91	80 - 120	1	20

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Client Sample ID: CWC 1

Client Sample ID: GWC-1

Prep Type: Total/NA

Prep Type: Total/NA

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-103436-1

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

Lab Sample ID: MB 180-310904/87

Matrix: Water

Analysis Batch: 310904

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 1.0 Chloride 0.32 mg/L 03/25/20 05:30 <0.32

Lab Sample ID: LCS 180-310904/86

Matrix: Water

Analysis Batch: 310904

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 50.0 Chloride 52.0 mg/L 104 90 - 110

Lab Sample ID: 180-103490-1 MS

Matrix: Water

Analysis Batch: 310904

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Chloride 25.0 80 - 120 6.4 29.9 mg/L 94

Lab Sample ID: 180-103490-1 MSD

Matrix: Water

Analysis Batch: 310904

Sample Sample Spike MSD MSD %Rec. **RPD** Added RPD Analyte Result Qualifier Result Qualifier D %Rec Limits Limit Unit Chloride 6.4 25.0 31.5 100 80 - 120 20 mg/L

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

Lab Sample ID: MB 180-310431/1-A

Matrix: Water

Analysis Batch: 311181

Client Sample ID: Method Blank **Prep Type: Total Recoverable** Prep Batch: 310431

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: GWC-1

Client Sample ID: GWC-1

Prep Type: Total/NA

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		03/19/20 08:30	03/25/20 17:53	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/19/20 08:30	03/25/20 17:53	1
Boron	<0.039		0.080	0.039	mg/L		03/19/20 08:30	03/25/20 17:53	1
Calcium	<0.13		0.50	0.13	mg/L		03/19/20 08:30	03/25/20 17:53	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/19/20 08:30	03/25/20 17:53	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		03/19/20 08:30	03/25/20 17:53	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/19/20 08:30	03/25/20 17:53	1
Copper	<0.00063		0.0020	0.00063	mg/L		03/19/20 08:30	03/25/20 17:53	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		03/19/20 08:30	03/25/20 17:53	1
Zinc	<0.0032		0.0050	0.0032	mg/L		03/19/20 08:30	03/25/20 17:53	1

Lab Sample ID: LCS 180-310431/2-A

Matrix: Water

Analysis Batch: 311181

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Prep Batch: 310431

7 maryolo Zatom CTTTO	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Barium	1.00	1.03	-	mg/L		103	80 - 120
Beryllium	0.500	0.483		mg/L		97	80 - 120
Boron	1.25	1.20		mg/L		96	80 - 120
Calcium	25.0	25.1		mg/L		100	80 - 120

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Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Lab Sample ID: LCS 180-310431/2-A

Lab Sample ID: LCS 180-310431/2-A

Matrix: Water

Matrix: Water

Analysis Batch: 311181

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Prep Batch: 310431

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chromium	0.500	0.573		mg/L		115	80 - 120	
Lead	0.500	0.499		mg/L		100	80 - 120	
Vanadium	0.500	0.564		mg/L		113	80 - 120	
Zinc	0.250	0.227		mg/L		91	80 - 120	

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

Prep Batch: 310431

Client Sample ID: GWA-5

Job ID: 180-103436-1

Analysis Batch: 311296 LCS LCS Spike %Rec. Added Result Qualifier Unit D %Rec Limits **Analyte** Cobalt 0.500 0.436 80 - 120 mg/L 87 0.500 0.450 90 80 - 120 Copper mg/L

Lab Sample ID: 180-103436-1 MS **Client Sample ID: GWA-5 Matrix: Water Prep Type: Total Recoverable Analysis Batch: 311181 Prep Batch: 310431**

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Barium 0.081 1.00 75 - 125 1.13 mg/L 105 Beryllium 0.00028 J 0.500 0.490 mg/L 98 75 - 125 Boron 0.066 J 1.25 1.30 99 75 - 125 mg/L Calcium 2.9 25.0 26.6 mg/L 95 75 - 125Chromium 0.0031 0.500 0.560 mg/L 111 75 - 125 Cobalt 0.00099 0.500 0.601 mg/L 120 75 - 125 Lead 0.0022 0.500 0.504 mg/L 100 75 - 125 Copper 0.0019 JF1* 0.500 0.631 F1 mg/L 126 75 - 125 Vanadium 0.010 0.500 0.561 mg/L 110 75 - 125 Zinc 0.250 75 - 125 0.0071 0.229 mg/L 89

Lab Sample ID: 180-103436-1 MSD **Matrix: Water**

Prep Type: Total Recoverable Analysis Batch: 311181 Prep Batch: 310431

Alialysis Dalcii. 311101									Frep Do	aten. 3	U43 I	
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Barium	0.081		1.00	1.11		mg/L		103	75 - 125	2	20	
Beryllium	0.00028	J	0.500	0.480		mg/L		96	75 - 125	2	20	
Boron	0.066	J	1.25	1.28		mg/L		97	75 - 125	1	20	
Calcium	2.9		25.0	27.5		mg/L		99	75 - 125	3	20	
Chromium	0.0031		0.500	0.554		mg/L		110	75 - 125	1	20	
Cobalt	0.00099		0.500	0.597		mg/L		119	75 - 125	1	20	
Lead	0.0022		0.500	0.506		mg/L		101	75 - 125	0	20	
Copper	0.0019	J F1 *	0.500	0.623		mg/L		124	75 - 125	1	20	
Vanadium	0.010		0.500	0.558		mg/L		110	75 - 125	1	20	
Zinc	0.0071		0.250	0.225		mg/L		87	75 - 125	1	20	
Zinc	0.0071		0.250	0.225		mg/L		87	75 - 125	1		

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-103436-1

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

Lab Sample ID: MB 180-309763/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 309763

MB MB Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared Total Dissolved Solids 10 10 mg/L 03/12/20 12:25 <10

Lab Sample ID: LCS 180-309763/1 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 309763

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 661 **Total Dissolved Solids** 674 mg/L 102 80 - 120

Lab Sample ID: MB 180-309877/2 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 309877

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared Total Dissolved Solids 10 03/13/20 10:05 <10 10 mg/L

Lab Sample ID: LCS 180-309877/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 309877

Spike LCS LCS %Rec. Added Analyte Result Qualifier Limits Unit D %Rec **Total Dissolved Solids** 661 662 100 80 - 120 mg/L

Lab Sample ID: MB 180-309880/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 309880

MB MB **MDL** Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac Total Dissolved Solids 10 10 mg/L 03/13/20 10:25 <10

Lab Sample ID: LCS 180-309880/1

Matrix: Water

Analysis Batch: 309880

LCS LCS Spike %Rec. Added Result Qualifier Unit %Rec Limits mg/L Total Dissolved Solids 661 662 100 80 - 120

Lab Sample ID: MB 180-310199/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 310199

MB MB

Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Total Dissolved Solids <10 10 10 mg/L 03/17/20 12:10

Lab Sample ID: LCS 180-310199/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 310199

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit %Rec Limits 242 **Total Dissolved Solids** 254 mg/L 105 80 - 120

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Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

HPLC/IC

Analysis Batch: 310688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103436-6	GWA-2B	Total/NA	Water	EPA 300.0 R2.1	
180-103436-7	GWA-1A	Total/NA	Water	EPA 300.0 R2.1	
MB 180-310688/38	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-310688/37	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-103436-7 MS	GWA-1A	Total/NA	Water	EPA 300.0 R2.1	
180-103436-7 MSD	GWA-1A	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 310689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103436-1	GWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-103436-2	GWA-5-FILTERED	Total/NA	Water	EPA 300.0 R2.1	
180-103436-3	GWA-4	Total/NA	Water	EPA 300.0 R2.1	
180-103436-4	GWA-3A	Total/NA	Water	EPA 300.0 R2.1	
180-103436-5	GWA-2A	Total/NA	Water	EPA 300.0 R2.1	
MB 180-310689/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-310689/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-103436-1 MS	GWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-103436-1 MSD	GWA-5	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 310811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103490-1	GWC-1	Total/NA	Water	EPA 300.0 R2.1	-
180-103490-2	GWC-6	Total/NA	Water	EPA 300.0 R2.1	
180-103490-3	GWA-7A	Total/NA	Water	EPA 300.0 R2.1	
180-103490-4	GWA-7	Total/NA	Water	EPA 300.0 R2.1	
180-103490-5	GWA-3B-FILTERED	Total/NA	Water	EPA 300.0 R2.1	
180-103490-6	GWA-3B	Total/NA	Water	EPA 300.0 R2.1	
180-103490-7	LF3-DUP-01	Total/NA	Water	EPA 300.0 R2.1	
MB 180-310811/51	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-310811/50	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-103490-1 MS	GWC-1	Total/NA	Water	EPA 300.0 R2.1	
180-103490-1 MSD	GWC-1	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 310904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103490-1	GWC-1	Total/NA	Water	EPA 300.0 R2.1	
180-103490-2	GWC-6	Total/NA	Water	EPA 300.0 R2.1	
180-103490-3	GWA-7A	Total/NA	Water	EPA 300.0 R2.1	
180-103490-4	GWA-7	Total/NA	Water	EPA 300.0 R2.1	
180-103490-5	GWA-3B-FILTERED	Total/NA	Water	EPA 300.0 R2.1	
180-103490-6	GWA-3B	Total/NA	Water	EPA 300.0 R2.1	
180-103490-7	LF3-DUP-01	Total/NA	Water	EPA 300.0 R2.1	
MB 180-310904/87	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-310904/86	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-103490-1 MS	GWC-1	Total/NA	Water	EPA 300.0 R2.1	
180-103490-1 MSD	GWC-1	Total/NA	Water	EPA 300.0 R2.1	

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Job ID: 180-103436-1

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Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Metals

Prep Batch: 310431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
180-103436-1	GWA-5	Total Recoverable	Water	3005A	_
180-103436-2	GWA-5-FILTERED	Total Recoverable	Water	3005A	
180-103436-3	GWA-4	Total Recoverable	Water	3005A	
180-103436-4	GWA-3A	Total Recoverable	Water	3005A	
180-103436-5	GWA-2A	Total Recoverable	Water	3005A	
180-103436-6	GWA-2B	Total Recoverable	Water	3005A	
180-103436-7	GWA-1A	Total Recoverable	Water	3005A	
180-103490-1	GWC-1	Total Recoverable	Water	3005A	
180-103490-2	GWC-6	Total Recoverable	Water	3005A	
180-103490-3	GWA-7A	Total Recoverable	Water	3005A	
180-103490-4	GWA-7	Total Recoverable	Water	3005A	
180-103490-5	GWA-3B-FILTERED	Total Recoverable	Water	3005A	
180-103490-6	GWA-3B	Total Recoverable	Water	3005A	
180-103490-7	LF3-DUP-01	Total Recoverable	Water	3005A	
MB 180-310431/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-310431/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-103436-1 MS	GWA-5	Total Recoverable	Water	3005A	
180-103436-1 MSD	GWA-5	Total Recoverable	Water	3005A	

Analysis Batch: 311181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103436-1	GWA-5	Total Recoverable	Water	EPA 6020B	310431
180-103436-2	GWA-5-FILTERED	Total Recoverable	Water	EPA 6020B	310431
180-103436-3	GWA-4	Total Recoverable	Water	EPA 6020B	310431
180-103436-4	GWA-3A	Total Recoverable	Water	EPA 6020B	310431
180-103436-5	GWA-2A	Total Recoverable	Water	EPA 6020B	310431
180-103436-6	GWA-2B	Total Recoverable	Water	EPA 6020B	310431
180-103436-7	GWA-1A	Total Recoverable	Water	EPA 6020B	310431
180-103490-1	GWC-1	Total Recoverable	Water	EPA 6020B	310431
180-103490-2	GWC-6	Total Recoverable	Water	EPA 6020B	310431
180-103490-3	GWA-7A	Total Recoverable	Water	EPA 6020B	310431
180-103490-4	GWA-7	Total Recoverable	Water	EPA 6020B	310431
180-103490-5	GWA-3B-FILTERED	Total Recoverable	Water	EPA 6020B	310431
180-103490-6	GWA-3B	Total Recoverable	Water	EPA 6020B	310431
180-103490-7	LF3-DUP-01	Total Recoverable	Water	EPA 6020B	310431
MB 180-310431/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	310431
LCS 180-310431/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	310431
180-103436-1 MS	GWA-5	Total Recoverable	Water	EPA 6020B	310431
180-103436-1 MSD	GWA-5	Total Recoverable	Water	EPA 6020B	310431

Analysis Batch: 311296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-310431/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	310431

General Chemistry

Analysis Batch: 309763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103436-1	GWA-5	Total/NA	Water	SM 2540C	
180-103436-2	GWA-5-FILTERED	Total/NA	Water	SM 2540C	
MB 180-309763/2	Method Blank	Total/NA	Water	SM 2540C	

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Job ID: 180-103436-1

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-103436-1

General Chemistry (Continued)

Analysis Batch: 309763 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-309763/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 309877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103436-3	GWA-4	Total/NA	Water	SM 2540C	-
180-103436-4	GWA-3A	Total/NA	Water	SM 2540C	
180-103436-5	GWA-2A	Total/NA	Water	SM 2540C	
180-103436-6	GWA-2B	Total/NA	Water	SM 2540C	
180-103436-7	GWA-1A	Total/NA	Water	SM 2540C	
MB 180-309877/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-309877/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 309880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103490-1	GWC-1	Total/NA	Water	SM 2540C	
180-103490-2	GWC-6	Total/NA	Water	SM 2540C	
180-103490-3	GWA-7A	Total/NA	Water	SM 2540C	
180-103490-4	GWA-7	Total/NA	Water	SM 2540C	
MB 180-309880/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-309880/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 310199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103490-5	GWA-3B-FILTERED	Total/NA	Water	SM 2540C	
180-103490-6	GWA-3B	Total/NA	Water	SM 2540C	
180-103490-7	LF3-DUP-01	Total/NA	Water	SM 2540C	
MB 180-310199/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-310199/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Pittsburgh

5/14/2020 (Rev. 2)

Company

700

Date/Time:

Hully Water

Received by:

Company

1920

3 W 20

Date:

Empty Kit Relinquished by:

inquished by:

ime:

Method of Shipment:

Date/Time

Cooler Temperature(s) °C and Other Remarks:

Received by: Received by:

Company Company

Date/Time:

T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify) **TestAmerica** THE LEADER IN ENVIRONMENTAL TESTING 2 Starte parameter: Special Instructions/Note: 2 Appill: B, Ca, Ci, FI, 2 Ba, Be, Cr, Co, Cu, N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S-H2S04 Months

 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

 ☐ Return To Client
 ★ Disposal By Lab
 ☐ Archive For Month

 Special Instructions/QC Requirements:

 2 OHS, TDS reservation Codes: A - HCL
B - NaOH
C - Zn Acetate
C - Nitric Acid
E - Nitric Acid
F - Mas O4
F - MeO H
G - Amchlor
H - Ascorbic Acid 180-103436 Chain of Custody J - DI Water K - EDTA L - EDA 2 Pb, V COC No: Total Number of containers **Analysis Requested** E-Mail: veronica.bortot@testamericainc.com MAPPILL parameter course Chain of Custody Record Lab PM: Bortot, Veronica X + Z Matrix Preservation Code: Radiological (C=comb, Sample G=grab) Type 0 Project #: 18019950 1807950 SSOW#: 1700 000 195 1525 Sample 0091 3/10/20 1400 Time Unknown Standard 'AT Requested (days): Due Date Requested: PO#: SCS10347656 WO#: Sample Date Phone: 4045920094 Poison B Skin Irritant Possible Hazard Identification
Non-Hazard Flammable Skin Irrit
Deliverable Requested: I, III, IV, Other (specify) GWA-S-Filtered Phone (412) 963-7058 Fax (412) 963-2468 **TestAmerica Pittsburgh** 53 8 4 6WA-3A N 301 Alpha Drive RIDC Park DWA-2 Impetty@southernco.com GWA-S 6WA-4 Client Information Sample Identification Pittsburgh, PA 15238 Project Name: CCR - Plant McIntosh

D W B

PO BOX 2641 GSC8

Birmingham

State, Zip: AL, 35291

Phone: 205-992-5417(Tel)

Plant McIntosh

Southern Company

Lauren Petty

Client Contact:

inquished by: finquished by

Custody Seals Intact: Custody Seal No.:

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

Chain of Custody Record

Client Information	J. No kes, J. Bash, L.C	Bash, L. Cotter Bortot, Veronica	Carrier Tracking No(s):		COC No: 180-57786-11316.2
Client Contact: Ms. Lauren Petty	Phone:	E-Mail: veronica.bort	E-Mail: veronica.bortot@testamericainc.com	Page: Page 2 of 2	of P
Company: Southern Company			Analysis Requested	Job #:	
Address: PO BOX 2641 GSC8	Due Date Requested:		214	Preserva	8
City: Birmingham	TAT Requested (days):		1490	A - HCL B - NaOH C - Zn Acetate	
State, Zip: AL, 35291	Standard		300	D - Nitric A	
Phone: 205-992-5417(Tel)	PO#. SCS10382606		005 404	F - MeOH G - Amchlor H - Ascorbic Acid	or S - H2SO4 or S - H2SO4 Dic Acid T - TSP Dodecahydrate
Email: Impetty@southernco.com	WO #.		1 p.		
Project Name: CCR - ARAN Mointesh Art Pong 1 L & S	Project #: 18019956) A !	tainer K - EDTA	W - pH 4-5 Z - other (specify)
Site: Georgia	SSOW#:		0 0	of con	
	Sample Type Sample (C=comp.	Matrix (w=water, S=solid, O=waster)oil,	Ohs oio	al Mumber	
Sample Identification	0	BT=Tissue, A=Air)	こう		Special Instructions/Note:
1-080	10h	2	ンプン		
3-220	3/11/20 0930	Water M			
GWC-7A	120	Water N			
C-000	3/11/20 094S	Water N			
6WC-3B-FIRED	120 10	Water			
GWC-3B	3/11/20/1049	Water (V 🗸	77		
		Water			
		Water			
		Water		180-103490 Chain of Custody	ustody
153-DUP-01					
Possible Hazard Identification Non-Hazard	□ Poison B □ Unknown □ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Mor	if samples are retained longe.	r than 1 month) Months
Deliverable Requested: I, II, III, IV, Other (specify)			Special Instructions/QC Requirements:		
Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	2/11/20 1330 Date/Time.	Company	Received by: Received by:	Date/Time: // // 9 9w	Company
Relinguished by	Data/Time		Received by:	DateTime	y many
			veceived by.	Date/Time.	Company
Custody Seals Intact: Custody Seal No.: A Yes, A No			Cooler Temperature(s) °C and Other Remarks:		
		CONTRACTOR CANALITY SECURITY CONTRACTOR CONT	AND THE PROPERTY OF THE PROPER	AND THE	Ver: 01/16/2019

Client: Southern Company

Job Number: 180-103436-1

Login Number: 103436

List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

Answer	Comment
N/A	
True	
False	
False	Received extra samples not listed on COC.
True	
N/A	
	N/A True True True True True True True True

Client: Southern Company Job Number: 180-103436-1

Login Number: 103490 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Say, Thomas C

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

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238

Tel: (412)963-7058

Laboratory Job ID: 180-104179-1

Client Project/Site: CCR - Plant McIntosh Ash Landfill #3

For:

Southern Company PO BOX 2641 GSC8 Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

(Freignan)

Authorized for release by: 4/29/2020 8:19:06 AM

Shali Brown, Project Manager II

(615)301-5031

shali.brown@testamericainc.com

·····LINKS ······

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Have a Question?



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

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

PA Lab ID: 02-00416

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-104179-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-104179-1

Comments

No additional comments.

Receipt

The samples were received on 4/1/2020 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.1° C and 3.4° C.

GC Semi VOA

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

Metals

Methods 6020, 6020A, 6020B: The continuing calibration verification (CCV) associated with batch 180-313332 recovered above the upper control limit for boron. The samples associated with this CCV were non-detects -or- less than the RL for the affected analytes; therefore, the data have been reported.

Methods 200.8, 6020A, 6020B: The ICSAB for batch 180-313490 was outside the acceptance limits (80-120%) (actual 121%) for element: lithium. An elevated concentration in the stock solution is suspected. The initial analytical QC and low level standard criteria pass for target analyte; therefore, the data has been reported.

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

General Chemistry

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

Job ID: 180-104179-1

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Definitions/Glossary

Client: Southern Company Job ID: 180-104179-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Qualifiers

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 Qualifier
 Qualifier Description

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

Metals

Qualifier Qualifier Description

ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

B Compound was found in the blank and sample.

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

HF Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly	used abbreviations ma	v or mav r	not be prese	nt in this report
ADDIGNICION	THESE COMMISSIONS	, useu abbievialions ina	y Oi iiiay i	IOL DE PIESE	III III UIII I IOPOI L

Example 2 Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
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)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

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Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

Job ID: 180-104179-1

Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asse
180-104179-1	GWC-2	Water	03/31/20 11:45	04/01/20 08:00	
180-104179-2	GWC-5	Water	03/31/20 12:30	04/01/20 08:00	
180-104179-3	GWC-4B	Water	03/31/20 14:15	04/01/20 08:00	
180-104179-4	GWC-4A	Water	03/31/20 15:45	04/01/20 08:00	
180-104179-5	LF3-DUP-02	Water	03/31/20 00:00	04/01/20 08:00	
180-104179-6	LF3-FERB-01	Water	03/31/20 16:00	04/01/20 08:00	
180-104179-7	LF3-FERB-02	Water	03/31/20 16:05	04/01/20 08:00	
180-104179-8	LF3-FB-01	Water	03/31/20 16:10	04/01/20 08:00	
180-104179-9	LF3-FB-02	Water	03/31/20 16:15	04/01/20 08:00	

Job ID: 180-104179-1

Method Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

Job ID: 180-104179-1

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Lab Chronicle

Client: Southern Company Job ID: 180-104179-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWC-2 Lab Sample ID: 180-104179-1

Date Collected: 03/31/20 11:45 **Matrix: Water** Date Received: 04/01/20 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at ID: CHICS2100B		1			312544	04/10/20 14:20	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311870	04/02/20 10:00	RJR	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: A		1			313332	04/18/20 15:54	WTR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311870	04/02/20 10:00	RJR	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: A		1			313490	04/21/20 12:54	RSK	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	311873	04/02/20 08:04	AVS	TAL PIT
Total/NA	Analysis Instrumer	SM 4500 H+ B		1			312017	04/03/20 18:02	PMH	TAL PIT

Lab Sample ID: 180-104179-2 **Client Sample ID: GWC-5**

Date Collected: 03/31/20 12:30 **Matrix: Water**

Date Received: 04/01/20 08:00

Dran Time	Batch	Batch	Dun	Dil	Initial	Final	Batch	Prepared	Amaluat	Lab
Prep Type Total/NA	Type Analysis Instrumen	Method EPA 300.0 R2.1 t ID: CHICS2100B	Run	Factor 1	Amount	Amount	Number 312544	or Analyzed 04/10/20 14:35	Analyst SAC	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B t ID: A		1	50 mL	50 mL	311870 313332	04/02/20 10:00 04/18/20 15:57		TAL PIT TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B t ID: A		1	50 mL	50 mL	311870 313490	04/02/20 10:00 04/21/20 12:57		TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	311873	04/02/20 08:04	AVS	TAL PIT
Total/NA	Analysis Instrumen	SM 4500 H+ B t ID: NOEQUIP		1			312017	04/03/20 18:09	PMH	TAL PIT

Client Sample ID: GWC-4B Lab Sample ID: 180-104179-3 Date Collected: 03/31/20 14:15 **Matrix: Water**

Date Received: 04/01/20 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHICS2100B		1			312544	04/10/20 15:07	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311870	04/02/20 10:00	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: A		1			313332	04/18/20 16:01	WTR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311870	04/02/20 10:00	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: A		1			313490	04/21/20 13:01	RSK	TAL PIT

Eurofins TestAmerica, Pittsburgh

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Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Lab Sample ID: 180-104179-3 Client Sample ID: GWC-4B

Date Collected: 03/31/20 14:15 Date Received: 04/01/20 08:00 **Matrix: Water**

Job ID: 180-104179-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	311873	04/02/20 08:04	AVS	TAL PIT
Total/NA	Analysis	SM 4500 H+ B		1			312017	04/03/20 18:10	PMH	TAL PIT
	Instrument	ID: NOEQUIP								

Client Sample ID: GWC-4A Lab Sample ID: 180-104179-4

Date Collected: 03/31/20 15:45 **Matrix: Water** Date Received: 04/01/20 08:00

Dron Tuno	Batch	Batch Method	Bun	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Prep Type Total/NA	Type Analysis Instrumer	EPA 300.0 R2.1 at ID: CHICS2100B	Run	1	Amount	Amount	312544	04/10/20 15:23	Analyst SAC	Lab TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311870	04/02/20 10:00	RJR	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: A		1			313332	04/18/20 16:11	WTR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	311873	04/02/20 08:04	AVS	TAL PIT
Total/NA	Analysis Instrumer	SM 4500 H+ B		1			312017	04/03/20 18:12	PMH	TAL PIT

Client Sample ID: LF3-DUP-02 Lab Sample ID: 180-104179-5

Date Collected: 03/31/20 00:00

Matrix: Water Date Received: 04/01/20 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrument	EPA 300.0 R2.1 ID: CHICS2100B		1			312544	04/10/20 15:39	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311870	04/02/20 10:00	RJR	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B :ID: A		1			313332	04/18/20 16:15	WTR	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	311873	04/02/20 08:04	AVS	TAL PIT
Total/NA	Analysis Instrument	SM 4500 H+ B ID: NOEQUIP		1			312017	04/03/20 18:14	РМН	TAL PIT

Client Sample ID: LF3-FERB-01 Lab Sample ID: 180-104179-6

Date Collected: 03/31/20 16:00 **Matrix: Water** Date Received: 04/01/20 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			312544	04/10/20 12:29	SAC	TAL PIT
	Instrumer	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	311870	04/02/20 10:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313332	04/18/20 16:18	WTR	TAL PIT
	Instrumer	t ID: A								

4/29/2020

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Lab Sample ID: 180-104179-6 Client Sample ID: LF3-FERB-01

Date Collected: 03/31/20 16:00 **Matrix: Water** Date Received: 04/01/20 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	311873	04/02/20 08:04	AVS	TAL PIT
Total/NA	Analysis Instrument	SM 4500 H+ B ID: NOEQUIP		1			312017	04/03/20 18:16	PMH	TAL PIT

Client Sample ID: LF3-FERB-02

Lab Sample ID: 180-104179-7 Date Collected: 03/31/20 16:05 **Matrix: Water** Date Received: 04/01/20 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHICS2100B		1			312544	04/10/20 12:45	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311870	04/02/20 10:00	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: A		1			313332	04/18/20 16:22	WTR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	311873	04/02/20 08:04	AVS	TAL PIT
Total/NA	Analysis Instrumen	SM 4500 H+ B		1			312017	04/03/20 18:17	PMH	TAL PIT

Client Sample ID: LF3-FB-01

Lab Sample ID: 180-104179-8 Date Collected: 03/31/20 16:10 **Matrix: Water** Date Received: 04/01/20 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrument	EPA 300.0 R2.1 ID: CHICS2100B		1			312544	04/10/20 15:54	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311870	04/02/20 10:00	RJR	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B :ID: A		1			313332	04/18/20 16:25	WTR	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	311873	04/02/20 08:04	AVS	TAL PIT
Total/NA	Analysis Instrument	SM 4500 H+ B		1			312017	04/03/20 18:19	РМН	TAL PIT

Client Sample ID: LF3-FB-02 Lab Sample ID: 180-104179-9

Date Collected: 03/31/20 16:15 **Matrix: Water** Date Received: 04/01/20 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			312544	04/10/20 16:42	SAC	TAL PIT
	Instrumer	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	311870	04/02/20 10:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313332	04/18/20 16:29	WTR	TAL PIT
	Instrumer	t ID: A								

Eurofins TestAmerica, Pittsburgh

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Job ID: 180-104179-1

4/29/2020

Lab Chronicle

Client: Southern Company Job ID: 180-104179-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Lab Sample ID: 180-104179-9 Client Sample ID: LF3-FB-02

Date Collected: 03/31/20 16:15 **Matrix: Water** Date Received: 04/01/20 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	311873	04/02/20 08:04	AVS	TAL PIT
Total/NA	Analysis	SM 4500 H+ B		1			312017	04/03/20 18:21	PMH	TAL PIT
	instrument	ID: NOEQUIP								

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Prep

RJR = Ron Rosenbaum

Batch Type: Analysis

AVS = Abbey Smith

PMH = Paloma Hoelzle

RSK = Robert Kurtz

SAC = Shawn Clemente

WTR = Bill Reinheimer

Client: Southern Company

Job ID: 180-104179-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWC-2 Lab Sample ID: 180-104179-1

Date Collected: 03/31/20 11:45

Date Received: 04/01/20 08:00

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.7		1.0	0.32	mg/L			04/10/20 14:20	1
Fluoride	0.043	J	0.10	0.026	mg/L			04/10/20 14:20	1
Sulfate	1.0		1.0	0.38	mg/L			04/10/20 14:20	1
Method: EPA 6020B - Meta	als (ICP/MS) - T	otal Recov	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.077		0.010	0.0016	mg/L		04/02/20 10:00	04/18/20 15:54	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/02/20 10:00	04/18/20 15:54	1
Boron	0.046	J	0.080	0.039	mg/L		04/02/20 10:00	04/21/20 12:54	1
Calcium	8.3		0.50	0.13	mg/L		04/02/20 10:00	04/18/20 15:54	1
Chromium	0.0050		0.0020	0.0015	mg/L		04/02/20 10:00	04/18/20 15:54	1
Cobalt	0.00061	J	0.0025	0.00013	mg/L		04/02/20 10:00	04/18/20 15:54	1
Copper	< 0.00063		0.0020	0.00063	mg/L		04/02/20 10:00	04/18/20 15:54	1
Lead	< 0.00013		0.0010	0.00013	mg/L		04/02/20 10:00	04/18/20 15:54	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		04/02/20 10:00	04/18/20 15:54	1
Zinc	0.0065	В	0.0050	0.0032	mg/L		04/02/20 10:00	04/18/20 15:54	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	50		10	10	mg/L			04/02/20 08:04	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
рН	6.1	HF	0.1	0.1	SU			04/03/20 18:02	1
Temperature	21.0	HF	0.1	0.1	Degrees C			04/03/20 18:02	1

Client Sample ID: GWC-5

Date Collected: 03/31/20 12:30

Lab Sample ID: 180-104179-2

Matrix: Water

Date Received: 04/01/20 08:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.2		1.0	0.32	mg/L			04/10/20 14:35	1
Fluoride	0.16		0.10	0.026	mg/L			04/10/20 14:35	1
Sulfate	11		1.0	0.38	mg/L			04/10/20 14:35	1
Method: EPA 6020B - Meta	Is (ICP/MS) - T	otal Recove	erable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.67		0.010	0.0016	mg/L		04/02/20 10:00	04/18/20 15:57	1
Beryllium	0.00060	J	0.0025	0.00018	mg/L		04/02/20 10:00	04/18/20 15:57	1
Boron	<0.039		0.080	0.039	mg/L		04/02/20 10:00	04/21/20 12:57	1
Calcium	12		0.50	0.13	mg/L		04/02/20 10:00	04/18/20 15:57	1
Chromium	<0.0015		0.0020	0.0015	mg/L		04/02/20 10:00	04/18/20 15:57	1
Cobalt	0.012		0.0025	0.00013	mg/L		04/02/20 10:00	04/18/20 15:57	1
Copper	<0.00063		0.0020	0.00063	mg/L		04/02/20 10:00	04/18/20 15:57	1
Lead	< 0.00013		0.0010	0.00013	mg/L		04/02/20 10:00	04/18/20 15:57	1
Vanadium	0.0016		0.0010	0.00099	mg/L		04/02/20 10:00	04/18/20 15:57	1
Zinc	0.025	В	0.0050	0.0032	mg/L		04/02/20 10:00	04/18/20 15:57	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	750		10	10	mg/L			04/02/20 08:04	1

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4/29/2020

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWC-5 Lab Sample ID: 180-104179-2 Date Collected: 03/31/20 12:30

Matrix: Water

Job ID: 180-104179-1

Date Received: 04/01/20 08:00

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.6	HF	0.1	0.1	SU	_		04/03/20 18:09	1
Temperature	20.4	HF	0.1	0.1	Degrees C			04/03/20 18:09	1

Client Sample ID: GWC-4B Lab Sample ID: 180-104179-3 Date Collected: 03/31/20 14:15 **Matrix: Water**

Date Received: 04/01/20 08:00

Method: EPA 300.0 R2.1	- Anions, Ion Chroma	atography						
Analyte	Result Qual	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39	1.0	0.32	mg/L			04/10/20 15:07	1
Fluoride	<0.026	0.10	0.026	mg/L			04/10/20 15:07	1
Sulfate	1.9	1.0	0.38	mg/L			04/10/20 15:07	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.052		0.010	0.0016	mg/L		04/02/20 10:00	04/18/20 16:01	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/02/20 10:00	04/18/20 16:01	1
Boron	<0.039		0.080	0.039	mg/L		04/02/20 10:00	04/21/20 13:01	1
Calcium	0.26	J	0.50	0.13	mg/L		04/02/20 10:00	04/18/20 16:01	1
Chromium	<0.0015		0.0020	0.0015	mg/L		04/02/20 10:00	04/18/20 16:01	1
Cobalt	0.00028	J	0.0025	0.00013	mg/L		04/02/20 10:00	04/18/20 16:01	1
Copper	<0.00063		0.0020	0.00063	mg/L		04/02/20 10:00	04/18/20 16:01	1
Lead	0.00018	J	0.0010	0.00013	mg/L		04/02/20 10:00	04/18/20 16:01	1
Vanadium	0.0011		0.0010	0.00099	mg/L		04/02/20 10:00	04/18/20 16:01	1
Zinc	<0.0032		0.0050	0.0032	mg/L		04/02/20 10:00	04/18/20 16:01	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	85		10	10	mg/L			04/02/20 08:04	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.0	HF	0.1	0.1	SU			04/03/20 18:10	1
Temperature	20.3	uc	0.1	0.1	Degrees C			04/03/20 18:10	1

Lab Sample ID: 180-104179-4 Client Sample ID: GWC-4A **Matrix: Water**

Date Collected: 03/31/20 15:45 Date Received: 04/01/20 08:00

Method: EPA 300.0 R2.1 - Ani	ons, Ion Ch	romatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		1.0	0.32	mg/L			04/10/20 15:23	1
Fluoride	0.028	J	0.10	0.026	mg/L			04/10/20 15:23	1
Sulfate	2.5		1.0	0.38	mg/L			04/10/20 15:23	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.036		0.010	0.0016	mg/L		04/02/20 10:00	04/18/20 16:11	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/02/20 10:00	04/18/20 16:11	1
Boron	<0.039	٨	0.080	0.039	mg/L		04/02/20 10:00	04/18/20 16:11	1
Calcium	0.48	J	0.50	0.13	mg/L		04/02/20 10:00	04/18/20 16:11	1
Chromium	<0.0015		0.0020	0.0015	mg/L		04/02/20 10:00	04/18/20 16:11	1
Cobalt	0.00033	J	0.0025	0.00013	mg/L		04/02/20 10:00	04/18/20 16:11	1
Copper	<0.00063		0.0020	0.00063	mg/L		04/02/20 10:00	04/18/20 16:11	1

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Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWC-4A

Client: Southern Company

Date Collected: 03/31/20 15:45 Date Received: 04/01/20 08:00

Lab Sample ID: 180-104179-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00013		0.0010	0.00013	mg/L		04/02/20 10:00	04/18/20 16:11	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		04/02/20 10:00	04/18/20 16:11	1
Zinc	<0.0032		0.0050	0.0032	mg/L		04/02/20 10:00	04/18/20 16:11	1
General Chemistry Analyte	Popult	Qualifier	RL	MDL	l Init	D	Dropored	Anglyzad	Dil Fac
		Qualifier				D	Prepared	Analyzed	DII Fac
Total Dissolved Solids	52		10	10	mg/L			04/02/20 08:04	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac

0.1

0.1

4.6 HF

20.5 HF

0.1 SU

0.1 Degrees C

Client Sample ID: LF3-DUP-02

Date Collected: 03/31/20 00:00 Date Received: 04/01/20 08:00

рН

Temperature

Lab Sample ID: 180-104179-5

04/03/20 18:12

04/03/20 18:12

Matrix: Water

Method: EPA 30	0.0 R2.1 - Anions, Ion Chi	romatography						
Analyte	Result	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.3	1.0	0.32	mg/L			04/10/20 15:39	1
Fluoride	<0.026	0.10	0.026	mg/L			04/10/20 15:39	1
Sulfate	1.6	1.0	0.38	mg/L			04/10/20 15:39	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.078		0.010	0.0016	mg/L		04/02/20 10:00	04/18/20 16:15	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/02/20 10:00	04/18/20 16:15	1
Boron	0.053	J ^	0.080	0.039	mg/L		04/02/20 10:00	04/18/20 16:15	1
Calcium	8.2		0.50	0.13	mg/L		04/02/20 10:00	04/18/20 16:15	1
Chromium	0.0048		0.0020	0.0015	mg/L		04/02/20 10:00	04/18/20 16:15	1
Cobalt	0.00061	J	0.0025	0.00013	mg/L		04/02/20 10:00	04/18/20 16:15	1
Copper	<0.00063		0.0020	0.00063	mg/L		04/02/20 10:00	04/18/20 16:15	1
Lead	<0.00013		0.0010	0.00013	mg/L		04/02/20 10:00	04/18/20 16:15	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		04/02/20 10:00	04/18/20 16:15	1
Zinc	0.0087	В	0.0050	0.0032	mg/L		04/02/20 10:00	04/18/20 16:15	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	57		10	10	mg/L			04/02/20 08:04	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.1	HF	0.1	0.1	SU			04/03/20 18:14	1
Temperature	20.7	HF	0.1	0.1	Degrees C			04/03/20 18:14	1

Client Sample ID: LF3-FERB-01

Date Collected: 03/31/20 16:00

Date Received: 04/01/20 08:00

Method: EPA 300.0 R2.1 - Anio	ns, Ion Ch	romatogra	ohy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/10/20 12:29	1
Fluoride	0.032	J	0.10	0.026	mg/L			04/10/20 12:29	1
Sulfate	0.83	J	1.0	0.38	mg/L			04/10/20 12:29	1

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Lab Sample ID: 180-104179-6

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Matrix: Water

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: LF3-FERB-01

Date Collected: 03/31/20 16:00 Date Received: 04/01/20 08:00 Lab Sample ID: 180-104179-6

Matrix: Water

Job ID: 180-104179-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		04/02/20 10:00	04/18/20 16:18	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/02/20 10:00	04/18/20 16:18	1
Boron	<0.039	٨	0.080	0.039	mg/L		04/02/20 10:00	04/18/20 16:18	1
Calcium	<0.13		0.50	0.13	mg/L		04/02/20 10:00	04/18/20 16:18	1
Chromium	<0.0015		0.0020	0.0015	mg/L		04/02/20 10:00	04/18/20 16:18	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		04/02/20 10:00	04/18/20 16:18	1
Copper	<0.00063		0.0020	0.00063	mg/L		04/02/20 10:00	04/18/20 16:18	1
Lead	<0.00013		0.0010	0.00013	mg/L		04/02/20 10:00	04/18/20 16:18	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		04/02/20 10:00	04/18/20 16:18	1
Zinc	<0.0032		0.0050	0.0032	mg/L		04/02/20 10:00	04/18/20 16:18	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/02/20 08:04	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.5	HF	0.1	0.1	SU			04/03/20 18:16	1
Temperature	21.0	HF	0.1	0.1	Degrees C			04/03/20 18:16	1

Client Sample ID: LF3-FERB-02

Date Collected: 03/31/20 16:05 Date Received: 04/01/20 08:00

Lab Sample ID: 180-104179-7 **Matrix: Water**

Method: EPA 300.0 R2.1	- Anions, Ion Chr	omatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/10/20 12:45	1
Fluoride	0.029	J	0.10	0.026	mg/L			04/10/20 12:45	1
Sulfate	0.73	J	1.0	0.38	mg/L			04/10/20 12:45	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		04/02/20 10:00	04/18/20 16:22	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/02/20 10:00	04/18/20 16:22	1
Boron	<0.039	٨	0.080	0.039	mg/L		04/02/20 10:00	04/18/20 16:22	1
Calcium	<0.13		0.50	0.13	mg/L		04/02/20 10:00	04/18/20 16:22	1
Chromium	<0.0015		0.0020	0.0015	mg/L		04/02/20 10:00	04/18/20 16:22	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		04/02/20 10:00	04/18/20 16:22	1
Copper	<0.00063		0.0020	0.00063	mg/L		04/02/20 10:00	04/18/20 16:22	1
Lead	< 0.00013		0.0010	0.00013	mg/L		04/02/20 10:00	04/18/20 16:22	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		04/02/20 10:00	04/18/20 16:22	1
Zinc	<0.0032		0.0050	0.0032	mg/L		04/02/20 10:00	04/18/20 16:22	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/02/20 08:04	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.5	HF	0.1	0.1	SU		<u> </u>	04/03/20 18:17	1

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: LF3-FB-01

Date Collected: 03/31/20 16:10 Date Received: 04/01/20 08:00

Date Received: 04/01/20 08:00

Lab Sample ID: 180-104179-8

Matrix: Water

Job ID: 180-104179-1

Method: EPA 300.0 R2.1 - Anio	ns, Ion Chrom	natography						
Analyte	Result Qu	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32	1.0	0.32	mg/L			04/10/20 15:54	1
Fluoride	<0.026	0.10	0.026	mg/L			04/10/20 15:54	1
Sulfate	<0.38	1.0	0.38	mg/L			04/10/20 15:54	1

Method: EPA 6020B Analyte		otal Recove Qualifier	erable RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L			04/18/20 16:25	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/02/20 10:00	04/18/20 16:25	1
Boron	<0.039	٨	0.080	0.039	mg/L		04/02/20 10:00	04/18/20 16:25	1
Calcium	<0.13		0.50	0.13	mg/L		04/02/20 10:00	04/18/20 16:25	1
Chromium	<0.0015		0.0020	0.0015	mg/L		04/02/20 10:00	04/18/20 16:25	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		04/02/20 10:00	04/18/20 16:25	1
Copper	<0.00063		0.0020	0.00063	mg/L		04/02/20 10:00	04/18/20 16:25	1
Lead	<0.00013		0.0010	0.00013	mg/L		04/02/20 10:00	04/18/20 16:25	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		04/02/20 10:00	04/18/20 16:25	1
Zinc	<0.0032		0.0050	0.0032	mg/L		04/02/20 10:00	04/18/20 16:25	1

General Chemistry Analyte Total Dissolved Solids	Result <10	Qualifier	RL	MDL 10	Unit mg/L	_ D	Prepared	Analyzed 04/02/20 08:04	Dil Fac
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.5	HF	0.1	0.1	SU			04/03/20 18:19	1
Temperature	20.8	HF	0.1	0.1	Degrees C			04/03/20 18:19	1

Lab Sample ID: 180-104179-9 Client Sample ID: LF3-FB-02 Date Collected: 03/31/20 16:15 **Matrix: Water**

Method	EPA 300.0 R2.1 - Anions, Ion Ch	romatography						
Analyte	Result	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32	1.0	0.32	mg/L			04/10/20 16:42	1
Fluoride	0.035	J 0.10	0.026	mg/L			04/10/20 16:42	1
Sulfate	<0.38	1.0	0.38	mg/L			04/10/20 16:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		04/02/20 10:00	04/18/20 16:29	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/02/20 10:00	04/18/20 16:29	1
Boron	<0.039	^	0.080	0.039	mg/L		04/02/20 10:00	04/18/20 16:29	1
Calcium	<0.13		0.50	0.13	mg/L		04/02/20 10:00	04/18/20 16:29	1
Chromium	<0.0015		0.0020	0.0015	mg/L		04/02/20 10:00	04/18/20 16:29	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		04/02/20 10:00	04/18/20 16:29	1
Copper	<0.00063		0.0020	0.00063	mg/L		04/02/20 10:00	04/18/20 16:29	1
Lead	<0.00013		0.0010	0.00013	mg/L		04/02/20 10:00	04/18/20 16:29	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		04/02/20 10:00	04/18/20 16:29	1
Zinc	< 0.0032		0.0050	0.0032	mg/L		04/02/20 10:00	04/18/20 16:29	1

General Chemistry Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10	10	10	mg/L			04/02/20 08:04	1

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Client Sample Results

Client: Southern Company Job ID: 180-104179-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Lab Sample ID: 180-104179-9 Client Sample ID: LF3-FB-02 Date Collected: 03/31/20 16:15

Matrix: Water

Date Received: 04/01/20 08:00

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.5	HF	0.1	0.1	SU			04/03/20 18:21	1
Temperature	21.1	HF	0.1	0.1	Degrees C			04/03/20 18:21	1

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-104179-1

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

Lab Sample ID: MB 180-312544/48

Matrix: Water

Analysis Batch: 312544

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

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride 1.0 0.32 mg/L 04/10/20 18:17 <0.32 Fluoride 0.10 04/10/20 18:17 < 0.026 0.026 mg/L 04/10/20 18:17 Sulfate <0.38 1.0 0.38 mg/L

Lab Sample ID: MB 180-312544/6

Matrix: Water

Analysis Batch: 312544

MB MB Analyte Result Qualifier **MDL** Unit Prepared RL Analyzed Dil Fac Chloride < 0.32 1.0 0.32 mg/L 04/10/20 07:13 Fluoride <0.026 0.10 0.026 mg/L 04/10/20 07:13 04/10/20 07:13 Sulfate <0.38 1.0 0.38 mg/L

Lab Sample ID: LCS 180-312544/47

Matrix: Water

Analysis Batch: 312544

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Chloride 50.0 48.2 mg/L 96 90 - 110 Fluoride 2.50 2.30 mg/L 92 90 - 110 Sulfate 50.0 47.5 mg/L 95 90 - 110

Lab Sample ID: LCS 180-312544/5

Matrix: Water

Analysis Batch: 312544

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	50.0	48.6		mg/L		97	90 - 110	
Fluoride	2.50	2.37		mg/L		95	90 - 110	
Sulfate	50.0	48.4		mg/L		97	90 - 110	

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

Lab Sample ID: MB 180-311870/1-A

Matrix: Water

Analysis Batch: 313332

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

Prep Batch: 311870

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		04/02/20 10:00	04/18/20 14:59	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/02/20 10:00	04/18/20 14:59	1
Calcium	<0.13		0.50	0.13	mg/L		04/02/20 10:00	04/18/20 14:59	1
Chromium	<0.0015		0.0020	0.0015	mg/L		04/02/20 10:00	04/18/20 14:59	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		04/02/20 10:00	04/18/20 14:59	1
Copper	<0.00063		0.0020	0.00063	mg/L		04/02/20 10:00	04/18/20 14:59	1
Lead	<0.00013		0.0010	0.00013	mg/L		04/02/20 10:00	04/18/20 14:59	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		04/02/20 10:00	04/18/20 14:59	1
Zinc	0.00384	J	0.0050	0.0032	mg/L		04/02/20 10:00	04/18/20 14:59	1

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4/29/2020

Job ID: 180-104179-1

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

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

MB MB

Lab Sample ID: MB 180-311870/1-A

Matrix: Water

Analysis Batch: 313490

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

Prep Batch: 311870

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Boron 0.080 0.039 mg/L 04/02/20 10:00 04/21/20 11:41 <0.039

Lab Sample ID: LCS 180-311870/2-A

Matrix: Water

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

Analysis Batch: 313332	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Barium	1.00	1.04		mg/L		104	80 - 120
Beryllium	0.500	0.503		mg/L		101	80 - 120
Calcium	25.0	29.8		mg/L		119	80 - 120
Chromium	0.500	0.517		mg/L		103	80 - 120
Cobalt	0.500	0.522		mg/L		104	80 - 120
Copper	0.500	0.517		mg/L		103	80 - 120
Lead	0.500	0.529		mg/L		106	80 - 120
Vanadium	0.500	0.523		mg/L		105	80 - 120
Zinc	0.250	0.264		mg/L		105	80 - 120

Lab Sample ID: LCS 180-311870/2-A

Matrix: Water

Analysis Batch: 313490

Client Sample ID: Lab Control Sample **Prep Type: Total Recoverable Prep Batch: 311870** LCS LCS %Rec.

Spike Analyte Added Result Qualifier Unit %Rec Limits 1.25 1.25 Boron mg/L 100 80 - 120

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

Lab Sample ID: MB 180-311873/2

Matrix: Water

Analysis Batch: 311873

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Total Dissolved Solids <10 10 10 mg/L

Lab Sample ID: LCS 180-311873/1

Matrix: Water

рН

Client Sample ID: Lab Control Sample

SU

Analysis Batch: 311873 Spike LCS LCS %Rec.

Analyte Added Result Qualifier Unit D %Rec Limits **Total Dissolved Solids** 242 250 mg/L 103 80 - 120

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 180-312017/1

Matrix: Water Prep Type: Total/NA **Analysis Batch: 312017** Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits

7.0

7.00

Eurofins TestAmerica, Pittsburgh

99 - 101

Client Sample ID: Lab Control Sample

100

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Prep Type: Total/NA

4/29/2020

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

HPLC/IC

Analysis Batch: 312544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104179-1	GWC-2	Total/NA	Water	EPA 300.0 R2.1	<u> </u>
180-104179-2	GWC-5	Total/NA	Water	EPA 300.0 R2.1	
180-104179-3	GWC-4B	Total/NA	Water	EPA 300.0 R2.1	
180-104179-4	GWC-4A	Total/NA	Water	EPA 300.0 R2.1	
180-104179-5	LF3-DUP-02	Total/NA	Water	EPA 300.0 R2.1	
180-104179-6	LF3-FERB-01	Total/NA	Water	EPA 300.0 R2.1	
180-104179-7	LF3-FERB-02	Total/NA	Water	EPA 300.0 R2.1	
180-104179-8	LF3-FB-01	Total/NA	Water	EPA 300.0 R2.1	
180-104179-9	LF3-FB-02	Total/NA	Water	EPA 300.0 R2.1	
MB 180-312544/48	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-312544/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-312544/47	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-312544/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 311870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104179-1	GWC-2	Total Recoverable	Water	3005A	
180-104179-2	GWC-5	Total Recoverable	Water	3005A	
180-104179-3	GWC-4B	Total Recoverable	Water	3005A	
180-104179-4	GWC-4A	Total Recoverable	Water	3005A	
180-104179-5	LF3-DUP-02	Total Recoverable	Water	3005A	
180-104179-6	LF3-FERB-01	Total Recoverable	Water	3005A	
180-104179-7	LF3-FERB-02	Total Recoverable	Water	3005A	
180-104179-8	LF3-FB-01	Total Recoverable	Water	3005A	
180-104179-9	LF3-FB-02	Total Recoverable	Water	3005A	
MB 180-311870/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-311870/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 313332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104179-1	GWC-2	Total Recoverable	Water	EPA 6020B	311870
180-104179-2	GWC-5	Total Recoverable	Water	EPA 6020B	311870
180-104179-3	GWC-4B	Total Recoverable	Water	EPA 6020B	311870
180-104179-4	GWC-4A	Total Recoverable	Water	EPA 6020B	311870
180-104179-5	LF3-DUP-02	Total Recoverable	Water	EPA 6020B	311870
180-104179-6	LF3-FERB-01	Total Recoverable	Water	EPA 6020B	311870
180-104179-7	LF3-FERB-02	Total Recoverable	Water	EPA 6020B	311870
180-104179-8	LF3-FB-01	Total Recoverable	Water	EPA 6020B	311870
180-104179-9	LF3-FB-02	Total Recoverable	Water	EPA 6020B	311870
MB 180-311870/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	311870
LCS 180-311870/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	311870

Analysis Batch: 313490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104179-1	GWC-2	Total Recoverable	Water	EPA 6020B	311870
180-104179-2	GWC-5	Total Recoverable	Water	EPA 6020B	311870
180-104179-3	GWC-4B	Total Recoverable	Water	EPA 6020B	311870
MB 180-311870/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	311870
LCS 180-311870/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	311870

Eurofins TestAmerica, Pittsburgh

Job ID: 180-104179-1

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

General Chemistry

Analysis Batch: 311873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104179-1	GWC-2	Total/NA	Water	SM 2540C	
180-104179-2	GWC-5	Total/NA	Water	SM 2540C	
180-104179-3	GWC-4B	Total/NA	Water	SM 2540C	
180-104179-4	GWC-4A	Total/NA	Water	SM 2540C	
180-104179-5	LF3-DUP-02	Total/NA	Water	SM 2540C	
180-104179-6	LF3-FERB-01	Total/NA	Water	SM 2540C	
180-104179-7	LF3-FERB-02	Total/NA	Water	SM 2540C	
180-104179-8	LF3-FB-01	Total/NA	Water	SM 2540C	
180-104179-9	LF3-FB-02	Total/NA	Water	SM 2540C	
MB 180-311873/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-311873/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 312017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104179-1	GWC-2	Total/NA	Water	SM 4500 H+ B	
180-104179-2	GWC-5	Total/NA	Water	SM 4500 H+ B	
180-104179-3	GWC-4B	Total/NA	Water	SM 4500 H+ B	
180-104179-4	GWC-4A	Total/NA	Water	SM 4500 H+ B	
180-104179-5	LF3-DUP-02	Total/NA	Water	SM 4500 H+ B	
180-104179-6	LF3-FERB-01	Total/NA	Water	SM 4500 H+ B	
180-104179-7	LF3-FERB-02	Total/NA	Water	SM 4500 H+ B	
180-104179-8	LF3-FB-01	Total/NA	Water	SM 4500 H+ B	
180-104179-9	LF3-FB-02	Total/NA	Water	SM 4500 H+ B	
LCS 180-312017/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Job ID: 180-104179-1

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Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468

eurofins Environment Testing Testing

Client Information	Sampler D. Mr. Co. Ch. O.	Lab PM: Bortot, Veronica	Carrier Tracking No(s): COC No: 180-54270-10409.2	
Client Contact Lauren Petty	14	E-Mail: veronica.bortot@testamericainc.com	Page: Page of	
Company. Southern Company Services,		Analysis Requested		
Address. 3535 Colonnade Parkway	Due Date Requested:	I-A uz /		
City Birmingham	TAT Requested (days):			le le laO2
State, Zip. AL, 35243	STATION	Pb W 4€	D - Nitric Acid P - Na2. E - Na HSO 4 Q - Na2. F - MacOH Q - Na2.	P - Na204S Q - Na2SO3 R - Na2SO3
Phone: 205-992-5417(Tel)	PO#. SCS10382606	uDoD1;		504 Dodecahydrate
Email: Impetty@southernco.com	, MO #;	No) BaBeC	J - DI Water	tone AA 4-5
Project Name: CCR - Plant McIntosh Ash Landfill #3	Project # 18019950	etals	L-EDA	Z - other (specify)
Site: Georgia	#MOSS	Y) OSI M ətst	of co Other:	
Sample Identification	Sample Type Sample (C=comp.	Matrix (Wewater (Wewa	Mumber Number Special Instructions/Note:	ons/Note:
	Preserva	n Code: X D N		
GWC-2	3/31/20 1145 6	Water X X		
SWC-S	3/31/20 1230 G	Water		
6wc-4B	3/31/20 1415 6	Water		
GWC-4A	3/31/201545 6	Water		
LF3-DUP-02	3/31/20 - 6	Water		
1F3-FEPB-01	3/81/201600 6	Water		
Lf3-FERB-02	3/31/10/1005 6	Water		
LF3-PB-01	3/31/10/1010	Water		
LF3-F8-02	3/31/201015 6	Water U L L L	180-104179 Chain of Custody	
		Water		
		Water		
Pospible Hazard Identification Non-Hazard	☐ Poison B ☐ Unknown ☐ Radiological	Sample Disposal (A fee may be	essed if samples are retained longer than 1 mo	nth) Months
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:	nts:	
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:	
Relinquished by Relinquished by	2/31/20 1730 CO	Company Received by Received by	Date/Time Company	C My Ni M
Relinquished by:	Date/Time: Co	Company Received by:	Date/Time: Company	any
Custody Seals Intact: Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks	emarks:	
			Ver; (Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company Job Number: 180-104179-1

Login Number: 104179 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Say, Thomas C

Question Answer Comment

Radioactivity wasn't checked or is </= background as measured by a survey meter.

The cooler's custody seal, if present, is intact.

Sample custody seals, if present, are intact.

The cooler or samples do not appear to have been compromised or

tampered with.

Samples were received on ice.

Cooler Temperature is acceptable.

Cooler Temperature is recorded.

COC is present.

COC is filled out in ink and legible.

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

There are no discrepancies between the containers received and the COC.

Samples are received within Holding Time (excluding tests with immediate HTs)

Sample containers have legible labels.

Containers are not broken or leaking.

Sample collection date/times are provided.

Appropriate sample containers are used.

Sample bottles are completely filled.

Sample Preservation Verified.

There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Multiphasic samples are not present.

Samples do not require splitting or compositing.

Residual Chlorine Checked.

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238

Tel: (412)963-7058

Laboratory Job ID: 180-104274-1

Client Project/Site: CCR - Plant McIntosh Ash Landfill #3

For:

Southern Company PO BOX 2641 GSC8 Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

(Freignan)

Authorized for release by: 4/24/2020 1:13:19 PM

Shali Brown, Project Manager II (615)301-5031

shali.brown@testamericainc.com

·····LINKS ······

Review your project results through

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Have a Question?



Visit us at: www.testamericainc.com

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

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

PA Lab ID: 02-00416

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-104274-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-104274-1

Comments

No additional comments.

Receipt

The sample was received on 4/3/2020 8:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3° C.

GC Semi VOA

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

Metals

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

General Chemistry

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

Job ID: 180-104274-1

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Definitions/Glossary

Client: Southern Company Job ID: 180-104274-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Qualifiers

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Qualifier Description

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

Metals

B Compound was found in the blank and sample.

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

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
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)

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

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Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-104274-1

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-104274-1	GWA-3A	Water	04/02/20 11:30	04/03/20 08:30	

Job ID: 180-104274-1

Method Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

Job ID: 180-104274-1

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Lab Chronicle

Client: Southern Company Job ID: 180-104274-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-3A

Lab Sample ID: 180-104274-1 Date Collected: 04/02/20 11:30

Matrix: Water

Date Received: 04/03/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at ID: CHIC2100A		1			312640	04/11/20 12:27	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	312341	04/08/20 08:32	KEM	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: NEMO		1			313470	04/21/20 13:26	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	312341	04/08/20 08:32	KEM	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: NEMO		1			313652	04/22/20 13:40	WTR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	312057	04/04/20 08:38	AVS	TAL PIT

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KEM = Kimberly Mahoney

Batch Type: Analysis

AVS = Abbey Smith

MJH = Matthew Hartman

RJR = Ron Rosenbaum

WTR = Bill Reinheimer

Client Sample Results

Client: Southern Company

Job ID: 180-104274-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWA-3A

Date Collected: 04/02/20 11:30 Date Received: 04/03/20 08:30 Lab Sample ID: 180-104274-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		1.0	0.32	mg/L			04/11/20 12:27	1
Fluoride	0.051	J	0.10	0.026	mg/L			04/11/20 12:27	1
Sulfate	<0.38		1.0	0.38	mg/L			04/11/20 12:27	1
Method: EPA 6020B - Meta	als (ICP/MS) - T	otal Recov	erable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.088		0.010	0.0016	mg/L		04/08/20 08:32	04/21/20 13:26	1
Beryllium	0.00062	J	0.0025	0.00018	mg/L		04/08/20 08:32	04/21/20 13:26	1
Boron	0.084		0.080	0.039	mg/L		04/08/20 08:32	04/21/20 13:26	1
Calcium	3.0		0.50	0.13	mg/L		04/08/20 08:32	04/21/20 13:26	1
Chromium	0.0031		0.0020	0.0015	mg/L		04/08/20 08:32	04/21/20 13:26	1
Cobalt	0.0017	J	0.0025	0.00013	mg/L		04/08/20 08:32	04/21/20 13:26	1
Copper	0.0019	JB	0.0020	0.00063	mg/L		04/08/20 08:32	04/21/20 13:26	1
Lead	0.00062	JB	0.0010	0.00013	mg/L		04/08/20 08:32	04/21/20 13:26	1
Vanadium	0.0013		0.0010	0.00099	mg/L		04/08/20 08:32	04/22/20 13:40	1
Zinc	0.011		0.0050	0.0032	mg/L		04/08/20 08:32	04/21/20 13:26	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	61			10	mg/L			04/04/20 08:38	1

4/24/2020

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Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Lab Sample ID: MB 180-312640/6 **Matrix: Water**

Analysis Batch: 312640

Client Sample ID: Method Blank

Prep Type: Total/NA

Job ID: 180-104274-1

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride 1.0 0.32 mg/L 04/11/20 07:58 <0.32 Fluoride 0.10 0.026 mg/L 04/11/20 07:58 < 0.026 04/11/20 07:58 Sulfate <0.38 1.0 0.38 mg/L

Lab Sample ID: LCS 180-312640/5 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 312640

Spike LCS LCS %Rec. Analyte Added Result Qualifier Limits Unit D %Rec Chloride 50.0 50.8 mg/L 102 90 - 110 Fluoride 2.50 2.67 mg/L 107 90 - 110 Sulfate 50.0 50.1 mg/L 100 90 - 110

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

Lab Sample ID: MB 180-312341/1-A

Matrix: Water

Analysis Batch: 313470

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 312341**

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		04/08/20 08:32	04/21/20 13:21	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/08/20 08:32	04/21/20 13:21	1
Boron	<0.039		0.080	0.039	mg/L		04/08/20 08:32	04/21/20 13:21	1
Calcium	<0.13		0.50	0.13	mg/L		04/08/20 08:32	04/21/20 13:21	1
Chromium	<0.0015		0.0020	0.0015	mg/L		04/08/20 08:32	04/21/20 13:21	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		04/08/20 08:32	04/21/20 13:21	1
Copper	0.00146	J	0.0020	0.00063	mg/L		04/08/20 08:32	04/21/20 13:21	1
Lead	0.000241	J	0.0010	0.00013	mg/L		04/08/20 08:32	04/21/20 13:21	1
Zinc	<0.0032		0.0050	0.0032	mg/L		04/08/20 08:32	04/21/20 13:21	1

Lab Sample ID: MB 180-312341/1-A

Matrix: Water

Analyte

Vanadium

Analysis Batch: 313652

Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 312341

0.00099 mg/L

MB MB Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac

Lab Sample ID: LCS 180-312341/2-A

<0.00099

Matrix: Water

Analysis Batch: 313470

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Prep Batch: 312341

04/08/20 08:32 04/22/20 13:35

7 mary old Batom 6 to 110	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Barium	1.00	0.956		mg/L		96	80 - 120
Beryllium	0.500	0.460		mg/L		92	80 - 120
Boron	1.25	1.29		mg/L		103	80 - 120
Calcium	25.0	26.3		mg/L		105	80 - 120
Chromium	0.500	0.457		mg/L		91	80 - 120
Cobalt	0.500	0.462		mg/L		92	80 - 120
Copper	0.500	0.461		mg/L		92	80 - 120
Lead	0.500	0.484		mg/L		97	80 - 120

0.0010

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Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-104274-1

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

Lab Sample ID: LCS 180-312341/2-A			Client Sample ID: Lab Control Sample					
Matrix: Water					P	rep Ty	pe: Total Recoverable	
Analysis Batch: 313470							Prep Batch: 312341	
-	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
7inc	0.250	0.225		ma/l		04	90 120	

Lab Sample ID: LCS 180-312341/2-A Matrix: Water				Clie			: Lab Control Sample pe: Total Recoverable
Analysis Batch: 313652	Spike	LCS	LCS				Prep Batch: 312341 %Rec.
Analyte	Added	_	Qualifier	Unit	D	%Rec	Limits
Vanadium	0.500	0.481		mg/L		96	80 - 120

Lab Sample ID: 180-104274 Matrix: Water	I-1 MS						P	t Sample ID: GWA-3A be: Total Recoverable	
Analysis Batch: 313470	Sample	Sample	Spike	MS	MS				Prep Batch: 312341 %Rec.
Analyte	•	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Barium	0.088		1.00	1.13		mg/L		104	75 - 125
Beryllium	0.00062	J	0.500	0.500		mg/L		100	75 - 125
Boron	0.084		1.25	1.46		mg/L		110	75 - 125
Calcium	3.0		25.0	28.4		mg/L		102	75 - 125
Chromium	0.0031		0.500	0.522		mg/L		104	75 - 125
Cobalt	0.0017	J	0.500	0.500		mg/L		100	75 - 125
Copper	0.0019	JB	0.500	0.495		mg/L		99	75 - 125
Lead	0.00062	JB	0.500	0.526		mg/L		105	75 - 125
Zinc	0.011		0.250	0.245		mg/L		94	75 - 125

Lab Sample ID: 180-104274 Matrix: Water	-1 MS						P		t Sample ID: GWA- pe: Total Recoveral	
Analysis Batch: 313652									Prep Batch: 3123	341
_	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Vanadium	0.0013		0.500	0.497		mg/L		99	75 - 125	

Lab Sample ID: 180-104274 Matrix: Water Analysis Batch: 313470		O mare la	0	мор	мор		P		t Sample pe: Total I Prep Ba	Recove	rable 12341
Analyte	•	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	0.088		1.00	1.10	Qualifier	mg/L		101	75 - 125	2	20
Beryllium	0.00062	J	0.500	0.498		mg/L		100	75 ₋ 125	0	20
Boron	0.084		1.25	1.46		mg/L		110	75 ₋ 125	0	20
Calcium	3.0		25.0	28.4		mg/L		102	75 - 125	0	20
Chromium	0.0031		0.500	0.514		mg/L		102	75 - 125	1	20
Cobalt	0.0017	J	0.500	0.501		mg/L		100	75 - 125	0	20
Copper	0.0019	JB	0.500	0.505		mg/L		101	75 - 125	2	20
Lead	0.00062	JB	0.500	0.516		mg/L		103	75 - 125	2	20
Zinc	0.011		0.250	0.248		mg/L		95	75 - 125	1	20

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QC Sample Results

Client: Southern Company Job ID: 180-104274-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Lab Sample ID: 180-104274-1 MSD

Analysis Batch: 313652

Sample Sample Analyte Result Qualifier Vanadium 0.0013

Added

Spike 0.500

MSD MSD Result Qualifier 0.493

MDL Unit

10 mg/L

Unit mg/L %Rec

Limits 98 75 - 125

Prep Type: Total/NA

Prep Batch: 312341

RPD

RPD

20

Limit

Client Sample ID: GWA-3A

Prep Type: Total Recoverable

%Rec.

Client Sample ID: Method Blank

Analyzed

04/04/20 08:38

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

Lab Sample ID: MB 180-312057/2

Lab Sample ID: LCS 180-312057/1

Matrix: Water

Matrix: Water

Analysis Batch: 312057

мв мв

Result Qualifier Total Dissolved Solids

<10

RL10

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

Matrix: Water

Analysis Batch: 312057

Analyte **Total Dissolved Solids**

Spike Added 242

LCS LCS Result Qualifier 246

Unit mg/L

D %Rec 102

Prepared

%Rec. Limits 80 - 120

10

QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

HPLC/IC

Analysis Batch: 312640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104274-1	GWA-3A	Total/NA	Water	EPA 300.0 R2.1	
MB 180-312640/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-312640/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 312341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104274-1	GWA-3A	Total Recoverable	Water	3005A	<u> </u>
MB 180-312341/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-312341/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-104274-1 MS	GWA-3A	Total Recoverable	Water	3005A	
180-104274-1 MSD	GWA-3A	Total Recoverable	Water	3005A	

Analysis Batch: 313470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104274-1	GWA-3A	Total Recoverable	Water	EPA 6020B	312341
MB 180-312341/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	312341
LCS 180-312341/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	312341
180-104274-1 MS	GWA-3A	Total Recoverable	Water	EPA 6020B	312341
180-104274-1 MSD	GWA-3A	Total Recoverable	Water	EPA 6020B	312341

Analysis Batch: 313652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104274-1	GWA-3A	Total Recoverable	Water	EPA 6020B	312341
MB 180-312341/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	312341
LCS 180-312341/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	312341
180-104274-1 MS	GWA-3A	Total Recoverable	Water	EPA 6020B	312341
180-104274-1 MSD	GWA-3A	Total Recoverable	Water	EPA 6020B	312341

General Chemistry

Analysis Batch: 312057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104274-1	GWA-3A	Total/NA	Water	SM 2540C	
MB 180-312057/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-312057/1	Lab Control Sample	Total/NA	Water	SM 2540C	

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Job ID: 180-104274-1

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4/24/2020

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468

· eurofins

N - None
O - Asha02
P - Na2O4S
Q - Na2S03
R - Na2S233
S - H2SO4
I - TSP Dodecahydrate
U - Acetone
V - MCAA
W - PH 4-5
Z - other (specify) Por City Ver: 01/16/2019 Special Instructions/Note: COC No: 180-54270-10409.1 Preservation Codes A - HCL
B - NaOH
C - Zn Acetate
C - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid Page 1 of DI Water - EDTA - EDA 180-104274 Chain of Custody Total Number of containers 3/2/2 Analysis Requested ooler Temperature(s) °C and Other Remarks. Special Instructions/QC Requirements veronica.bortot@testamericainc.com Received by: 2540C_Calcd, TDS 300_Chloride, Fluoride, Sulfate 2 Lab PM: Bortot, Veronica 6020 - B, Ca; State Metals BaBeCrCoCuPby/SchgfW Zn Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No) E-Mail: (C) Water Water Water Preservation Code Water Water Water Water Matrix Water Water Water Water Company Radiological Sample Type G=grab) (C=comp, 1000265 hop 0 1000 D. McCarthe TAT Requested (days): Standar of Sample Time 1130 Date: Unknown Due Date Requested: 02/2/1 PO#. SCS10382606 Sample Date 4/2/20 Project #: 18019950 SSOW#: Date/Time. Poison B Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify Custody Seal No. Project Name. CCR - Plant McIntosh Ash Landfill #3 Flammable Possible Hazard Identification Southern Company Services, Inc Empty Kit Relinquished by Impetty@southernco.com 3535 Colonnade Parkway Custody Seals Intact: Client Information Sample Identification GWA-3A A Yes A No 205-992-5417(Tel) inquished by: nquished by: _auren Petty Birmingham State, Zip: AL, 35243

Client: Southern Company

Job Number: 180-104274-1

Login Number: 104274 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Say, Thomas C

oroator: cay, moniac c		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s 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 1st Semiannual Event March 2020

Georgia Power Company – McIntosh Landfill 3 Quality Control Review of Analytical Data – March 2020

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Eurofins TestAmerica, Pittsburgh for groundwater samples collected at McIntosh LF3 between March 10, 2020 and March 31, 2020. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix. SDG 180-103436 was revised by the laboratory to correct sample IDs.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detected monitoring constituents listed in 40 CFR, Part 257, Appendix III and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Determination of Inorganic Anions (USEPA Method 300.0), and Solids in Water (Standard Methods 2540C).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)¹ and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)². The review included an assessment of the results for completeness, precision (laboratory duplicate recoveries and matrix spike/matrix spike duplicate recoveries), accuracy (laboratory control samples and matrix spike samples), and blank contamination (field, equipment, and laboratory blanks). Sample receipt conditions, holding times, and chains of custody (COCs) were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

DATA QUALITY OBJECTIVES

Laboratory Precision: Laboratory goals for precision were met.

Field Precision: Field goals for precision were met, with the exceptions of Sulfate

and Cobalt on GWC-1 (180-103490-1) and Sulfate and Zinc on GWC-2 (180-104179-1) as described in the qualifications section

below.

Accuracy: Laboratory goals for accuracy were met, with the exception of

Copper on GWA-5 (180-103436-1) as described in the

qualifications section below.

Detection Limits: Project goals for detection limits were met.

Completeness: There were no rejected analytical results for this event, resulting

in a completion of 100%.

Holding Times: Holding time requirements were met.

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

U: 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.

Sample GWA-5 (180-103436-1) was qualified as estimated (J) for Copper as the
associated matrix spike recovery was above the QC criteria (126% above the range of
75-125).

- Samples GWC-1 (180-103490-1) and LF3-DUP-01 (180-103490-7) were qualified as estimated (J) for Sulfate and Cobalt as the field relative percent differences (RPDs) exceeded QC criteria (80.00% and 32.26%, respectively above the limit of 25).
- Samples GWC-2 (180-104179-1) and LF3-DUP-02 (180-104179-5) were qualified as estimated (J) for Sulfate and Zinc as the field RPDs exceeded QC criteria (46.15% and 28.95%, respectively above limit of 25).
- Certain Zinc results in SDG 180-104179 were qualified as non-detect (U) due to the
 analyte(s) being detected at a similar concentration in an associated blank sample. As
 shown in Table 2, when the original sample result was above the reporting limit (RL),
 both the RL and method detection limit (MDL) were raised to the sample result as part
 of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from McIntosh LF3 sampled between March 10, 2020 and March 31, 2020 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

¹USEPA, 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

²USEPA, 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 – March 2020

						Ar	nalyses	
SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Metals (6020B)	Anions (300.0)	TDS (SM 2540C)
103436	GWA-5	3/10/2020	180-103436-1	GW		Х	Х	Х
103436	GWA-5 FILTERED	3/10/2020	180-103436-2	GW		Х	Х	Х
103436	GWA-4	3/10/2020	180-103436-3	GW		Х	Х	Х
103436	GWA-3A	3/10/2020	180-103436-4	GW		Х	Х	Х
103436	GWA-2A	3/10/2020	180-103436-5	GW		Х	Х	X
103436	GWA-2B	3/10/2020	180-103436-6	GW		Х	Х	X
103436	GWC-1	3/11/2020	180-103490-1	GW		Х	Χ	X
103436	GWC-6	3/11/2020	180-103490-2	GW		Х	X	X
103436	GWA-7A	3/11/2020	180-103490-3	GW		Х	X	X
103436	GWA-7	3/11/2020	180-103490-4	GW		Х	X	X
103436	GWA-3B FILTERED	3/11/2020	180-103490-5	GW		Х	Х	Х
103436	GWA-3B	3/11/2020	180-103490-6	GW		Х	Х	Х
103436	LF3-DUP-01	3/11/2020	180-103490-7	GW	FD (GWC-1)	Х	Х	Х
104179	GWC-2	3/31/2020	180-104179-1	GW		Х	Х	Х
104179	GWC-5	3/31/2020	180-104179-2	GW		X	Х	Х
104179	GWC-4B	3/31/2020	180-104179-3	GW		X	Х	Х
104179	GWC-4A	3/31/2020	180-104179-4	GW		Х	Х	Х
104179	LF4-DUP-01	3/31/2020	180-104179-5	GW	FD (GWC-2)	Х	Х	Х
104179	LF4-FERB-01	3/31/2020	180-104179-6	WQ	EB	Х	Х	Х
104179	LF4-FERB-01	3/31/2020	180-104179-7	WQ	EB	Х	Х	Х
104179	LF4-FB-01	3/31/2020	180-104179-8	WQ	FB	X	Х	Х
104179	LF4-FB-02	3/31/2020	180-104179-9	WQ	FB	X	Х	Х

Abbreviations:

EB – Equipment Blank

FB – Field Blank

FD – Field Duplicate

 $\mathsf{GW}-\mathsf{Groundwater}$

QC – Quality Control

TDS – Total Dissolved Solids

WQ – Water Quality Control

TABLE 2

Georgia Power Company – McIntosh LF3

Qualifier Summary Table – March 2020

SDG	Field	Constituent	New RL	New MDL	Qualifier	Reason
	Identification			or MDC		
103436	GWC-1	Sulfate			J	RPD exceeds field goal
103436	LF3-DUP-01	Sulfate			J	RPD exceeds field goal
103436	GWC-1	Cobalt			J	RPD exceeds field goal
103436	LF3-DUP-01	Cobalt			J	RPD exceeds field goal
104179	GWC-2	Sulfate			J	RPD exceeds field goal
104179	LF3-DUP-02	Sulfate			J	RPD exceeds field goal
104179	GWC-2	Zinc			J	RPD exceeds field goal
104179	LF3-DUP-02	Zinc			J	RPD exceeds field goal
103436	GWA-5	Copper			J	MS recovery above QC criteria
104179	GWC-2	Zinc	0.0065	0.0065	U	Blank detection
104179	GWC-5	Zinc	0.025	0.025	U	Blank detection

Abbreviations:

MDC – Minimum Detectable Concentration
MS/MSD – Matrix Spike / Matrix Spike Duplicate

MDL – Method Detection Limit

RL – Reporting Limit

RPD – Relative Percent Difference

SDG – Sample Delivery Group

TDS – Total Dissolved Solids

Qualifiers:

J – Estimated Result

U – Non-Detect Result

Date: 2020-03-10 17:36:47

Alexis Peristaltic

Project Information:

Pump Information: **Operator Name** JBash Pump Model/Type

Company Name GEI **Tubing Type LDPE** Project Name Tubing Diameter McIntosh 0.17 in Tubing Length Site Name Default Site 33.87 ft

Latitude 0° 0' 0" 0° 0' 0" Longitude Sonde SN 647057

Pump placement from TOC Turbidity Make/Model 2.5 ft

Well Information: Pumping Information:

Well ID GWA-1A Final Pumping Rate 100 mL/min Total System Volume Well diameter 2 in 0.2411761 L Calculated Sample Rate 37.30 ft Well Total Depth 300 sec Screen Length 10 ft Stabilization Drawdown 1.08 in Depth to Water 7.32 ft Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary Time Elapsed Temp C SpCond µS/cmTurb NTU DTW ft RDO mg/L ORP mV рН +/- 0 +/- 0.1 Stabilization +/- 5% +/- 10% +/- 0 +/- 0 17:13:35 1799.98 19.25 5.54 77.23 5.03 7.41 1.22 109.40 Last 5 Last 5 2099.96 5.50 73.73 4.86 7.41 1.23 108.35 17:18:35 19.15 Last 5 17:23:34 2399.96 19.08 5.46 70.56 3.98 7.41 1.09 108.50 Last 5 17:28:34 2699.95 18.93 5.46 69.50 3.83 7.41 1.02 106.68 Last 5 17:33:34 2999.94 19.00 5.48 67.89 3.24 7.41 1.05 103.33 Variance 0 -0.07-0.03 -3.17 -0.14 0.14 Variance 1 -0.15 -0.01 -1.06 -0.07 -1.81 Variance 2 0.07 0.02 -1.61 0.03 -3.35

Notes

Sampled at 1735

Date: 2020-03-10 17:01:46

Pumping Information:

Project Information:

Pump Information: Operator Name L. Coker Pump Model/Type

Alexis Peristaltic Company Name GEI **Tubing Type LDPE** Project Name Tubing Diameter .170 in McIntosh Tubing Length Site Name Default Site 35 ft

0° 0' 0" Latitude 0° 0' 0" Longitude 613179 Sonde SN

Turbidity Make/Model LaMotte 2020we Pump placement from TOC 2 ft

Well Information:

Final Pumping Rate 150 mL/min Well ID GWA-2A Well diameter 2 in Total System Volume 0.2462198 L Calculated Sample Rate Well Total Depth 43.20 ft 300 sec Screen Length 10 ft Stabilization Drawdown 1.8 in Total Volume Pumped Depth to Water 4.5 L 12.90 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10%	+/- 0.1	+/- 5%	+/- 10%		+/- 0.2	+/- 10%
Last 5	16:34:45	600.02	20.57	5.57	82.03	0.51	13.00	0.85	73.70
Last 5	16:39:45	900.02	20.44	5.41	82.30	0.59	13.01	0.77	79.15
Last 5	16:44:45	1200.02	20.39	5.41	82.10	0.69	13.01	0.72	78.85
Last 5	16:49:45	1500.02	20.40	5.39	81.17	0.71	13.05	0.61	80.17
Last 5	16:54:45	1800.02	20.33	5.39	81.34	0.65	13.05	0.61	83.12
Variance 0			-0.04	0.00	-0.20			-0.06	-0.29
Variance 1			0.00	-0.02	-0.93			-0.11	1.31
Variance 2			-0.07	0.01	0.17			0.00	2.96

Notes

Sampled at 1700

Date: 2020-03-10 18:04:07

Project Information:

Operator Name
Company Name
Project Name
Site Name
Latitude
Longitude
Sonde SN

L. Coker
GEI
McIntosh
Default Site
O° 0' 0"

0° 0' 0"

613179

Pump Information:

Pump Model/Type Peristaltic
Tubing Type LDPE
Tubing Diameter .170 in
Tubing Length 35 ft

Turbidity Make/Model LaMotte 2020we Pump placement from TOC

2 ft

Well Information:

Well ID GWA-2B
Well diameter 2 in
Well Total Depth ft
Screen Length 10 ft
Depth to Water 12.80 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.2462198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 15 in
Total Volume Pumped 5.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10%	+/- 0.1	+/- 5%	+/- 10%		+/- 0.2	+/- 10%
Last 5	17:28:42	900.01	20.17	5.68	200.16	0.51	13.85	1.77	74.95
Last 5	17:33:42	1200.02	20.13	5.65	200.81	0.62	13.90	1.03	74.72
Last 5	17:38:42	1500.02	20.11	5.62	200.12	1.10	14.00	0.83	72.78
Last 5	17:43:42	1800.03	20.16	5.57	200.02	0.98	14.00	0.61	73.74
Last 5	17:48:42	2100.03	20.17	5.56	199.47	0.62	14.00	0.44	73.53
Variance 0			-0.02	-0.03	-0.69			-0.20	-1.95
Variance 1			0.05	-0.04	-0.10			-0.22	0.96
Variance 2			0.01	-0.01	-0.54			-0.17	-0.21

Notes

Sampled at 1755

Date: 2020-03-10 17:00:13

Project Information:

Pump Information: Operator Name J.Noles Pump Model/Type

Alexis Peristaltic Company Name GEI **Tubing Type LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 32 ft

Latitude 00 0' 0" 00 0' 0" Longitude 497259 Sonde SN

Turbidity Make/Model LaMotte 2020we Pump placement from TOC ft

Pumping Information: Well Information:

Final Pumping Rate 200 mL/min Well ID GWA-3A Well diameter 2 in Total System Volume 0.2328295 L Calculated Sample Rate Well Total Depth 33 ft 300 sec Screen Length 10 ft Stabilization Drawdown 4.4 in Depth to Water **Total Volume Pumped** 7.45 ft 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	Com Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	16:46:46	300.02	19.18	4.79	84.85	1.78	8.26	4.26	242.44
Last 5	16:51:46	600.02	18.91	4.80	85.24	1.28	8.46	4.19	276.80
Last 5	16:56:46	900.02	18.91	4.79	85.20	1.12	8.66	4.13	296.81
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.27	0.01	0.39			-0.07	34.36
Variance 2			0.00	-0.01	-0.04			-0.06	20.01

Notes

Sampled at 1700

Test Date / Time: 4/2/2020 9:50:07 AM

Project: Plant McIntosh

Operator Name: Daniel McCartha

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:

8.25 ft

Pump Type: Alexis Peristaltic

Tubing Type: LDPE

Pump Intake From TOC: 28.5 ft Estimated Total Volume Pumped:

9 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 1.33 ft Instrument Used: Aqua TROLL 400

Serial Number: 728623

Test Notes:

Landfill 3

Drawdown 0.0 feet over last 4 readings

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water
		+/- 0.1	+/- 10 %	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3
4/2/2020 9:50 AM	00:00	4.84 pH	16.29 °C	90.24 μS/cm	3.50 mg/L	5.57 NTU	221.4 mV	8.50 ft
4/2/2020 9:55 AM	05:00	4.85 pH	17.09 °C	87.77 μS/cm	2.79 mg/L	7.51 NTU	214.3 mV	8.98 ft
4/2/2020 10:00 AM	10:00	4.82 pH	17.32 °C	88.84 µS/cm	2.42 mg/L	10.74 NTU	222.3 mV	9.12 ft
4/2/2020 10:05 AM	15:00	4.80 pH	17.41 °C	89.56 µS/cm	2.15 mg/L	9.46 NTU	228.6 mV	9.25 ft
4/2/2020 10:10 AM	20:00	4.78 pH	17.45 °C	90.99 μS/cm	1.75 mg/L	7.71 NTU	224.5 mV	9.31 ft
4/2/2020 10:15 AM	25:00	4.77 pH	17.54 °C	91.41 μS/cm	1.62 mg/L	7.75 NTU	228.5 mV	9.39 ft
4/2/2020 10:20 AM	30:00	4.78 pH	17.54 °C	90.89 μS/cm	1.53 mg/L	9.48 NTU	230.0 mV	9.46 ft
4/2/2020 10:25 AM	35:00	4.77 pH	17.49 °C	91.11 μS/cm	1.51 mg/L	10.02 NTU	231.6 mV	9.52 ft
4/2/2020 10:30 AM	40:00	4.76 pH	17.50 °C	91.51 μS/cm	1.52 mg/L	9.33 NTU	363.8 mV	9.55 ft
4/2/2020 10:35 AM	45:00	4.75 pH	17.43 °C	92.10 μS/cm	1.40 mg/L	7.81 NTU	365.4 mV	9.57 ft
4/2/2020 10:40 AM	50:00	4.77 pH	17.50 °C	91.14 μS/cm	1.46 mg/L	7.82 NTU	238.0 mV	9.57 ft
4/2/2020 10:45 AM	55:00	4.77 pH	17.54 °C	90.48 μS/cm	1.48 mg/L	6.63 NTU	230.8 mV	9.57 ft
4/2/2020 10:50 AM	01:00:00	4.77 pH	17.58 °C	90.62 μS/cm	1.48 mg/L	6.60 NTU	231.6 mV	9.57 ft
4/2/2020 10:55 AM	01:05:00	4.75 pH	17.54 °C	91.34 μS/cm	1.33 mg/L	6.51 NTU	226.7 mV	9.57 ft
4/2/2020 11:00 AM	01:10:00	4.77 pH	17.63 °C	90.50 μS/cm	1.37 mg/L	6.32 NTU	227.0 mV	9.57 ft

4/2/2020 11:05 AM	01:15:00	4.77 pH	17.59 °C	90.49 μS/cm	1.41 mg/L	4.89 NTU	229.3 mV	9.58 ft
4/2/2020 11:10 AM	01:20:00	4.76 pH	17.66 °C	90.60 μS/cm	1.37 mg/L	6.10 NTU	226.3 mV	9.58 ft
4/2/2020 11:15 AM	01:25:00	4.75 pH	17.72 °C	90.87 μS/cm	1.29 mg/L	6.69 NTU	225.0 mV	9.58 ft
4/2/2020 11:20 AM	01:30:00	4.75 pH	17.77 °C	91.28 μS/cm	1.28 mg/L	6.69 NTU	347.6 mV	9.58 ft

9.57 ft

Samples

Sample ID:	Description:
GWA-3A	Landfill 3 sampled at 1130
GWA-3A	NTU above 5 but less than 10 after 90 minutes

Created using VuSitu from In-Situ, Inc.

Date: 2020-03-11 10:42:42

Project Information:

Pump Information: Operator Name Pump Model/Type J.Noles

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 18 ft

Latitude 00 0' 0" 00 0' 0" Longitude 497259 Sonde SN

Turbidity Make/Model LaMotte 2020we Pump placement from TOC ft

Pumping Information: Well Information:

Final Pumping Rate 100 mL/min Well ID GWA-3B Well diameter 2 in Total System Volume 0.1703416 L Calculated Sample Rate Well Total Depth 18 ft 300 sec Screen Length 10 ft Stabilization Drawdown 8.4 in Depth to Water **Total Volume Pumped** 4.05 ft 9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization	1		+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:21:12	4200.33	16.23	5.35	55.70	14.80	4.75	5.37	108.87
Last 5	10:26:12	4500.33	16.24	5.37	56.00	15.50	4.75	5.35	108.63
Last 5	10:31:12	4800.33	16.32	5.37	56.14	14.30	4.75	5.27	109.42
Last 5	10:36:12	5100.33	16.46	5.38	56.47	13.70	4.75	5.34	109.50
Last 5	10:41:12	5400.33	16.50	5.38	56.18	14.40	4.75	5.27	110.81
Variance 0			0.09	0.00	0.14			-0.07	0.79
Variance 1			0.14	0.01	0.33			0.07	0.09
Variance 2			0.04	-0.00	-0.28			-0.06	1.30

Notes

Filtered and unfiltered sampled at 1040

Date: 2020-03-10 15:22:40

Project Information:

Pump Information: Operator Name J.Noles Pump Model/Type

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name LF3 Tubing Diameter 0.17 in Tubing Length Site Name McIntosh 27 ft

Latitude 00 0' 0" 00 0' 0" Longitude 497259 Sonde SN

Turbidity Make/Model LaMotte 2020we Pump placement from TOC ft

Pumping Information: Well Information:

Final Pumping Rate 200 mL/min Well ID GWA-4 Well diameter 2 in Total System Volume 0.2105124 L Calculated Sample Rate Well Total Depth 29 ft 300 sec Screen Length 10 ft Stabilization Drawdown 54.6 in Depth to Water **Total Volume Pumped** 6.85 ft 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	Com Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:58:57	600.02	17.53	5.17	45.19	2.27	8.79	4.01	135.59
Last 5	15:03:57	900.02	17.43	4.75	45.19	2.12	9.65	3.99	139.79
Last 5	15:08:57	1200.02	17.44	4.62	45.16	2.01	10.29	3.95	145.02
Last 5	15:13:57	1500.02	17.43	4.59	45.06	1.98	12.01	3.93	150.78
Last 5	15:18:57	1800.02	17.53	4.59	44.98	1.63	12.68	3.90	155.96
Variance 0			0.02	-0.13	-0.03			-0.04	5.22
Variance 1			-0.01	-0.03	-0.10			-0.02	5.76
Variance 2			0.10	0.00	-0.07			-0.04	5.18

Notes

Sampled at 1525

Date: 2020-03-10 16:07:11

Project Information:

Pump Information: Operator Name Pump Model/Type JBash

Alexis Peristaltic Company Name Tubing Type GEI LDPE Project Name Tubing Diameter 0.17 in McIntosh Tubing Length Site Name **Default Site** 27.62 ft

0° 0' 0" Latitude 0° 0' 0" Longitude Sonde SN 647057

Turbidity Make/Model Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate Well ID 100 mL/min GWA-5 Total System Volume 0.2132798 L Well diameter 2 in Calculated Sample Rate Well Total Depth 33.00 ft 300 sec Screen Length 10 ft Stabilization Drawdown 48.36 in

Depth to Water Total Volume Pumped 9 L 5.10 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:42:35	4200.91	20.02	4.83	64.65	15.44	8.81	4.36	96.83
Last 5	15:47:35	4500.90	20.08	4.80	65.13	15.57	8.98	4.36	98.30
Last 5	15:52:35	4800.89	20.10	4.83	64.89	15.50	9.06	4.31	97.75
Last 5	15:57:35	5100.88	20.58	4.83	64.74	15.39	9.09	4.40	98.36
Last 5	16:02:35	5400.87	20.30	4.81	64.80	11.03	9.13	4.58	100.20
Variance 0			0.03	0.03	-0.24			-0.05	-0.54
Variance 1			0.47	-0.00	-0.15			0.09	0.61
Variance 2			-0.27	-0.02	0.06			0.18	1.84

Notes

Sampled at 1600

Date: 2020-03-11 09:38:44

Project Information:

Pump Information: Operator Name L. Coker Pump Model/Type

Alexis Peristaltic Company Name Tubing Type GEI **LDPE** Project Name Tubing Diameter .170 in McIntosh Tubing Length Site Name Default Site 27 ft

0° 0' 0" Latitude 0° 0' 0" Longitude 613179 Sonde SN

Turbidity Make/Model LaMotte 2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate 120 mL/min Well ID GWA-7 Well diameter 2 in Total System Volume 0.2105124 L Calculated Sample Rate Well Total Depth 32.84 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0.96 in Total Volume Pumped Depth to Water 4.2 L 11.14 ft

Low-Flow Sampling Stabilization Summary

	Time	Time Elapsed Temp C pH SpCond μ S/cm Tur		cm Turb NTU	DTW ft	RDO mg/L	ORP mV		
Stabilization			+/- 10%	+/- 0.1	+/- 5%	+/- 10%		+/- 0.2	+/- 10%
Last 5	09:17:00	900.02	18.15	5.30	36.35	2.57	11.21	1.11	94.10
Last 5	09:22:00	1200.02	18.35	5.29	36.31	4.16	11.22	1.04	94.48
Last 5	09:27:00	1500.02	18.62	5.27	36.44	2.90	11.22	1.00	95.67
Last 5	09:32:00	1800.03	18.82	5.28	36.37	2.91	11.22	0.98	95.66
Last 5	09:37:00	2100.02	18.88	5.27	36.80	3.22	11.22	0.96	96.83
Variance 0			0.27	-0.02	0.12			-0.04	1.19
Variance 1			0.20	0.01	-0.06			-0.02	-0.02
Variance 2			0.06	-0.02	0.43			-0.02	1.17

Notes

Sampled at 0945

Date: 2020-03-11 10:34:56

Project Information:

Pump Information: Operator Name L. Coker Pump Model/Type

Alexis Peristaltic Company Name Tubing Type GEI LDPE Project Name Tubing Diameter .170 in McIntosh Tubing Length Site Name Default Site 39 ft

0° 0' 0" Latitude 0° 0' 0" Longitude 613179 Sonde SN

Turbidity Make/Model LaMotte 2020we Pump placement from TOC 2 ft

Pumping Information: Well Information:

Final Pumping Rate 150 mL/min Well ID GWA-7A Well diameter 2 in Total System Volume 0.2640735 L Calculated Sample Rate Well Total Depth 46 ft 300 sec Screen Length 10 ft Stabilization Drawdown 6 in Total Volume Pumped Depth to Water 5.2 L 15.75 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10%	+/- 0.1	+/- 5%	+/- 10%		+/- 0.2	+/- 10%
Last 5	10:09:07	900.02	19.29	5.67	201.17	1.26	16.22	0.26	45.05
Last 5	10:14:07	1200.02	19.42	5.49	248.30	1.45	16.22	0.23	61.55
Last 5	10:19:07	1500.02	19.48	5.13	286.04	0.51	16.22	0.21	86.55
Last 5	10:24:07	1800.03	19.43	5.06	291.65	0.82	16.23	0.20	91.36
Last 5	10:29:07	2100.02	19.40	5.05	291.88	1.04	16.25	0.19	92.81
Variance 0			0.06	-0.36	37.74			-0.02	25.00
Variance 1			-0.05	-0.07	5.61			-0.01	4.81
Variance 2			-0.03	-0.01	0.23			-0.01	1.44

Notes

Sampled at 1035

Date: 2020-03-11 10:55:41

Project Information:

Pump Information: **Operator Name** JBash Pump Model/Type

Alexis Peristaltic Company Name GEI **Tubing Type LDPE** Tubing Diameter **Project Name** McIntosh 0.17 in Tubing Length Site Name Default Site 31.50 ft

Latitude 0° 0' 0" 0° 0' 0" Longitude Sonde SN 647057

Pump placement from TOC 2 ft Turbidity Make/Model

Well Information: Pumping Information:

Well ID GWC-1 Final Pumping Rate 100 mL/min Total System Volume Well diameter 2 in 0.2305978 L Calculated Sample Rate 35.96 ft Well Total Depth 300 sec Screen Length 1.2 in 10 ft Stabilization Drawdown Depth to Water 11.04 ft Total Volume Pumped 3.5 L

Low-Flow Sampling Stabilization Summary Time Elapsed Temp C SpCond µS/cmTurb NTU DTW ft RDO mg/L ORP mV рН +/- 0 +/- 0.1 Stabilization +/- 5% +/- 10% +/- 0 +/- 0 10:20:43 900.00 19.44 5.25 54.79 1.21 11.14 0.92 135.03 Last 5 Last 5 10:25:43 1199.99 5.23 54.55 0.89 11.13 0.92 133.89 19.52 Last 5 10:30:43 1499.98 19.48 5.20 54.19 1.49 11.14 0.86 133.76 Last 5 10:35:43 1799.96 19.53 5.24 54.02 0.66 11.14 0.86 130.38 Last 5 10:40:43 2099.96 19.48 5.21 53.61 0.53 11.14 0.85 129.99 Variance 0 -0.04-0.03 -0.36 -0.06 -0.13 0.04 -3.39 Variance 1 0.04 -0.17 0.00 -0.03 Variance 2 -0.04-0.41-0.01 -0.38

Notes

Sampled at 1040

Test Date / Time: 3/31/2020 10:51:37 AM

Project: Plant McIntosh

Operator Name: Daniel McCartha

Location Name: GWC-2

Well Diameter: 2 in

Casing Type: PVC

Screen Length: 10 ft Top of Screen: 27.25 ft

Total Depth: 37.35 ft Initial Depth to Water:

10.83

Pump Type: Alexis Peristaltic

Tubing Type: LDPE

Estimated Total Volume Pumped:

4.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.06 ft Instrument Used: Aqua TROLL 400

Serial Number: 728623

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water
		+/- 0.1	+/- 10 %	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3
3/31/2020 10:51 AM	00:00	5.87 pH	20.49 °C	102.43 μS/cm	2.80 mg/L	0.42 NTU	108.0 mV	10.83 ft
3/31/2020 10:56 AM	05:00	5.86 pH	20.50 °C	100.80 μS/cm	2.73 mg/L	0.47 NTU	78.1 mV	10.87 ft
3/31/2020 11:01 AM	10:00	5.85 pH	20.53 °C	99.32 µS/cm	2.67 mg/L	0.51 NTU	102.8 mV	10.89 ft
3/31/2020 11:06 AM	15:00	5.82 pH	20.57 °C	96.20 μS/cm	2.65 mg/L	0.58 NTU	77.5 mV	10.89 ft
3/31/2020 11:11 AM	20:00	5.78 pH	20.62 °C	92.64 µS/cm	2.59 mg/L	0.12 NTU	77.7 mV	10.89 ft
3/31/2020 11:16 AM	25:00	5.75 pH	20.67 °C	91.34 μS/cm	2.56 mg/L	0.49 NTU	75.7 mV	10.89 ft
3/31/2020 11:21 AM	30:00	5.73 pH	20.83 °C	89.02 µS/cm	2.50 mg/L	0.43 NTU	78.4 mV	10.89 ft
3/31/2020 11:24 AM	32:31	5.71 pH	20.84 °C	88.36 µS/cm	2.47 mg/L	0.25 NTU	104.1 mV	10.89 ft
3/31/2020 11:29 AM	37:31	5.68 pH	20.94 °C	84.98 µS/cm	2.44 mg/L	0.16 NTU	79.2 mV	10.89 ft
3/31/2020 11:34 AM	42:31	5.64 pH	20.97 °C	83.30 µS/cm	2.41 mg/L	0.35 NTU	79.5 mV	10.89 ft
3/31/2020 11:39 AM	47:31	5.65 pH	21.02 °C	82.96 µS/cm	2.38 mg/L	0.51 NTU	78.7 mV	10.89 ft
3/31/2020 11:44 AM	52:31	5.64 pH	20.99 °C	82.10 µS/cm	2.37 mg/L	0.51 NTU	78.2 mV	10.89 ft

Samples

Sa	ample ID:	Description:	
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GWC-2	Sampled at 1145, LF3-DUP-02 taken here
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Created using VuSitu from In-Situ, Inc.

Test Date / Time: 3/31/2020 3:04:36 PM

Project: Plant McIntosh

Operator Name: Daniel McCartha

Location Name: GWC-4A

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft

Top of Screen: 27 ft Total Depth: 37 ft

Initial Depth to Water: 12.23 ft

Pump Type: Alexis Peristaltic

Tubing Type: LDPE

Pump Intake From TOC: 32 ft Estimated Total Volume Pumped:

3.3 liter

Flow Cell Volume: 90 ml Final Flow Rate: 110 ml/min Final Draw Down: 0.32 ft Instrument Used: Aqua TROLL 400

Serial Number: 728623

Test Notes:

Weather Conditions:

Cloudy, chance of rain

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water
		+/- 0.1	+/- 10 %	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3
3/31/2020 3:04 PM	00:00	4.67 pH	21.20 °C	70.44 μS/cm	3.08 mg/L	3.86 NTU	113.3 mV	12.23 ft
3/31/2020 3:09 PM	05:00	4.66 pH	20.75 °C	71.99 µS/cm	2.11 mg/L	4.56 NTU	107.6 mV	12.58 ft
3/31/2020 3:14 PM	10:00	4.66 pH	20.66 °C	71.93 µS/cm	2.02 mg/L	5.67 NTU	117.1 mV	12.65 ft
3/31/2020 3:19 PM	15:00	4.66 pH	20.68 °C	72.17 µS/cm	1.99 mg/L	2.60 NTU	119.3 mV	12.65 ft
3/31/2020 3:24 PM	20:00	4.66 pH	20.60 °C	72.09 µS/cm	1.94 mg/L	3.62 NTU	124.4 mV	12.59 ft
3/31/2020 3:29 PM	25:00	4.66 pH	20.59 °C	72.12 µS/cm	1.88 mg/L	2.94 NTU	128.2 mV	12.57 ft
3/31/2020 3:34 PM	30:00	4.66 pH	20.66 °C	72.17 µS/cm	1.83 mg/L	2.94 NTU	132.7 mV	12.55 ft

Samples

Sample ID:	Description:
GWC-4A	Sampled at 1545

Test Date / Time: 3/31/2020 1:19:47 PM

Project: Plant McIntosh (5) **Operator Name**: Daniel McCartha

Location Name: GWC-4B

Well Diameter: 2 in Casing Type: PVC

Screen Length: 10 ft Top of Screen: 8 ft Total Depth: 14.75 ft

Initial Depth to Water: 10.55 ft **Pump Type: Alexis Peristaltic**

Tubing Type: LDPE

Pump Intake From TOC: 12.5 ft Estimated Total Volume Pumped:

5.25 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.26 ft Instrument Used: Aqua TROLL 400

Serial Number: 728623

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water
		+/- 0.1	+/- 10 %	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3
3/31/2020 1:19 PM	00:00	4.55 pH	21.64 °C	200.10 μS/cm	0.72 mg/L	1.94 NTU	-31.7 mV	10.55 ft
3/31/2020 1:24 PM	05:00	4.56 pH	21.24 °C	193.55 μS/cm	0.38 mg/L	1.59 NTU	-39.6 mV	10.60 ft
3/31/2020 1:29 PM	10:00	4.55 pH	21.02 °C	203.30 μS/cm	0.29 mg/L	2.04 NTU	-35.8 mV	10.68 ft
3/31/2020 1:34 PM	15:00	4.57 pH	20.83 °C	201.08 μS/cm	0.24 mg/L	2.32 NTU	-36.7 mV	10.71 ft
3/31/2020 1:39 PM	20:00	4.57 pH	20.75 °C	196.68 µS/cm	0.21 mg/L	1.86 NTU	-37.5 mV	10.74 ft
3/31/2020 1:44 PM	25:00	4.58 pH	20.58 °C	194.77 µS/cm	0.21 mg/L	1.32 NTU	-37.3 mV	10.75 ft
3/31/2020 1:49 PM	30:00	4.60 pH	20.61 °C	178.82 µS/cm	0.19 mg/L	0.71 NTU	-39.3 mV	10.76 ft
3/31/2020 1:54 PM	35:00	4.61 pH	20.58 °C	168.70 μS/cm	0.16 mg/L	0.62 NTU	-41.8 mV	10.77 ft
3/31/2020 1:59 PM	40:00	4.61 pH	20.57 °C	167.45 µS/cm	0.16 mg/L	0.71 NTU	-41.9 mV	10.78 ft
3/31/2020 2:04 PM	45:00	4.62 pH	20.50 °C	162.20 µS/cm	0.16 mg/L	0.44 NTU	-42.3 mV	10.80 ft
3/31/2020 2:09 PM	50:00	4.63 pH	20.48 °C	160.97 μS/cm	0.15 mg/L	0.44 NTU	-43.1 mV	10.81 ft

Samples

Sample ID:	Description:
GWC-4B	Sampled at 1415

Test Date / Time: 3/31/2020 10:46:57 AM

Project: Plant McIntosh **Operator Name:** L. Coker

Location Name: GWC-5 LF3

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 20.96 ft Total Depth: 30.59 ft

Initial Depth to Water: 11.41 ft

Pump Type: Alexis Peristaltic

Tubing Type: LDPE

Estimated Total Volume Pumped:

15 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 4.75 ft Instrument Used: Aqua TROLL 400

Serial Number: 728638

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
3/31/2020 10:46 AM	00:00	6.20 pH	20.81 °C	1,038.2 μS/cm	7.67 mg/L	0.37 NTU	183.7 mV	11.41 ft	150.00 ml/min
3/31/2020 10:51 AM	05:00	6.18 pH	20.14 °C	1,005.8 μS/cm	0.63 mg/L	0.34 NTU	66.2 mV	12.40 ft	150.00 ml/min
3/31/2020 10:56 AM	10:00	6.19 pH	20.12 °C	1,029.9 μS/cm	0.56 mg/L	0.32 NTU	65.9 mV	12.61 ft	150.00 ml/min
3/31/2020 10:59 AM	12:16	6.17 pH	20.14 °C	1,014.4 µS/cm	0.60 mg/L	0.32 NTU	59.5 mV	12.80 ft	150.00 ml/min
3/31/2020 11:00 AM	13:57	6.18 pH	20.11 °C	1,002.2 μS/cm	0.64 mg/L	0.36 NTU	55.3 mV	13.20 ft	150.00 ml/min
3/31/2020 11:04 AM	17:33	6.18 pH	20.07 °C	1,015.4 μS/cm	1.77 mg/L	0.41 NTU	51.0 mV	13.40 ft	150.00 ml/min
3/31/2020 11:09 AM	22:33	6.18 pH	20.16 °C	994.42 μS/cm	1.28 mg/L	0.52 NTU	34.3 mV	13.60 ft	150.00 ml/min
3/31/2020 11:14 AM	27:33	6.19 pH	20.10 °C	928.84 μS/cm	2.48 mg/L	0.55 NTU	44.3 mV	13.80 ft	150.00 ml/min
3/31/2020 11:19 AM	32:33	6.17 pH	20.17 °C	917.09 μS/cm	0.44 mg/L	0.60 NTU	43.7 mV	14.20 ft	150.00 ml/min
3/31/2020 11:24 AM	37:33	6.17 pH	20.27 °C	1,027.7 μS/cm	0.37 mg/L	0.60 NTU	43.0 mV	14.60 ft	150.00 ml/min
3/31/2020 11:29 AM	42:37	6.19 pH	20.33 °C	946.07 μS/cm	0.35 mg/L	0.61 NTU	32.7 mV	14.70 ft	150.00 ml/min
3/31/2020 11:34 AM	47:37	6.20 pH	20.40 °C	969.70 μS/cm	0.41 mg/L	0.63 NTU	48.7 mV	14.90 ft	150.00 ml/min
3/31/2020 11:39 AM	52:37	6.18 pH	20.45 °C	985.92 μS/cm	0.39 mg/L	0.65 NTU	33.4 mV	15.15 ft	150.00 ml/min
3/31/2020 11:44 AM	57:37	6.19 pH	20.39 °C	965.97 μS/cm	0.28 mg/L	0.37 NTU	34.1 mV	15.50 ft	150.00 ml/min
3/31/2020 11:49 AM	01:02:37	6.18 pH	20.32 °C	912.27 μS/cm	0.29 mg/L	0.40 NTU	31.6 mV	15.65 ft	150.00 ml/min
3/31/2020 11:54 AM	01:07:37	6.18 pH	20.30 °C	985.48 μS/cm	0.27 mg/L	0.37 NTU	32.4 mV	15.80 ft	150.00 ml/min

3/31/2020	01:12:37	6.18 pH	20.40 °C	994.53 μS/cm	0.29 mg/L	0.41 NTU	32.2 mV	16.00 ft	150.00 ml/min
11:59 AM									
3/31/2020	01:17:37	6.17 pH	20.47 °C	943.23 µS/cm	0.31 mg/L	0.45 NTU	49.8 mV	16.10 ft	150.00 ml/min
12:04 PM		'		·					
3/31/2020	01:22:37	6.19 pH	20.52 °C	957.32 µS/cm	0.31 mg/L	0.38 NTU	32.4 mV	16.13 ft	150.00 ml/min
12:09 PM	01.22.57	0.13 pm	20.02	σον ισε μονοιτί	0.01 mg/L	0.001110	02.4 mv	10.15 10	100.00 111/111111
3/31/2020	01:27:37	6.18 pH	20.73 °C	945.93 µS/cm	0.38 mg/L	0.35 NTU	34.4 mV	16.16 ft	150.00 ml/min
12:14 PM	01:27:37	6. 16 рп	20.73 C	945.95 μ5/cm	0.36 Hig/L	0.35 NTO	34.4 1117	10.1011	150.00 111/11111
3/31/2020	01:28:52	6.17 pH	20.77 °C	946.28 µS/cm	0.39 mg/L	0.35 NTU	43.7 mV	16.16 ft	150.00 ml/min
12:15 PM	01.20.32	0.17 pm	20.11	940.20 μ3/611	0.59 Hig/L	0.55 N10	45.7 1110	10.1011	130.00 111/111111

Samples

Sample ID:	Sampled at 1230	Description:

Created using VuSitu from In-Situ, Inc.

Date: 2020-03-11 09:40:57

Project Information:

Pump Information: Operator Name Pump Model/Type JBash

Alexis Peristaltic Company Name Tubing Type GEI LDPE Project Name Tubing Diameter 0.17 in McIntosh Tubing Length 31.61 ft Site Name **Default Site**

0° 0' 0" Latitude 0° 0' 0" Longitude Sonde SN 647057

Turbidity Make/Model Pump placement from TOC 2 ft

Pumping Information: Well Information:

GWC-6 Final Pumping Rate Well ID 100 mL/min Total System Volume 0.2310888 L Well diameter 2 in Calculated Sample Rate Well Total Depth 32.64 ft 300 sec Screen Length 10 ft Stabilization Drawdown 50.04 in

Total Volume Pumped Depth to Water 3 L 13.59 ft

Low-Flow S	Sampling Stab	ilization Summary	
	Time	Elapsed	1

	Time	Elapsed	Temp C	рН	SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:12:51	600.01	18.28	5.23	47.16	1.42	15.27	4.39	95.83
Last 5	09:17:51	900.00	18.42	5.23	47.23	1.07	15.87	4.53	101.51
Last 5	09:22:51	1199.99	18.51	5.24	47.16	1.37	16.26	4.47	104.05
Last 5	09:27:51	1499.98	18.86	5.23	46.96	1.52	17.10	4.35	107.85
Last 5	09:32:51	1799.97	19.04	5.23	46.95	2.06	17.76	4.45	109.90
Variance 0			0.09	0.00	-0.07			-0.06	2.54
Variance 1			0.35	-0.01	-0.21			-0.13	3.80
Variance 2			0.18	0.00	-0.01			0.10	2.05

Notes

Sampled at 0930



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 180-107800-1

Client Project/Site: CCR - Plant McIntosh Ash Landfill #3

For:

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

Attn: Kristen N Jurinko

() ray sum

Authorized for release by: 7/7/2020 4:36:31 PM

Shali Brown, Project Manager II (615)301-5031

shali.brown@testamericainc.com

·····LINKS ······

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Total Access

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www.eurofinsus.com/Env

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

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

PA Lab ID: 02-00416

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-107800-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-107800-1

Comments

No additional comments.

Receipt

The sample was received on 7/2/2020 8:30 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.1° C.

Field Service / Mobile Lab

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

General Chemistry

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

Job ID: 180-107800-1

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Definitions/Glossary

Client: Southern Company Job ID: 180-107800-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Glossary

LOD

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)

LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDI	Mothed Detection Limit

Limit of Detection (DoD/DOE)

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)

RLReporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Page 4 of 14

Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Job ID: 180-107800-1

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21
California	State	2891	04-30-21
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-21
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-20 *
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	08-01-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	05-23-21
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-21
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-21
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

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^{*} Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Pittsburgh

Sample Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received
 Asset ID

 180-107800-1
 GWC-5
 Water
 06/30/20 13:50
 07/02/20 08:30
 Asset ID

Job ID: 180-107800-1

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Method Summary

Client: Southern Company

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Method	Method Description	Protocol	Laboratory
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Job ID: 180-107800-1

Lab Chronicle

Client: Southern Company Job ID: 180-107800-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Lab Sample ID: 180-107800-1 **Client Sample ID: GWC-5**

Date Collected: 06/30/20 13:50 **Matrix: Water** Date Received: 07/02/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	320453	07/03/20 14:09	AGP	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			320756	06/30/20 13:50	CMK	TAL PIT

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

AGP = Angela Partridge CMK = Christina Kovitch

Client Sample Results

Client: Southern Company

Job ID: 180-107800-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

Client Sample ID: GWC-5 Lab Sample ID: 180-107800-1

Date Collected: 06/30/20 13:50 Matrix: Water

Date Received: 07/02/20 08:30

General Chemistry Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	710	10	10 mg/L			07/03/20 14:09	1
_							

	I Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	6.2				SU			06/30/20 13:50	1

QC Sample Results

Client: Southern Company Job ID: 180-107800-1

Project/Site: CCR - Plant McIntosh Ash Landfill #3

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

Lab Sample ID: MB 180-320453/2 **Client Sample ID: Method Blank Prep Type: Total/NA**

Matrix: Water

Analysis Batch: 320453 MB MB

Analyte **Result Qualifier** RL **MDL** Unit Prepared Analyzed Dil Fac Total Dissolved Solids 10 07/03/20 14:09 <10 10 mg/L

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 180-320453/1 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 320453

LCS LCS Spike Added Result Qualifier Analyte Unit D %Rec Limits **Total Dissolved Solids** 567 562 99 mg/L 80 - 120

%Rec.

10

QC Association Summary

Job ID: 180-107800-1

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

General Chemistry

Analysis Batch: 320453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-107800-1	GWC-5	Total/NA	Water	SM 2540C	
MB 180-320453/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-320453/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 320756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-107800-1	GWC-5	Total/NA	Water	Field Sampling	

Chain of Custody __cord

Eurofins Te-tAmerica, Pittsburgh

3 Park

301 Alpha Driv

Phone (412) 963-7058 Fax (412) 963-2468

Pittsburgh, PA 15238

Jent Testing

eurofins Env Jer America

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) Special Instructions/Note: Ver: 01/16/2019 Company Company Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Nathive For Montt Preservation Codes 01=6.20 A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
F - NanSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA 180-107800 Chain of Custody Job #: Page: Total Number of containers Date/Time: 6/30/01 Date/Time: Date/Time: Method of Shipment: Carrier Tracking No(s): **Analysis Requested** Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: Received by: Folgo E-Mail: shali.brown@testamericainc.com Received Received by: SOL Lab PM: Brown, Shali Time: Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No) (W=water, S=solid, O=waste/oil, Preservation Code: Matrix Company Acc Company 3 Radiological Type (C=comp, G=grab) Sample * 0 1700 Phone: 770-594-5998 Sample 2 DAY 1350 Time Date: Sampler 1 3er And Juknown Juknown TAT Requested (days): Due Date Requested: PO#: SCS10382606 WO#: Sample Date Date/Time: 6/30/LV 30-20 Project #: 18019950 Date/Time: * SSOW#: Poison B Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No.: 34 C-5 Project Name: Plant McIntosh Ash Landfill #3 Empty Kit Relinquished by: Custody Seals Intact: Address: 241 Ralph McGill Blvd SE Client Information Sample Identification Non-Hazard 404-506-7116(Tel) Email: SCS Contacts elinquished by: Client Contact: SCS Contacts selinquished by: elinquished by: State, Zip: GA, 30308 Company: GA Power City: Atlanta Georgia

Minnment Testing

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eurofins eurofins

SHIP DET : 29JUNED STANDS OF THE TOTAL STANDS OF SECURITY STANDS OF SECURITY STANDS OF SECURITY SECURI

DRIGIN ID:LIYA (404) 988-5629 HATT HALONE 1150 NOTHERDOW PKWY SUITE 100. ROSWELL, 64 30076 UNITED STATES US

TO SAMPLE RECEIVING

ETA PITTSBURGH 301 ALPHA DR

PITTSBURGH PA 15238 REFT

WED - 01 JUL 10:30A

16 9324 1161

AGCA

Uncorrected temp Thermometer ID

180-107800 Waybill

S

PT-WI-SR-001 effective 7/26/13 7

O Initials

Client: Southern Company

Job Number: 180-107800-1

Login Number: 107800 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Say, Thomas C

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

Eurofins TestAmerica, Pittsburgh

Page 14 of 14

Low-Flow Test Report:

Test Date / Time: 6/30/2020 10:21:09 AM Project: Plant McIntosh - Landfill #3

Operator Name: J. Berisford

Location Name: GWC-5
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 20.96 ft
Total Depth: 30.59 ft

Initial Depth to Water: 16.31 ft

Pump Type: Peri pump Tubing Type: Poly

Pump Intake From TOC: 25 ft Estimated Total Volume Pumped:

56500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 250 ml/min Final Draw Down: 143.88 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Sunny, sample time 1350

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
6/30/2020 10:21 AM	00:00	4.62 pH	34.12 °C	0.14 µS/cm	7.09 mg/L		79.6 mV		200.00 ml/min
6/30/2020 10:26 AM	05:00	6.70 pH	25.01 °C	1,129.3 μS/cm	4.57 mg/L	1.93 NTU	152.2 mV	17.40 ft	200.00 ml/min
6/30/2020 10:31 AM	10:00	6.42 pH	25.47 °C	1,167.0 μS/cm	1.89 mg/L	1.19 NTU	162.5 mV	18.20 ft	200.00 ml/min
6/30/2020 10:36 AM	15:00	6.39 pH	23.34 °C	1,235.0 μS/cm	0.31 mg/L	1.38 NTU	170.5 mV	18.70 ft	200.00 ml/min
6/30/2020 10:41 AM	20:00	6.37 pH	23.32 °C	1,212.4 μS/cm	0.19 mg/L	1.22 NTU	161.2 mV	19.00 ft	200.00 ml/min
6/30/2020 10:46 AM	25:00	6.37 pH	23.83 °C	1,200.9 μS/cm	0.20 mg/L	1.59 NTU	159.8 mV	19.20 ft	200.00 ml/min
6/30/2020 10:51 AM	30:00	6.36 pH	24.70 °C	1,239.1 μS/cm	0.26 mg/L	1.39 NTU	167.1 mV	19.30 ft	200.00 ml/min
6/30/2020 10:56 AM	35:00	6.36 pH	25.67 °C	1,202.5 μS/cm	0.27 mg/L	1.33 NTU	167.9 mV	19.50 ft	200.00 ml/min
6/30/2020 11:01 AM	40:00	6.37 pH	24.00 °C	1,194.6 μS/cm	0.19 mg/L	1.48 NTU	158.4 mV	19.80 ft	200.00 ml/min
6/30/2020 11:06 AM	45:00	6.36 pH	23.92 °C	1,204.3 μS/cm	0.19 mg/L	1.51 NTU	156.8 mV	20.00 ft	200.00 ml/min
6/30/2020 11:11 AM	50:00	6.36 pH	24.18 °C	1,180.6 μS/cm	0.20 mg/L	1.65 NTU	155.7 mV	20.30 ft	200.00 ml/min
6/30/2020 11:16 AM	55:00	6.36 pH	24.15 °C	1,193.9 μS/cm	0.21 mg/L	1.11 NTU	154.4 mV	20.50 ft	200.00 ml/min
6/30/2020 11:21 AM	01:00:00	6.36 pH	24.05 °C	1,187.3 μS/cm	0.21 mg/L	1.29 NTU	153.3 mV	20.50 ft	200.00 ml/min
6/30/2020 11:26 AM	01:05:00	6.36 pH	22.13 °C	1,161.8 μS/cm	0.16 mg/L	2.75 NTU	163.1 mV	22.00 ft	500.00 ml/min
6/30/2020 11:31 AM	01:10:00	6.35 pH	21.72 °C	1,141.4 μS/cm	0.19 mg/L	1.06 NTU	152.1 mV	22.90 ft	500.00 ml/min

6/30/2020	01:15:00	6.32 pH	21.81 °C	1,126.9	0.22 mg/L	2.92 NTU	161.0 mV	23.60 ft	500.00 ml/min
11:36 AM 6/30/2020	01:20:00	6.03 pH	21.81 °C	μS/cm 759.12 μS/cm	0.14 mg/L	5.22 NTU	149.2 mV	24.20 ft	500.00 ml/min
11:41 AM 6/30/2020 11:46 AM	01:25:00	5.88 pH	22.17 °C	564.08 μS/cm	0.14 mg/L	29.00 NTU	142.4 mV	24.80 ft	500.00 ml/min
6/30/2020 11:51 AM	01:30:00	6.02 pH	23.94 °C	626.56 μS/cm	0.17 mg/L	44.00 NTU	141.4 mV	25.20 ft	200.00 ml/min
6/30/2020 11:56 AM	01:35:00	6.15 pH	23.43 °C	763.63 µS/cm	0.21 mg/L	60.00 NTU	142.2 mV	25.20 ft	200.00 ml/min
6/30/2020 12:01 PM	01:40:00	6.15 pH	22.84 °C	828.49 μS/cm	0.46 mg/L	73.00 NTU	141.3 mV	26.00 ft	300.00 ml/min
6/30/2020 12:06 PM	01:45:00	6.16 pH	22.93 °C	815.04 μS/cm	2.07 mg/L	29.00 NTU	150.6 mV	26.80 ft	300.00 ml/min
6/30/2020 12:11 PM	01:50:00	6.27 pH	22.93 °C	982.47 μS/cm	1.86 mg/L	18.00 NTU	152.4 mV	27.60 ft	300.00 ml/min
6/30/2020 12:16 PM	01:55:00	6.33 pH	23.18 °C	1,078.4 μS/cm	1.34 mg/L	11.00 NTU	152.5 mV	28.00 ft	300.00 ml/min
6/30/2020 12:21 PM	02:00:00	6.33 pH	23.35 °C	1,046.6 μS/cm	1.74 mg/L	7.39 NTU	142.9 mV	28.50 ft	300.00 ml/min
6/30/2020 12:26 PM	02:05:00	6.34 pH	23.85 °C	1,038.2 μS/cm	2.15 mg/L	4.49 NTU	150.9 mV	28.90 ft	300.00 ml/min
6/30/2020 12:31 PM	02:10:00	6.33 pH	24.20 °C	1,009.0 μS/cm	2.43 mg/L	2.29 NTU	141.6 mV	28.90 ft	250.00 ml/min
6/30/2020 12:36 PM	02:15:00	6.33 pH	24.60 °C	1,007.6 μS/cm	2.39 mg/L	2.73 NTU	140.5 mV	28.90 ft	250.00 ml/min
6/30/2020 12:41 PM	02:20:00	6.27 pH	24.51 °C	869.17 μS/cm	3.09 mg/L	2.11 NTU	139.6 mV	28.80 ft	250.00 ml/min
6/30/2020 12:46 PM	02:25:00	6.24 pH	24.24 °C	836.86 μS/cm	3.47 mg/L	1.94 NTU	138.7 mV	28.70 ft	250.00 ml/min
6/30/2020 12:51 PM	02:30:00	6.23 pH	24.53 °C	829.21 μS/cm	3.56 mg/L	1.85 NTU	138.0 mV	28.70 ft	250.00 ml/min
6/30/2020 12:56 PM	02:35:00	6.22 pH	24.63 °C	830.88 μS/cm	3.66 mg/L	2.10 NTU	137.1 mV	28.60 ft	250.00 ml/min
6/30/2020 1:01 PM	02:40:00	6.24 pH	25.50 °C	836.64 μS/cm	4.24 mg/L	1.83 NTU	143.7 mV	28.60 ft	250.00 ml/min
6/30/2020 1:06 PM	02:45:00	6.22 pH	25.35 °C	823.48 μS/cm	3.57 mg/L	0.83 NTU	145.7 mV	28.50 ft	250.00 ml/min
6/30/2020 1:11 PM	02:50:00	6.22 pH	24.91 °C	832.03 μS/cm	3.58 mg/L	0.78 NTU	146.6 mV	28.50 ft	250.00 ml/min
6/30/2020 1:16 PM	02:55:00	6.22 pH	24.89 °C	845.73 μS/cm	3.60 mg/L	0.95 NTU	146.5 mV	28.50 ft	250.00 ml/min
6/30/2020 1:21 PM	03:00:00	6.22 pH	24.91 °C	835.67 μS/cm	3.53 mg/L	0.55 NTU	138.2 mV	28.40 ft	250.00 ml/min
6/30/2020 1:26 PM	03:05:00	6.22 pH	24.60 °C	845.25 μS/cm	3.55 mg/L	0.59 NTU	137.4 mV	28.40 ft	250.00 ml/min
6/30/2020 1:31 PM	03:10:00	6.21 pH	25.01 °C	845.15 μS/cm	3.65 mg/L	0.72 NTU	136.3 mV	28.40 ft	250.00 ml/min
6/30/2020 1:36 PM	03:15:00	6.21 pH	25.36 °C	852.28 μS/cm	3.51 mg/L	0.82 NTU	135.7 mV	28.40 ft	250.00 ml/min
6/30/2020 1:41 PM	03:20:00	6.21 pH	24.96 °C	861.13 μS/cm	3.54 mg/L	0.59 NTU	135.3 mV	28.30 ft	250.00 ml/min
6/30/2020 1:46 PM	03:25:00	6.21 pH	25.14 °C	844.75 μS/cm	3.58 mg/L	0.64 NTU	143.4 mV	28.30 ft	250.00 ml/min
6/30/2020 1:51 PM	03:30:00	6.20 pH	25.07 °C	835.50 μS/cm	3.55 mg/L	0.51 NTU	135.1 mV	28.30 ft	250.00 ml/min

Site Name	McIntosh- Landfill No. 3			
Permit Number		="		
Well ID	GWA-1	•		
Date	3/9/2020	<u>-</u> ,		
Reflective Sign:	Yes	- 1		,
1 Location	n/Identification	yes	no	n/a
a	Is the well visible and accessible?	Х		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require protection from traffic?		X	
d	Is the drainage around the well acceptable? (no standing water,			-
	nor is well located in obvious drainage flow path)	X		
2 Protecti	ve Casing			
a	Is the protective casing free from apparent damage and able to be			
	secured?	X		
b	Is the casing free of degradation or deterioration?		X	
С	Does the casing have a functioning weep hole?	X		
d	Is the annular space between casings clear of debris and water,			
	or filled with pea gravel/sand?	X		
е	Is the well locked and is the lock in good condition?	X		
3 <u>Surface</u>				
а	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	Χ		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	X		
е	Is the pad surface clean (not covered with sediment or debris)?	X		
4 Internal	casing			
а	Does the cap prevent entry of foreign material into the well?	X		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	X		
С	Is the well properly vented for equilibration of air pressure?	X		
d	Is the survey point clearly marked on the inner casing?	<u>X</u>		
е	Is the depth of the well consistent with the original well log?		Χ	
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	X		
5 <u>Samplin</u>	g: Groundwater Wells Only:			
а	Does well recharge adequately when purged?			X
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			X
С	Does the well require redevelopment (low flow, turbid)?	<u>X</u>		
6 Based o	on your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?		X	
7 Correcti	ve actions as needed, by date:			
	ollards, replace steel casing lid as to completely close.			

Name	McIntosh- Landfill No. 3	_		
it Number		_		
ID	GWA-1A	•		
	3/9/2020	•		
ctive Sign:	Yes	•		
		yes	no	n
1 <u>Locatior</u>	n/Identification			
а	Is the well visible and accessible?	X		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		X	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	X		
2 Protecti	ve Casing			
a	Is the protective casing free from apparent damage and able to be			
ч	secured?	Χ		
b	Is the casing free of degradation or deterioration?	$\frac{X}{X}$		_
C	Does the casing have a functioning weep hole?	$\frac{X}{X}$		_
d	Is the annular space between casings clear of debris and water,			_
u	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	$\frac{X}{X}$		
C	to the Well leaked and to the leak in good condition.			
3 <u>Surface</u>				
а	Is the well pad in good condition (not cracked or broken)?	X		_
b	Is the well pad sloped away from the protective casing?	X		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	X		
е	Is the pad surface clean (not covered with sediment or debris)?	X		_
4 Internal	casing			
a	Does the cap prevent entry of foreign material into the well?	X		
b	Is the casing free of kinks or bends, or any obstructions from			_
D	foreign objects (such as bailers)?	Χ		
С	Is the well properly vented for equilibration of air pressure?	$\frac{X}{X}$		_
d	Is the survey point clearly marked on the inner casing?	$\frac{X}{X}$		_
e	Is the depth of the well consistent with the original well log?	$\frac{X}{X}$		
f	Is the casing stable? (or does the pvc move easily when touched			_
•	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	Χ		
	,			
	ng: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	X		_
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			_
С	Does the well require redevelopment (low flow, turbid)?		<u>X</u>	
6 Based o	on your professional judgement, is the well construction / location			
5 20000 0	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	Χ		
	,			_
7 Correcti	ve actions as needed, by date:			
N/A				

Site Name	McIntosh- Landfill No. 3			
Permit Number	OWA 0			
Well ID	GWA-2			
Date	3/9/2020			
Reflective Sign:	Yes			,
4.1 (* 11		yes	no	n/a
1 <u>Location/I</u>	<u>dentification</u>			
a	Is the well visible and accessible?	<u>X</u>		
b	Is the well properly identified with the correct well ID?	<u> </u>		
С	Is the well in a high traffic area and does the well require protection from traffic?		X	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	Χ		
2 Protective	e Casing			
а	Is the protective casing free from apparent damage and able to be			
	secured?	Χ		
b	Is the casing free of degradation or deterioration?	X		
С	Does the casing have a functioning weep hole?	X		
d	Is the annular space between casings clear of debris and water,			
ď	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	X		
3 <u>Surface p</u>				
а	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	Χ		
С	Is the well pad in complete contact with the protective casing?	Χ		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	Χ		
е	Is the pad surface clean (not covered with sediment or debris)?	Χ		
4 Internal ca	asing			
a a	Does the cap prevent entry of foreign material into the well?	Χ		
b	Is the casing free of kinks or bends, or any obstructions from			
b	foreign objects (such as bailers)?	Χ		
•	Is the well properly vented for equilibration of air pressure?	X		
C	Is the survey point clearly marked on the inner casing?	X		
d	Is the depth of the well consistent with the original well log?	$\frac{\lambda}{X}$		
e				
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	Χ		
F. O	,			
	: Groundwater Wells Only:			V
a	Does well recharge adequately when purged?			X
b	If dedicated sampling equipment installed, is it in good condition			.,
	and specified in the approved groundwater plan for the facility?			Х
С	Does the well require redevelopment (low flow, turbid)?	X		
6 Based on	your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?		Χ	
7 Corrective	e actions as needed, by date:			

N/A

Site Name	McIntosh- Landfill No. 3	-		
Permit Number		<u>-</u> ,		
Well ID	GWA-2A	<u>-</u> ,		
Date	3/9/2020	-		
Reflective Sign:	Yes	-		
		yes	no	n/a
1 <u>Locatior</u>	<u>n/Identification</u>			
a	Is the well visible and accessible?	X		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,			•
	nor is well located in obvious drainage flow path)	X		
2 Protecti	vo Cosing			
	Is the protective casing free from apparent damage and able to be			
a	secured?	~		
L		$\frac{X}{X}$		
b	Is the casing free of degradation or deterioration?			
С	Does the casing have a functioning weep hole?	X		
d	Is the annular space between casings clear of debris and water,	V		
	or filled with pea gravel/sand?	<u>X</u>		
е	Is the well locked and is the lock in good condition?	X		
3 Surface	pad			
а	Is the well pad in good condition (not cracked or broken)?	Χ		
b	Is the well pad sloped away from the protective casing?	X		•
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	X		
е	Is the pad surface clean (not covered with sediment or debris)?	X		
4 1				
4 <u>Internal</u>		V		
a	Does the cap prevent entry of foreign material into the well?	<u>X</u>		
b	Is the casing free of kinks or bends, or any obstructions from	V		
	foreign objects (such as bailers)?	<u>X</u>		
С	Is the well properly vented for equilibration of air pressure?	<u>X</u>		
d	Is the survey point clearly marked on the inner casing?	<u>X</u>		
e	Is the depth of the well consistent with the original well log?	Χ		
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip	V		
	couplings in construction)	<u>X</u>		
5 <u>Samplin</u>	ng: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	Χ		
b	If dedicated sampling equipment installed, is it in good condition			•
	and specified in the approved groundwater plan for the facility?			Χ
С	Does the well require redevelopment (low flow, turbid)?		X	
6 Dagget -	an your professional judgement is the well construction / leastice			
o based 0	on your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory	V		
	requirements?	<u>X</u>		
7 Correcti	ve actions as needed, by date:			

N/A

Name	McIntosh- Landfill No. 3	_		
nit Number		_		
ID	GWA-2B	•		
	3/9/2020	•		
ective Sign:	Yes	•		
-		yes	no	n
1 Location	n/Identification			
a	Is the well visible and accessible?	X		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		X	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	X		
2 Protectiv	ve Casing			
a	Is the protective casing free from apparent damage and able to be			
ч	secured?	Χ		
b	Is the casing free of degradation or deterioration?	$\frac{X}{X}$		
C	Does the casing have a functioning weep hole?	$\frac{X}{X}$		
d	Is the annular space between casings clear of debris and water,			
u	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	$\frac{X}{X}$		
C	to the well looked and is the look in good condition:			_
3 Surface				
a	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	X		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	X		
е	Is the pad surface clean (not covered with sediment or debris)?	X		
4 Internal	casing			
a a	Does the cap prevent entry of foreign material into the well?	Χ		
b	Is the casing free of kinks or bends, or any obstructions from			_
b	foreign objects (such as bailers)?	Χ		
	Is the well properly vented for equilibration of air pressure?	$\frac{X}{X}$		_
c d	Is the survey point clearly marked on the inner casing?	$\frac{X}{X}$		_
	Is the depth of the well consistent with the original well log?	$\frac{\lambda}{X}$		
e f	Is the casing stable? (or does the pvc move easily when touched			_
1	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	Χ		
	osapinige in osnoriación,			
5 <u>Samplin</u>	g: Groundwater Wells Only:			
а	Does well recharge adequately when purged?	X		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			
С	Does the well require redevelopment (low flow, turbid)?		X	
6 Basad a	on your professional judgement, is the well construction / location			
o based o	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	Χ		
	roquiromonio:			
7 Correcti	ve actions as needed, by date:			
N/A	• •			

Name	McIntosh- Landfill No. 3			
nit Number		-		
ID	GWA-3A	•		
)	3/9/2020	•		
ective Sign:	Yes			
		yes	no	n/a
1 <u>Locatior</u>	n/Identification			
а	Is the well visible and accessible?	X		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,	<u></u>		
	nor is well located in obvious drainage flow path)	Χ		
2 Protecti	ve Casing			
a <u>1 1000000</u>	Is the protective casing free from apparent damage and able to be			
u	secured?	Χ		
b	Is the casing free of degradation or deterioration?	$\frac{X}{X}$		
	Does the casing have a functioning weep hole?	$\frac{X}{X}$		
C	Is the annular space between casings clear of debris and water,			
d	or filled with pea gravel/sand?	~		
_	Is the well locked and is the lock in good condition?	$\frac{X}{X}$		
е	is the well locked and is the lock in good condition?			
3 Surface	<u>pad</u>			
а	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	X		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	X		
е	Is the pad surface clean (not covered with sediment or debris)?	X		
4 Internal	casing			
		~		
a	Does the cap prevent entry of foreign material into the well?	<u>X</u>		
b	Is the casing free of kinks or bends, or any obstructions from	V		
	foreign objects (such as bailers)?	<u>X</u>		
C	Is the well properly vented for equilibration of air pressure?	<u>X</u>		
d	Is the survey point clearly marked on the inner casing?	X		
е	Is the depth of the well consistent with the original well log?	Χ		
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	<u>X</u>		
5 <u>Samp</u> lin	g: Groundwater Wells Only:			
а	Does well recharge adequately when purged?	Χ		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			Χ
С	Does the well require redevelopment (low flow, turbid)?		X	
6 Rasad a	on your professional judgement, is the well construction / location			
o pased C	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
		~		
	requirements?	<u>X</u>		
7 Correcti Needs b	ve actions as needed, by date: pollards			

Site Name	McIntosh- Landfill No. 3			
Permit Number				
Well ID	GWA-3B			
Date	3/9/2020			
Reflective Sign:	Yes			
		yes	no	n/a
1 Location/	<u>Identification</u>			
а	Is the well visible and accessible?	X		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	Χ		
2 Protective	e Casing			
a <u>- : - : - : - : - : - : - : - : - : - </u>	Is the protective casing free from apparent damage and able to be			
u	secured?	Χ		
b	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
d	Is the annular space between casings clear of debris and water,			
u	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	X		
G	is the well locked and is the lock in good condition:			
3 <u>Surface </u> p				
а	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	X		
С	Is the well pad in complete contact with the protective casing?	Χ		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	X		
е	Is the pad surface clean (not covered with sediment or debris)?	Χ		
4 Internal c	easing			
a	Does the cap prevent entry of foreign material into the well?	Χ		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	Χ		
С	Is the well properly vented for equilibration of air pressure?	X		
d	Is the survey point clearly marked on the inner casing?	Χ		
e	Is the depth of the well consistent with the original well log?	X		
f	Is the casing stable? (or does the pvc move easily when touched			
•	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	Χ		
5 Samplino	g: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	Χ		
b	If dedicated sampling equipment installed, is it in good condition			
-	and specified in the approved groundwater plan for the facility?			Х
С	Does the well require redevelopment (low flow, turbid)?	X		
6 Racad or	your professional judgement, is the well construction / leastion			
o baseu oi	n your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory	V		
	requirements?	<u>X</u>		
7 Correctiv	re actions as needed, by date:			
Needs bo	ollards, consistent high turbidity			

Site Name	McIntosh- Landfill No. 3	-		
Permit Number		•		
Well ID	GWA-4	•		
Date	3/9/2020	•		
Reflective Sign:	Yes	.		
		yes	no	n/a
1 <u>Location</u>	n/Identification			
а	Is the well visible and accessible?	<u>X</u>		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require protection from traffic?		Х	
d	Is the drainage around the well acceptable? (no standing water,			
ŭ	nor is well located in obvious drainage flow path)	X		
2 Protectiv	ve Casing			
a	Is the protective casing free from apparent damage and able to be			
-	secured?	X		
b	Is the casing free of degradation or deterioration?	$\frac{\chi}{X}$		
C	Does the casing have a functioning weep hole?	X		-
d	Is the annular space between casings clear of debris and water,			
u	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	$\frac{X}{X}$		
	·			
3 <u>Surface</u>		~		
a	Is the well pad in good condition (not cracked or broken)?	<u>X</u>		
b	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not	V		
	move when stepped on)	$\frac{X}{X}$		
е	Is the pad surface clean (not covered with sediment or debris)?			-
4 Internal	casing			
<u></u> а	Does the cap prevent entry of foreign material into the well?	Χ		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	X		
С	Is the well properly vented for equilibration of air pressure?	X		-
d	Is the survey point clearly marked on the inner casing?	X		
е	Is the depth of the well consistent with the original well log?	X		
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	X		
5 <u>Samplin</u>	g: Groundwater Wells Only:			
а	Does well recharge adequately when purged?	X		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			X
С	Does the well require redevelopment (low flow, turbid)?		X	
6 Based o	n your professional judgement, is the well construction / location			
2 24004 0	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	Χ		
	4			
7 Correctiv	ve actions as needed, by date:			

Needs bollards

e Name	McIntosh- Landfill No. 3	_		
mit Number		•		
II ID	GWA-5	•		
te	3/9/2020	- 11		
flective Sign:	Yes	•		
1 Location	n/Identification	yes	no	n/a
a <u>2004.01</u>	Is the well visible and accessible?	Χ		
b	Is the well properly identified with the correct well ID?	X		-
С	Is the well in a high traffic area and does the well require protection from traffic?		X	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Х		
2 Protectiv	ve Casing			
a	Is the protective casing free from apparent damage and able to be			
u	secured?	Χ		
b	Is the casing free of degradation or deterioration?	$\frac{X}{X}$		
C	Does the casing have a functioning weep hole?	$\frac{X}{X}$		-
d	Is the annular space between casings clear of debris and water,			-
u	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	$\frac{X}{X}$		
	Č			
3 <u>Surface</u>				
а	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	X		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	<u>X</u>		
е	Is the pad surface clean (not covered with sediment or debris)?	X		
4 Internal	casing			
a	Does the cap prevent entry of foreign material into the well?	Χ		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	Χ		
С	Is the well properly vented for equilibration of air pressure?	X		
d	Is the survey point clearly marked on the inner casing?	X		
е				
	Is the depth of the well consistent with the original well log?		X	
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	X		
5 Samplin	ig: Groundwater Wells Only:			
a <u>Sampiin</u>	Does well recharge adequately when purged?	Χ		
a b	If dedicated sampling equipment installed, is it in good condition			
D	and specified in the approved groundwater plan for the facility?			Х
С	Does the well require redevelopment (low flow, turbid)?		X	
6 Based o	on your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	<u>X</u>		
7 Correcti	ve actions as needed, by date:			
Needs b	•			

Name	McIntosh- Landfill No. 3			
nit Number				
ID	GWA-7			
	3/9/2020			
ective Sign:	Yes			
		yes	no	n/a
1 Location	n/Identification			
а	Is the well visible and accessible?	X		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	Χ		
2 Protectiv	ve Casing			
a a	Is the protective casing free from apparent damage and able to be			
u	secured?	Χ		
b	Is the casing free of degradation or deterioration?	$\frac{X}{X}$		
C	Does the casing have a functioning weep hole?	$\frac{X}{X}$		
d	Is the annular space between casings clear of debris and water,			
u	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	$\frac{\lambda}{X}$		
G	is the well locked and is the lock in good condition:			-
3 <u>Surface</u>				
а	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	Χ		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	X		
е	Is the pad surface clean (not covered with sediment or debris)?	Χ		
4 Internal	casing			
<u></u> а	Does the cap prevent entry of foreign material into the well?	Χ		
b	Is the casing free of kinks or bends, or any obstructions from			
2	foreign objects (such as bailers)?	Χ		
С	Is the well properly vented for equilibration of air pressure?		X	
d	Is the survey point clearly marked on the inner casing?	X		
e	Is the depth of the well consistent with the original well log?	X		
f	Is the casing stable? (or does the pvc move easily when touched			
•	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	Χ		
E Camplin	a. Craundwater Wella Only			
•	g: Groundwater Wells Only:	~		
a	Does well recharge adequately when purged?	<u>X</u>		
b	If dedicated sampling equipment installed, is it in good condition			V
	and specified in the approved groundwater plan for the facility?			<u> X</u>
С	Does the well require redevelopment (low flow, turbid)?	<u>X</u>		
6 Based o	n your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?		X	
/ Corrective Needs b	ve actions as needed, by date: collards			

Name	McIntosh- Landfill No. 3	_		
nit Number		_		
ID	GWA-7A	_		
	3/9/2020	•		
ctive Sign:	Yes	•		
J		yes	no	n
1 Location	n/Identification			
а	Is the well visible and accessible?	<u>X</u>		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require protection from traffic?		Х	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	X		
2 Protectiv	ve Casing			
а <u>глокович</u>	Is the protective casing free from apparent damage and able to be			
-	secured?	X		
b	Is the casing free of degradation or deterioration?	X		_
C	Does the casing have a functioning weep hole?	$\frac{X}{X}$		
d	Is the annular space between casings clear of debris and water,			_
u	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	$\frac{X}{X}$		
G	is the well looked and is the look in good condition:			
3 <u>Surface</u>				
а	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	X		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	X		
е	Is the pad surface clean (not covered with sediment or debris)?	Χ		
4 Internal	casing			
a	Does the cap prevent entry of foreign material into the well?	Χ		
	Is the casing free of kinks or bends, or any obstructions from			
b	foreign objects (such as bailers)?	V		
_	, ,	<u>X</u>		_
С	Is the well properly vented for equilibration of air pressure?	<u>X</u>		_
d	Is the survey point clearly marked on the inner casing?	<u>X</u>		
e	Is the depth of the well consistent with the original well log?	X		_
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip	V		
	couplings in construction)	<u>X</u>		
5 <u>Samplin</u>	g: Groundwater Wells Only:			
а	Does well recharge adequately when purged?	X		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			
С	Does the well require redevelopment (low flow, turbid)?		X	
6 Dagad -	on your professional judgement, is the well construction / leastice	-	-	_
o based 0	on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory	V		
	requirements?	<u>X</u>		
7 Correcti	ve actions as needed, by date:			
N/A	··, ,			

Name	McIntosh- Landfill No. 3			
nit Number				
ID	GWC-1			
)	3/9/2020	1		
ective Sign:	Yes	•		
· ·		yes	no	n/a
1 Location	/Identification			
а	Is the well visible and accessible?	Χ		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	Χ		
2 Protectiv	re Casing			
a	Is the protective casing free from apparent damage and able to be			
_	secured?	X		
b	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
d	Is the annular space between casings clear of debris and water,			
ď	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	$\frac{X}{X}$		
C	is the well looked and is the look in good condition.			
3 <u>Surface</u> p		V		
a	Is the well pad in good condition (not cracked or broken)?	<u>X</u>		
b	Is the well pad sloped away from the protective casing?	X		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	<u>X</u>		
е	Is the pad surface clean (not covered with sediment or debris)?	X		
4 Internal of	casing			
а	Does the cap prevent entry of foreign material into the well?	Χ		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	Χ		
С	Is the well properly vented for equilibration of air pressure?	X		
d	Is the survey point clearly marked on the inner casing?	X		
е	Is the depth of the well consistent with the original well log?	X		
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	X		
5 Sampling	g: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	X		
b	If dedicated sampling equipment installed, is it in good condition			
~	and specified in the approved groundwater plan for the facility?			Х
С	Does the well require redevelopment (low flow, turbid)?		X	
	n your professional judgement, is the well construction / lesstion			
6 Boood or	n your professional judgement, is the well construction / location			
6 Based or	appropriate to 1) achieve the objectives of the Groundwater			
6 Based or	appropriate to 1) achieve the objectives of the Groundwater			
6 Based or	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	X		

Name	McIntosh- Landfill No. 3			
nit Number				
ID	GWC-2			
	3/9/2020			
ective Sign:	Yes	1		
· ·		yes	no	n/a
1 Location	n/Identification			
а	Is the well visible and accessible?	Χ		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	Χ		
2 Protecti	ive Casing			
a <u>110000</u>	Is the protective casing free from apparent damage and able to be			
u	secured?	Χ		
b	Is the casing free of degradation or deterioration?	$\frac{X}{X}$		
	Does the casing have a functioning weep hole?	$\frac{X}{X}$		
C C	Is the annular space between casings clear of debris and water,			-
d	or filled with pea gravel/sand?	~		
_	Is the well locked and is the lock in good condition?	$\frac{X}{X}$		
е	is the well locked and is the lock in good condition?			
3 Surface				
а	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	X		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	X		
е	Is the pad surface clean (not covered with sediment or debris)?	Χ		
4 Internal	casing			
a	Does the cap prevent entry of foreign material into the well?	Χ		
b	Is the casing free of kinks or bends, or any obstructions from			
b	foreign objects (such as bailers)?	Χ		
	Is the well properly vented for equilibration of air pressure?	$\frac{\lambda}{X}$		
C				
d	Is the survey point clearly marked on the inner casing?	$\frac{X}{X}$		
e	Is the depth of the well consistent with the original well log?			
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	<u>X</u>		
5 <u>Samplir</u>	ng: Groundwater Wells Only:			
а	Does well recharge adequately when purged?	X		
b	If dedicated sampling equipment installed, is it in good condition	<u></u>		
	and specified in the approved groundwater plan for the facility?			Х
С	Does the well require redevelopment (low flow, turbid)?		X	
6 Based o	on your professional judgement, is the well construction / location			
5 Daoca (appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	Y		
	requirements:	<u>X</u>		
	ive actions as needed, by date: bollards			

Name	McIntosh- Landfill No. 3			
nit Number				
ID	GWC-3			
)	3/9/2020			
ective Sign:	Yes	1		
· ·		yes	no	n/a
1 Location	n/Identification			
а	Is the well visible and accessible?	Χ		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	Χ		
2 Protectiv	ve Casing			
a a	Is the protective casing free from apparent damage and able to be			
u	secured?	Χ		
b	Is the casing free of degradation or deterioration?	$\frac{X}{X}$		
	Does the casing have a functioning weep hole?	$\frac{X}{X}$		
C	Is the annular space between casings clear of debris and water,			
d	or filled with pea gravel/sand?	~		
	Is the well locked and is the lock in good condition?	$\frac{X}{X}$		
е	is the well locked and is the lock in good condition?			
3 <u>Surface</u>				
а	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	Χ		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	X		
е	Is the pad surface clean (not covered with sediment or debris)?	Χ		
4 Internal	casing			
a	Does the cap prevent entry of foreign material into the well?	Χ		
b	Is the casing free of kinks or bends, or any obstructions from			
В	foreign objects (such as bailers)?	Χ		
0	Is the well properly vented for equilibration of air pressure?	$\frac{X}{X}$		
c d	Is the survey point clearly marked on the inner casing?	$\frac{X}{X}$		
	· · · · · · · · · · · · · · · · · · ·	$\frac{\lambda}{X}$		
e	Is the depth of the well consistent with the original well log? Is the casing stable? (or does the pvc move easily when touched			
f				
	or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
	,			
·	g: Groundwater Wells Only:	.,		
а	Does well recharge adequately when purged?	X		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			X
С	Does the well require redevelopment (low flow, turbid)?		X	
6 Based o	on your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	Χ		
	4			
	ve actions as needed, by date:			
Needs b	oollards			

Name	McIntosh- Landfill No. 3	_		
it Number		=" 		
ID	GWC-4A	-		
	3/9/2020	•		
ctive Sign:	Yes			
J		yes	no	n/a
1 Location	n/Identification			
а	Is the well visible and accessible?	Χ		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	Χ		
2 Protectiv	ve Casing			
a <u>Frotectiv</u>	Is the protective casing free from apparent damage and able to be			
а	secured?	Χ		
h	Is the casing free of degradation or deterioration?	$\frac{\lambda}{X}$		
b		$\frac{\lambda}{X}$		
С	Does the casing have a functioning weep hole?			
d	Is the annular space between casings clear of debris and water,	V		
	or filled with pea gravel/sand?	X		
е	Is the well locked and is the lock in good condition?	X		
3 Surface	<u>pad</u>			
а	Is the well pad in good condition (not cracked or broken)?	Χ		
b	Is the well pad sloped away from the protective casing?	X		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	Χ		
е	Is the pad surface clean (not covered with sediment or debris)?		X	
1 lata a a				
4 <u>Internal</u>		V		
a	Does the cap prevent entry of foreign material into the well?	X		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	X		
С	Is the well properly vented for equilibration of air pressure?	<u>X</u>		
d	Is the survey point clearly marked on the inner casing?	X		
е	Is the depth of the well consistent with the original well log?	X		
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	X		
5 Samplin	g: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	X		
b	If dedicated sampling equipment installed, is it in good condition			
D	and specified in the approved groundwater plan for the facility?			Х
С	Does the well require redevelopment (low flow, turbid)?		X	
ნ Based o	n your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	X		
7 Correction	vo actions as needed, by date:			
Needs b	ve actions as needed, by date:			
110003	onal ac			

ite Name	McIntosh- Landfill No. 3			
ermit Number		• '		
/ell ID	GWC-4B			
ate	3/9/2020			
eflective Sign:	Yes	•		,
1 Location	n/Identification	yes	no	n/a
a <u>Location</u>	Is the well visible and accessible?	Χ		
b	Is the well properly identified with the correct well ID?	$\frac{x}{x}$		
C	Is the well in a high traffic area and does the well require			
	protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	Χ		
2 Protectiv	ve Casing			
a	Is the protective casing free from apparent damage and able to be			
ű.	secured?	Χ		
b	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
d	Is the annular space between casings clear of debris and water,			
	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	Χ		
3 Curfoco	nad			
3 <u>Surface</u> a	pad Is the well pad in good condition (not cracked or broken)?	Χ		
b	Is the well pad sloped away from the protective casing?	$\frac{X}{X}$		
C	Is the well pad in complete contact with the protective casing?	$\frac{\chi}{\chi}$		
d	Is the well pad in complete contact with the ground surface and			
_	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	X		
е	Is the pad surface clean (not covered with sediment or debris)?		X	
4 Internal	casing			
a a	Does the cap prevent entry of foreign material into the well?	Χ		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	X		
С	Is the well properly vented for equilibration of air pressure?	X		
d	Is the survey point clearly marked on the inner casing?	X		
е				
	Is the depth of the well consistent with the original well log?		X	
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip	V		
	couplings in construction)	<u>X</u>		
5 <u>Samplin</u>	g: Groundwater Wells Only:			
а				
	Does well recharge adequately when purged?		X	
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			X
С	Does the well require redevelopment (low flow, turbid)?	Х		
6 Based o	on your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory		V	
	requirements?		<u>X</u>	
7 Correcti	ve actions as needed, by date:			
Needs h	pollards			

Name	McIntosh- Landfill No. 3	_		
nit Number		=" 		
ID	GWC-5	-		
)	3/9/2020	•		
ective Sign:	Yes			
· ·		yes	no	n/a
1 Locatio	n/Identification			
а	Is the well visible and accessible?	Χ		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	X		
2 Protecti	ive Casing			
a <u>1 101601</u>	Is the protective casing free from apparent damage and able to be			
ч	secured?	Χ		
b	Is the casing free of degradation or deterioration?	$\frac{X}{X}$		
	Does the casing have a functioning weep hole?	$\frac{X}{X}$		
C	Is the annular space between casings clear of debris and water,			
d	or filled with pea gravel/sand?	~		
_	, ,	$\frac{X}{X}$		
е	Is the well locked and is the lock in good condition?			
3 Surface				
а	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	X		
С	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	Χ		
е	Is the pad surface clean (not covered with sediment or debris)?		X	
4 Internal	casing			
a	Does the cap prevent entry of foreign material into the well?	X		
b	Is the casing free of kinks or bends, or any obstructions from			
b	foreign objects (such as bailers)?	V		
•	Is the well properly vented for equilibration of air pressure?	$\frac{X}{X}$		-
C				
d	Is the survey point clearly marked on the inner casing?	$\frac{X}{X}$		
e	Is the depth of the well consistent with the original well log?			
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip	V		
	couplings in construction)	<u>X</u>		
5 <u>Samplir</u>	ng: Groundwater Wells Only:			
а	Does well recharge adequately when purged?	X		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			Х
С	Does the well require redevelopment (low flow, turbid)?		X	
6 Based 6	on your professional judgement, is the well construction / location			
5 24004 (appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	Χ		
	requirements:			
	ive actions as needed, by date: bollards			

Site Name	McIntosh- Landfill No. 3			
Permit Number				
Well ID	GWC-6			
Date	3/9/2020	•		
Reflective Sign:	Yes	•		
· ·		yes	no	n/a
1 Location	n/Identification	•		
a	Is the well visible and accessible?	X		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	X		
2 Protectiv				
а	Is the protective casing free from apparent damage and able to be			
	secured?	<u>X</u>		
b	Is the casing free of degradation or deterioration?	X		
С	Does the casing have a functioning weep hole?	<u>X</u>		
d	Is the annular space between casings clear of debris and water,			
	or filled with pea gravel/sand?	<u>X</u>		
е	Is the well locked and is the lock in good condition?	X		
3 Surface	nad			
a	Is the well pad in good condition (not cracked or broken)?	Χ		
b	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the protective casing?	X		
d	Is the well pad in complete contact with the ground surface and			
_	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	Χ		
е	Is the pad surface clean (not covered with sediment or debris)?		X	-
4 <u>Internal</u>				
а	Does the cap prevent entry of foreign material into the well?	<u> X</u>		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	X		
С	Is the well properly vented for equilibration of air pressure?	X		
d	Is the survey point clearly marked on the inner casing?	X		
е	Is the depth of the well consistent with the original well log?	Χ		
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	X		
5 Samplin	g: Groundwater Wells Only:			
a	Does well recharge adequately when purged?		X	
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			Х
С	Does the well require redevelopment (low flow, turbid)?	X		
6 Based o	on your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?		<u>X</u>	
7 Correction	ve actions as needed, by date:			
	pollards, re-development			

Name	McIntosh- Landfill No. 3			
it Number		=' -		
ID	PZ-1	-		
	3/9/2020	<u>-</u> ,		
ctive Sign:	Yes	•		
4.1	. II. L	yes	no	n/a
· ·	n/Identification	V		
a	Is the well visible and accessible?	<u>X</u>		
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require protection from traffic?		Χ	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	X		
2 Protectiv	ve Casing			
a	Is the protective casing free from apparent damage and able to be			
	secured?	X		
b	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
d	Is the annular space between casings clear of debris and water,			
_	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	X		
3 Surface	nad			
3 <u>Surface</u>	Is the well pad in good condition (not cracked or broken)?	Χ		
a b	Is the well pad sloped away from the protective casing?	$\frac{X}{X}$		
	Is the well pad in complete contact with the protective casing?	$\frac{\lambda}{X}$		
c d	Is the well pad in complete contact with the ground surface and			
u	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	V		
	Is the pad surface clean (not covered with sediment or debris)?	$\frac{X}{X}$		
е	is the pad surface clean (not covered with sediment of debits):			
4 Internal				
а	Does the cap prevent entry of foreign material into the well?	X		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	X		
С	Is the well properly vented for equilibration of air pressure?	X		
d	Is the survey point clearly marked on the inner casing?	X		
е	Is the depth of the well consistent with the original well log?	X		
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	X		
5 <u>Samplin</u>	g: Groundwater Wells Only:			
а	Does well recharge adequately when purged?			X
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			Х
С	Does the well require redevelopment (low flow, turbid)?		X	
6 Based o	on your professional judgement, is the well construction / location			
2 24304 0	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	Χ		
	·			
	ve actions as needed, by date:			
N/A				

Name	McIntosh- Landfill No. 3	_		
it Number		='		
ID	PZ-2			
	3/9/2020	=" 		
ctive Sign:	Yes	=" 		
		yes	no	n
1 Location	n/Identification	.,		
a	Is the well visible and accessible?	<u>X</u>		_
b	Is the well properly identified with the correct well ID?	X		
С	Is the well in a high traffic area and does the well require protection from traffic?		Х	
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	X		
2 Protectiv	ve Casing			
а <u></u>	Is the protective casing free from apparent damage and able to be			
	secured?	Χ		
b	Is the casing free of degradation or deterioration?	X		
С	Does the casing have a functioning weep hole?	X		
d	Is the annular space between casings clear of debris and water,			_
ū	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	X		
	Č			
3 <u>Surface</u>		~		
а	Is the well pad in good condition (not cracked or broken)?	<u>X</u>		
b	Is the well pad sloped away from the protective casing?	X		_
С	Is the well pad in complete contact with the protective casing?	X		_
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	<u>X</u>		_
е	Is the pad surface clean (not covered with sediment or debris)?	X		
4 Internal	casing			
а	Does the cap prevent entry of foreign material into the well?	X		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	Χ		
С	Is the well properly vented for equilibration of air pressure?	X		
d	Is the survey point clearly marked on the inner casing?	X		
е	Is the depth of the well consistent with the original well log?	X		_
f	Is the casing stable? (or does the pvc move easily when touched			_
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	X		
5 Samplin	ng: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			
b	If dedicated sampling equipment installed, is it in good condition			
~	and specified in the approved groundwater plan for the facility?			
С	Does the well require redevelopment (low flow, turbid)?		X	
6 Based o	on your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	<u>X</u>		
7 Correcti	ve actions as needed, by date:			
N/A	to dollotto do filodod, by dato.			

Site Name	McIntosh- Landfill No. 3			
Permit Number		i		
Well ID	PZ-3	i		
Date	3/9/2020			
Reflective Sign:	Yes	ı		
	and the same of	yes	no	n/a
1 Location/	<u>dentification</u>			
а	Is the well visible and accessible?	<u> X</u>		
b	Is the well properly identified with the correct well ID?	<u> X</u>		
С	Is the well in a high traffic area and does the well require protection from traffic?		Х	
d	Is the drainage around the well acceptable? (no standing water,			
_	nor is well located in obvious drainage flow path)	X		
2 Protective	e Casing			
a	Is the protective casing free from apparent damage and able to be			
	secured?	Χ		
b	Is the casing free of degradation or deterioration?	X		
С	Does the casing have a functioning weep hole?	X		
d	Is the annular space between casings clear of debris and water,			
ď	or filled with pea gravel/sand?	Χ		
е	Is the well locked and is the lock in good condition?	X		
3 <u>Surface p</u>				
-	ls the well pad in good condition (not cracked or broken)?	Y		
a	Is the well pad sloped away from the protective casing?	$\frac{X}{X}$		
b	· · · · · · · · · · · · · · · · · · ·	$\frac{\lambda}{X}$		
C	Is the well pad in complete contact with the protective casing?			
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not	V		
_	move when stepped on)	$\frac{X}{X}$		
е	Is the pad surface clean (not covered with sediment or debris)?			
4 Internal c	asing			
<u></u> а	Does the cap prevent entry of foreign material into the well?	Χ		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	Χ		
С	Is the well properly vented for equilibration of air pressure?	X		
d	Is the survey point clearly marked on the inner casing?	X		
e	Is the depth of the well consistent with the original well log?	X		
f	Is the casing stable? (or does the pvc move easily when touched			
•	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	X		
5 <u>Sampling</u>	: Groundwater Wells Only:			
а	Does well recharge adequately when purged?			Χ
b	If dedicated sampling equipment installed, is it in good condition	,		
	and specified in the approved groundwater plan for the facility?			Χ
С	Does the well require redevelopment (low flow, turbid)?		Χ	
6 Based on	your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	Χ		
	·			
7 Corrective	e actions as needed, by date:			

N/A



APPENDIX B MONITORING WELL AND PIEZOMETER SURVEY DATA

107 Mountain Brook Dr., Ste. 104 Canton, GA 30115



DATE: July 2, 2020

TO: Atlantic Coastal Consulting, Inc.

1150 Northmeadow Parkway

Suite 100

Roswell, GA 30076

ATTN: Evan Perry of Atlantic Coastal Consulting

SUBJECT: Plant Mcintosh Landfill #3: 18 wells / 3 piezometers

The following data has been established on the existing wells using Georgia State Plane East Zone (NAD 83 horizontal and NAVD 88 vertical). Wells were surveyed to the following tolerances: 0.01' vertical and 0.5' horizontal via conventional survey methods, GPS, OPUS processing, and level loops. Each well was cross-checked for horizontal and vertical accuracy.

WELL ID	NORTHING	ORTHING EASTING		ELEVATION	ELEVATION	
	NAIL	NAIL	NAIL	TOP OF CASE	TOP OF PVC	
PZ-1	852400.01	954904.93	64.70	67.63	67.41	
PZ-2	852549.77	955306.02	64.99	67.60	67.26	
PZ-3	852032.57	955677.60	58.69	61.52	61.28	

WELL ID	NORTHING EASTING		ELEVATION	ELEVATION	ELEVATION	
	NAIL	NAIL	NAIL	TOP OF CASE	TOP OF PVC	
GWA-1A	852023.48	954556.79	64.23	66.97	66.76	
GWA-2A	851830.61	954846.09	63.79	66.47	66.33	
GWA-2B	851831.06	954866.86	63.38	66.48	66.20	
GWA-7A	852254.28	954654.74	65.37	68.20	67.92	



WELL ID	NORTHING	EASTING	ELEVATION	ELEVATION	ELEVATION	
	TOP OF CASE	TOP OF CASE	PAD	TOP OF CASE	TOP OF PVC	
GWA-1	852026.28	954546.93	63.76	67.32	66.90	
GWA-2	851831.46	954854.59	63.02	66.52	66.17	
GWA-3A	851893.61	955179.89	59.53	63.06	62.77	
GWA-3B	851891.96	955180.00	59.53	63.11	62.78	
GWA-4	851980.91	955475.74	58.80	62.25	62.01	
GWA-5	852110.59	955844.69	57.35	60.76	60.43	
GWA-7	852261.63	954667.90	65.07	68.24	67.77	
GWC-1	852446.79	955308.31	63.63	66.38	66.08	
GWC-2	852343.90	955958.27	60.80	64.64	64.19	
GWC-3	852759.94	954845.83	64.25	67.14	66.91	
GWC-4A	852544.35	955702.05	64.37	67.27	66.60	
GWC-4B	852546.24	955700.46	64.37	67.05	66.83	
GWC-5	852679.23	955461.61	64.43	68.40	68.08	
GWC-6	852469.31	955055.59	65.28	68.79	68.51	

Sincerely yours,

Gunnin Land Surveying, LLC.



Jesse R. Gunnin, L.S. Principal Surveyor





APPENDIX C ALTERNATE SOURCE DEMONSTRATION





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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- 3. Box and Whisker Plot Chromium

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.
- o 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 alluvialderived 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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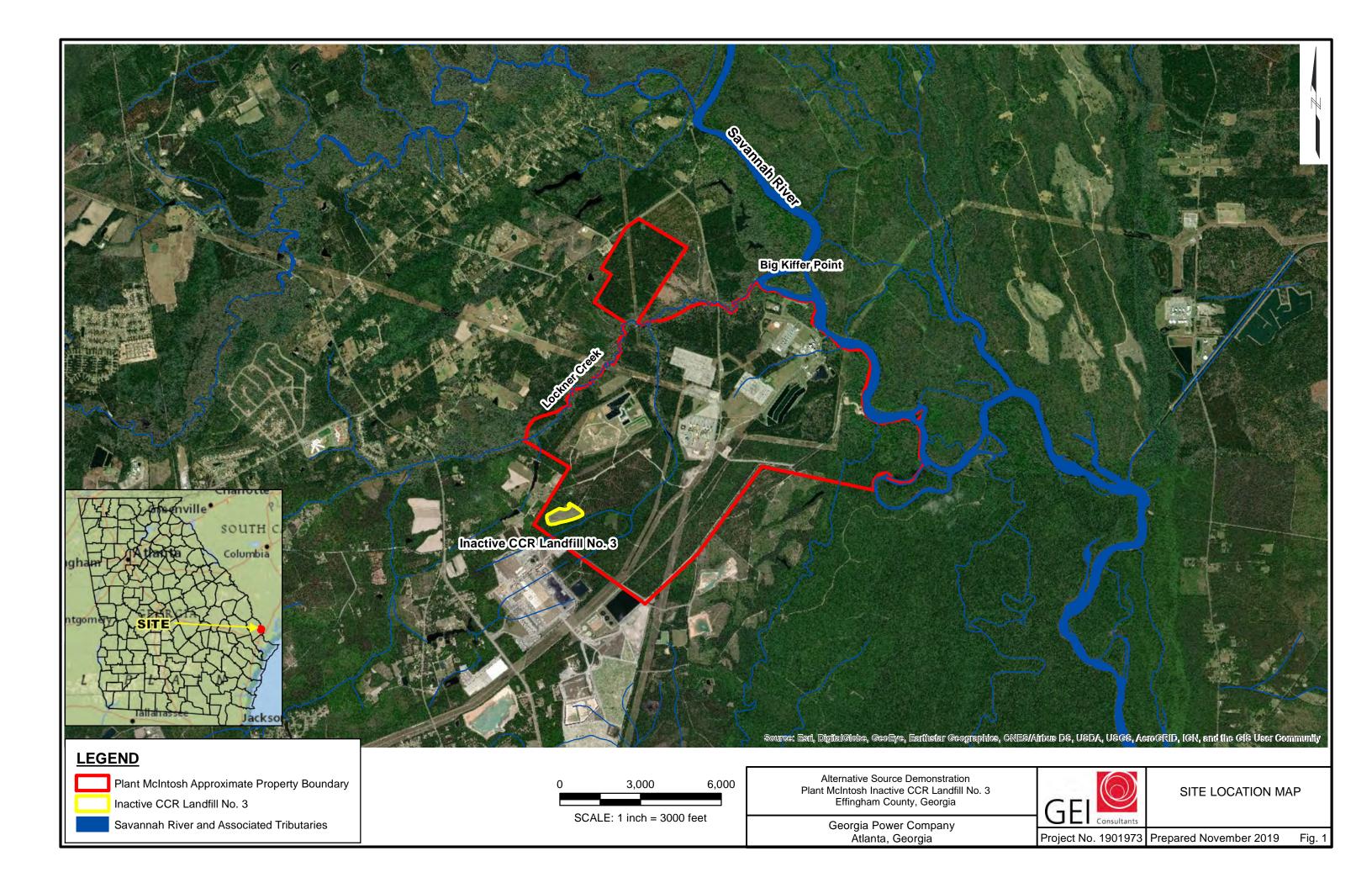
Griffits, Wallace, and Olson, Jerry, 1953. *Mica Deposits of the Southeastern Piedmont; Part 7. Hartwell District, Georgia and South Carolina*. USGS Professional Paper 248-E. 1953.

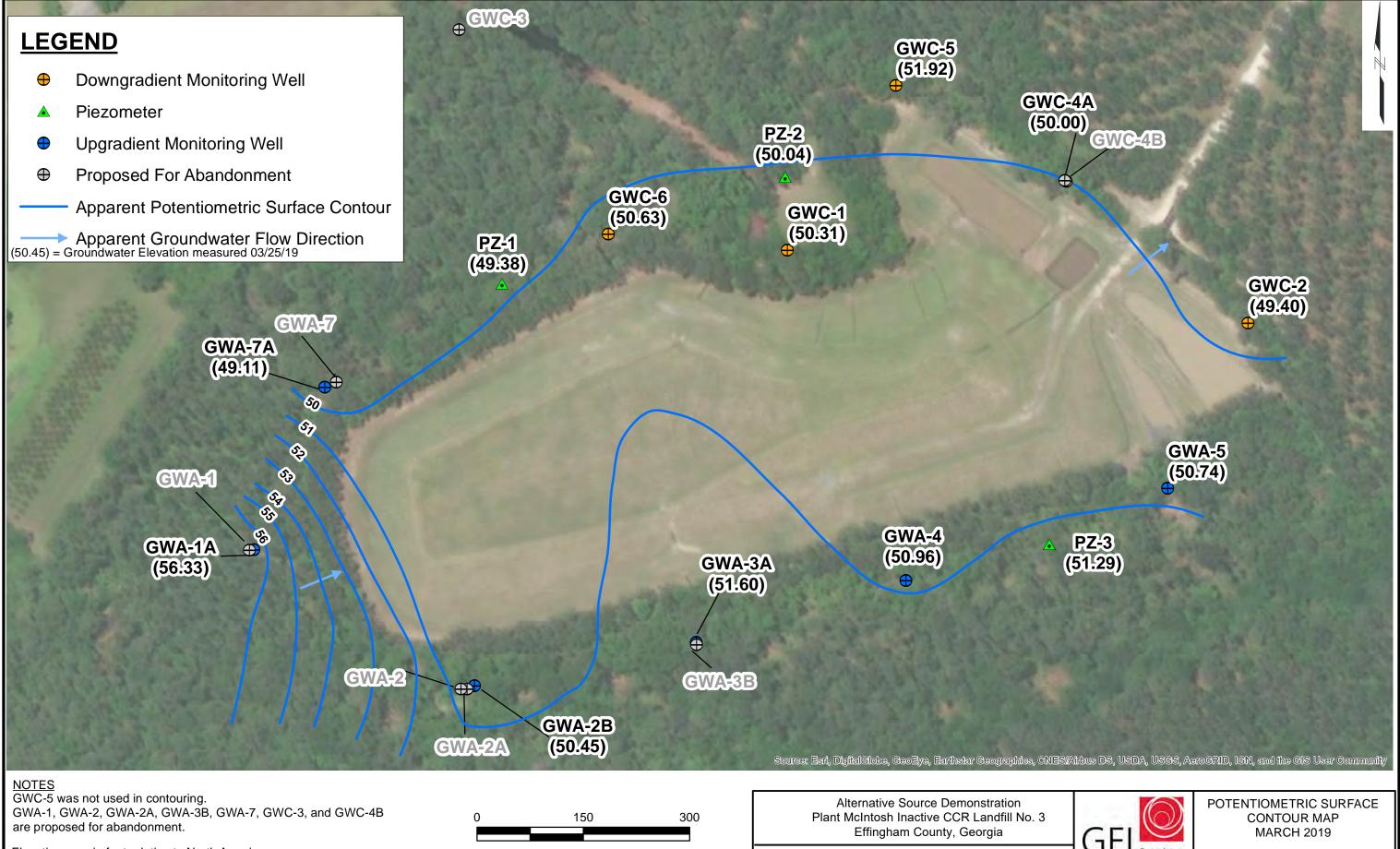
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Figures





Elevations are in feet relative to North American Vertical Datum (NAVD) 88

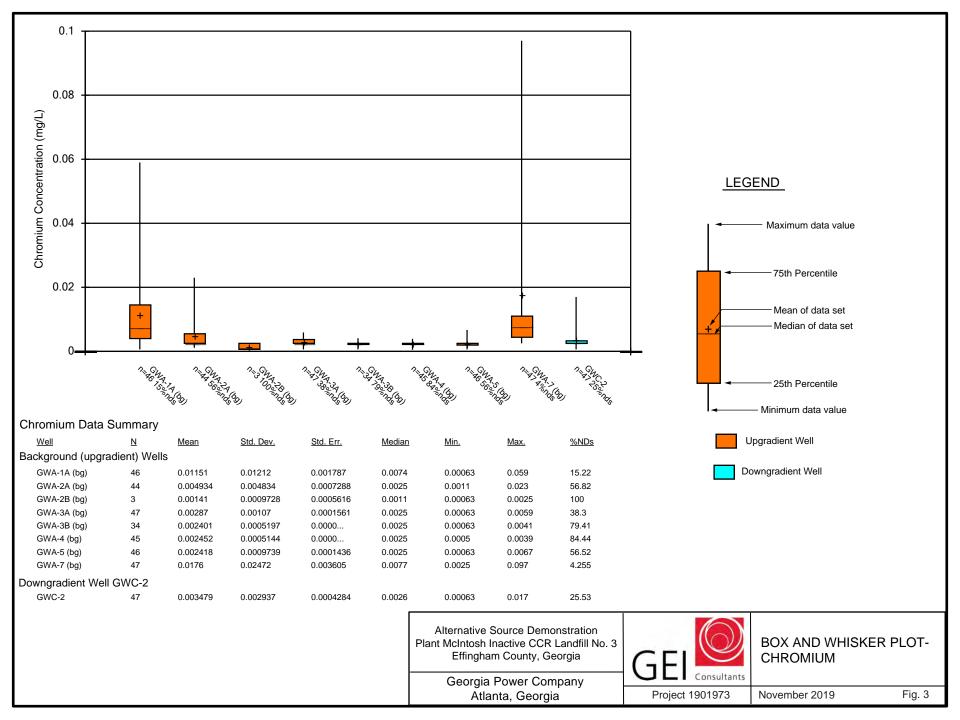
SCALE: 1 inch = 150 feet

Georgia Power Company Atlanta, Georgia



Project No. 1901973 November 2019

Fig. 2





APPENDIX D STATISTICAL ANALYSIS REPORTS



Second 2019 Semiannual
Statistical Analysis of
Appendix I, II, and III
Constituents

(Completed by GEI Consultants, Inc.)

Intrawell Prediction Limit - Significant Results

Plant McIntosh Client: GEI Data: McIntosh No 3 CCR Printed 2/17/2020, 12:39 PM

Constituent Well Lower Lim. Method Upper Lim. <u>Date</u> Observ. Sig. Bg N %NDs Transform Alpha Yes 7 0 Chloride (mg/L) GWA-3A 13.05 n/a 9/12/2019 16 No 0.001254 Param 1 of 2

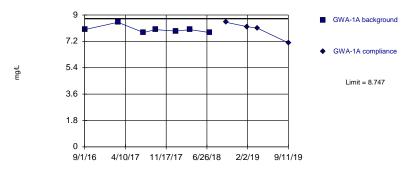
Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 3 CCR Printed 2/17/2020, 12:39 PM Constituent Well Upper Lim. Lower Lim. Date Bg N %NDs Method Observ. Sig. Transform Alpha Chloride (mg/L) GWA-1A 8.747 n/a 9/11/2019 7.1 No 7 0 No 0.001254 Param 1 of 2 Chloride (mg/L) GWA-2A 13 n/a 9/11/2019 12 0 0.02144 NP (normality) 1 of 2 No 8 n/a Param 1 of 2 Chloride (mg/L) GWA-3A 13.05 n/a 9/12/2019 16 Yes 7 0 No 0.001254 GWA-3B Param 1 of 2 Chloride (mg/L) 27.75 n/a 9/12/2019 24 No 7 0 No 0.001254 GWA-4 0 Chloride (mg/L) 6.3 9/12/2019 6.1 7 No 0.001254 Param 1 of 2 n/a No Chloride (mg/L) GWA-5 23.77 9/12/2019 9.1 7 0.001254 Param 1 of 2 n/a No No Chloride (mg/L) GWC-1 7.293 9/12/2019 0 0.001254 Param 1 of 2 n/a 4.9 No 7 No GWC-2 7 Chloride (mg/L) 5.965 n/a 9/12/2019 5.25 No 0 No 0.001254 Param 1 of 2 Chloride (mg/L) GWC-3 11 n/a 9/12/2019 9.4 No 7 0 n/a 0.02765 NP (normality) 1 of 2 Chloride (mg/L) GWC-4A 20.98 n/a 9/12/2019 9.9 No 7 0 No 0.001254 Param 1 of 2 Chloride (mg/L) GWC-5 14.58 n/a 9/12/2019 7.6 No 7 42.86 No 0.001254 Param 1 of 2 Chloride (mg/L) GWC-6 9.147 n/a 9/12/2019 7.7 No 6 0 No 0.001254 Param 1 of 2 pH (S.U.) GWA-1A 6.035 4.405 9/11/2019 5.1 No 26 0 sqrt(x) 0.0006268 Param 1 of 2 pH (S.U.) GWA-2A 6.94 4.67 9/11/2019 5.25 No 26 0 n/a 0.005334 NP (normality) 1 of 2 GWA-3A 3.59 9/12/2019 4.99 28 0 0.004674 NP (normality) 1 of 2 pH (S.U.) 6.42 No n/a GWA-3B 5.808 3.928 9/12/2019 5 25 0 0.0006268 Param 1 of 2 pH (S.U.) No No GWA-4 27 0 6.01 3.872 9/12/2019 4.92 No No 0.0006268 Param 1 of 2 pH (S.U.) pH (S.U.) GWA-5 5.635 3.391 9/12/2019 4.54 No 27 0 0.0006268 Param 1 of 2 No GWC-1 5.641 3.782 9/12/2019 4.95 No 26 0 x^2 0.0006268 Param 1 of 2 pH (S.U.) GWC-2 0 6.012 4.165 9/12/2019 5.14 No 28 No 0.0006268 Param 1 of 2 pH (S.U.) GWC-3 0 Param 1 of 2 pH (S.U.) 6.181 4.339 9/12/2019 5.31 No 26 In(x) 0.0006268 9/12/2019 Param 1 of 2 pH (S.U.) GWC-4A 5.279 4.113 4.89 No 26 0 No 0.0006268 pH (S.U.) GWC-5 8.221 3.702 9/12/2019 5.96 No 27 0 In(x) 0.0006268 Param 1 of 2 pH (S.U.) GWC-6 5.862 4.38 9/12/2019 4.96 No 27 0 No 0.0006268 Param 1 of 2 GWA-1A 2.7 9/11/2019 7 0.02765 NP (NDs) 1 of 2 Sulfate (mg/L) n/a 1ND No 85.71 n/a Sulfate (mg/L) GWA-2A 1.7 n/a 9/11/2019 1ND No 8 87.5 n/a 0.02144 NP (NDs) 1 of 2 Sulfate (mg/L) GWA-3A 1 n/a 9/12/2019 0.38ND No 7 100 n/a 0.02765 NP (NDs) 1 of 2 Sulfate (mg/L) GWA-3B 16.49 n/a 9/12/2019 1.5 No 7 0 No 0.001254 Param 1 of 2 Sulfate (mg/L) GWA-4 9.336 n/a 9/12/2019 3.7 No 7 0 No 0.001254 Param 1 of 2 Sulfate (mg/L) GWA-5 41.79 n/a 9/12/2019 10 No 7 0 No 0.001254 Param 1 of 2 GWC-1 NP (NDs) 1 of 2 Sulfate (mg/L) 1 n/a 9/12/2019 0.38ND No 7 100 n/a 0.02765 9/12/2019 Total Dissolved Solids (mg/L) GWA-3A 79.05 5ND 7 0 0.001254 Param 1 of 2 n/a No No Total Dissolved Solids (mg/L) GWA-3B 97.72 n/a 9/12/2019 34 No 7 0 No 0.001254 Param 1 of 2 Total Dissolved Solids (mg/L) GWA-4 50.76 n/a 9/12/2019 10 7 0.001254 Param 1 of 2 No 14.29 No Total Dissolved Solids (mg/L) 7 GWA-5 118.5 n/a 9/12/2019 20 No 0 No 0.001254 Param 1 of 2 Total Dissolved Solids (mg/L) GWC-1 79.85 n/a 9/12/2019 30 No 7 0 No 0.001254 Param 1 of 2 Total Dissolved Solids (mg/L) GWC-2 80.59 n/a 9/12/2019 35 No 7 0 No 0.001254 Param 1 of 2 9/12/2019 Total Dissolved Solids (mg/L) GWC-3 128.2 n/a 73 No 7 0 No 0.001254 Param 1 of 2 Total Dissolved Solids (mg/L) GWC-4A 77.82 n/a 9/12/2019 5ND 7 0 0.001254 Param 1 of 2 No No GWC-5 7 0 Total Dissolved Solids (mg/L) 692.3 n/a 9/12/2019 110 No No 0.001254 Param 1 of 2 Total Dissolved Solids (mg/L) GWC-6 100.7 n/a 9/12/2019 80 No 6 0 No 0.001254 Param 1 of 2 GWC-2 n/a 9/12/2019 0.38ND 7 100 0.02765 NP (NDs) 1 of 2 Sulfate (mg/L) No n/a Sulfate (mg/L) GWC-3 1 n/a 9/12/2019 0.38ND No 7 100 0.02765 NP (NDs) 1 of 2 n/a Sulfate (mg/L) GWC-4A 2.53 n/a 9/12/2019 1.1 No 7 0 No 0.001254 Param 1 of 2 Sulfate (mg/L) GWC-5 177.1 n/a 9/12/2019 4.9 No 7 0 sqrt(x) 0.001254 Param 1 of 2 Sulfate (mg/L) GWC-6 1.547 n/a 9/12/2019 1 No 6 0 No 0.001254 Param 1 of 2 Total Dissolved Solids (mg/L) GWA-1A 146.7 n/a 9/11/2019 53 No 6 0 No 0.001254 Param 1 of 2 Total Dissolved Solids (mg/L) GWA-2A 9/11/2019 0 0.001254 Param 1 of 2 207.6 n/a 74 No 8 No

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Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=8, Std. Dev.=0.238, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7678, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Chloride Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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Exceeds Limit Intrawell Parametric

20

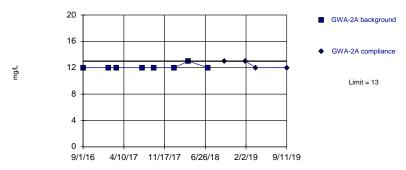
GWA-3A background

GWA-3A compliance

Limit = 13.05

Background Data Summary: Mean=8.243, Std. Dev.=1.532, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8921, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

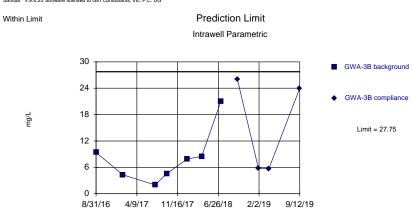
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Chloride Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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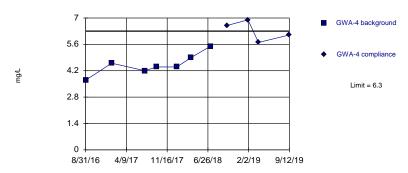


Background Data Summary: Mean=8.243, Std. Dev.=6.219, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8368, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

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Within Limit





Background Data Summary: Mean=4.529, Std. Dev.=0.5648, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9692, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0154

Constituent: Chloride Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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Within Limit Prediction Limit Intrawell Parametric

8
6.4

GWC-1 background

4.8

3.2

1.6

0

8/31/16

4/9/17

11/16/17

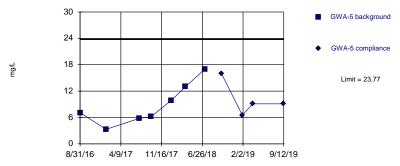
6/26/18

2/2/19

9/12/19

Background Data Summary: Mean=4.986, Std. Dev.=0.7358, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8589, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Within Limit Prediction Limit Intrawell Parametric



Background Data Summary: Mean=8.9, Std. Dev.=4.742, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9364, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Chloride Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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Within Limit Prediction Limit Intrawell Parametric

GWC-2 background

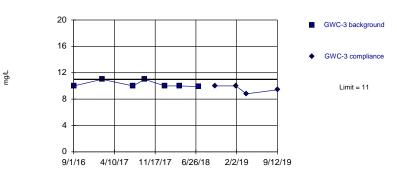
GWC-2 compliance

Limit = 5.965

Background Data Summary: Mean=5.457, Std. Dev.=0.1618, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8631, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Within Limit

Prediction Limit
Intrawell Non-parametric



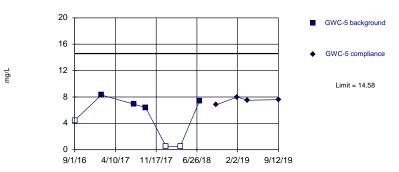
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Constituent: Chloride Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

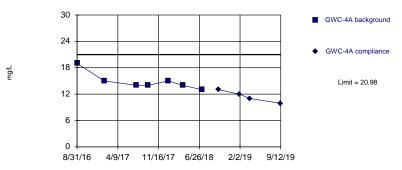
Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=5.167, Std. Dev.=3.001, n=7, 42.86% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8453, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Within Limit Prediction Limit Intrawell Parametric



Background Data Summary: Mean=14.86, Std. Dev.=1.952, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7655, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Chloride Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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Within Limit
Intrawell Parametric

GWC-6 background

GWC-6 compliance

Limit = 9.147

Background Data Summary: Mean=7.3, Std. Dev.=0.5367, n=6. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8479, critical = 0.713. Kappa = 3.441 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

2/14/18 8/24/18

8/6/17

1/27/17

3/4/19

9/12/19

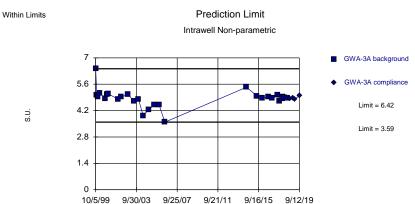
Prediction Limit Within Limits Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=2.278, Std. Dev.=0.08827, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9016, critical = 0.891. Kappa = 2.027 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

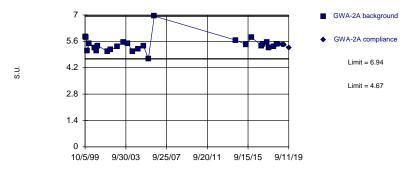
> Constituent: pH Analysis Run 2/17/2020 12:37 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 28 background values. Well-constituent pair annual alpha = 0.009338. Individual comparison alpha = 0.004674 (1 of 2).

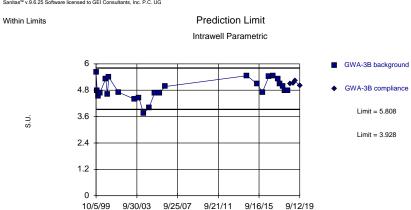
Prediction Limit Within Limits Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 26 background values. Well-constituent pair annual alpha = 0.01065. Individual comparison alpha = 0.005334 (1 of 2).

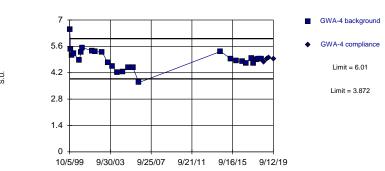
> Constituent: pH Analysis Run 2/17/2020 12:37 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG



Background Data Summary: Mean=4.868, Std. Dev.=0.4615, n=25. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9524, critical = 0.888. Kappa = 2.037 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Within Limits Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=4.941, Std. Dev.=0.5298, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9518, critical = 0.894. Kappa = 2.018 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.01574

Constituent: pH Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limits

Prediction Limit
Intrawell Parametric

GWC-1 background

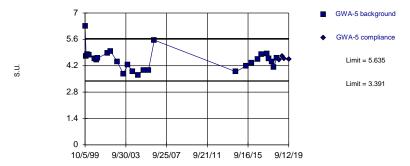
GWC-1 compliance

Limit = 5.641

Limit = 3.782

Background Data Summary (based on square transformation): Mean=23.06, Std. Dev.=4.321, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9211, critical = 0.891. Kappa = 2.027 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Within Limits Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=4.513, Std. Dev.=0.556, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9023, critical = 0.894. Kappa = 2.018 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

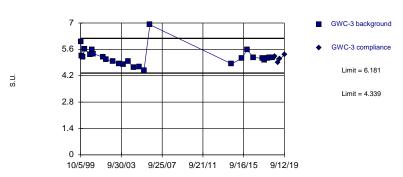
Constituent: pH Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Prediction Limit Within Limits Intrawell Parametric ■ GWC-2 background GWC-2 compliance 5.6 Limit = 6.012 4.2 S.U. Limit = 4.165 2.8 1.4 9/30/03 9/25/07 9/21/11 9/16/15 9/12/19 10/5/99

Background Data Summary: Mean=5.089, Std. Dev.=0.4597, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9517, critical = 0.896. Kappa = 2.009 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

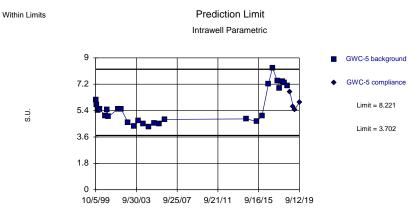
Within Limits Prediction Limit
Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=1.645, Std. Dev.=0.08728, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8953, critical = 0.891. Kappa = 2.027 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

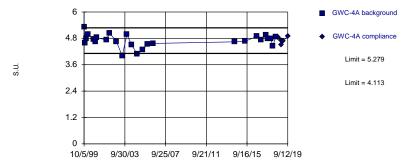
Constituent: pH Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG



Background Data Summary (based on natural log transformation): Mean=1.708, Std. Dev.=0.1977, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9014, critical = 0.894. Kappa = 2.018 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

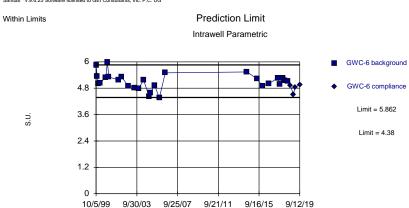
Within Limits Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=4.696, Std. Dev.=0.2874, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.959, critical = 0.891. Kappa = 2.027 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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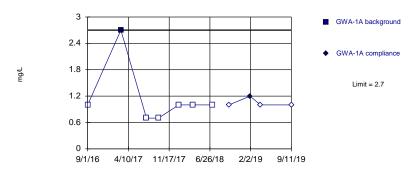


Background Data Summary: Mean=5.121, Std. Dev.=0.367, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.97, critical = 0.894. Kappa = 2.018 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

Constituent: Sulfate Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

8/31/16

Within Limit

Prediction Limit
Intrawell Non-parametric

GWA-3A background

GWA-3A compliance

Limit = 1

4/9/17 11/16/17 6/26/18 2/2/19

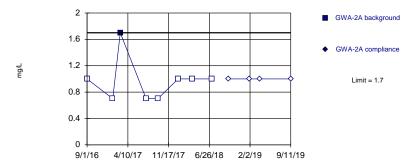
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 7) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

9/12/19

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit Pre

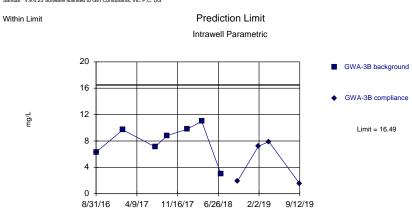
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

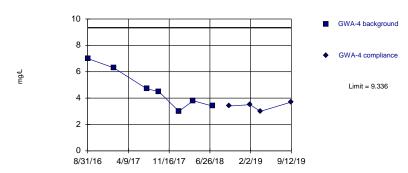
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG



Background Data Summary: Mean=7.957, Std. Dev.=2.722, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9247, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Within Limit Prediction Limit

Intrawell Parametric



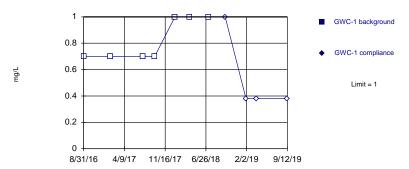
Background Data Summary: Mean=4.671, Std. Dev.=1.487, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9219, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.01526

Constituent: Sulfate Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

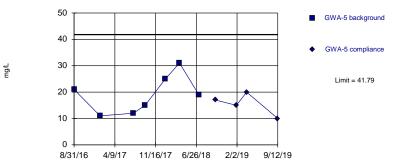
Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 7) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

Within Limit Prediction Limit
Intrawell Parametric

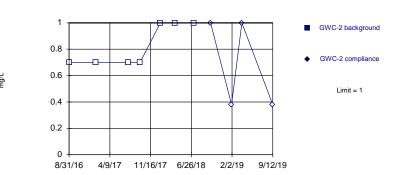


Background Data Summary: Mean=19.14, Std. Dev.=7.221, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9508, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Sulfate Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

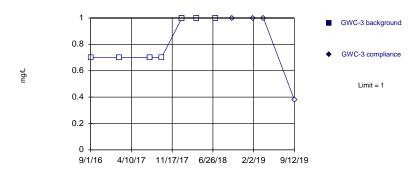


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 7) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

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Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 7) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2).

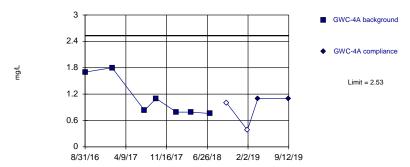
Constituent: Sulfate Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Background Data Summary (based on square root transformation): Mean=6.176, Std. Dev.=2.274, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7427, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Parametric

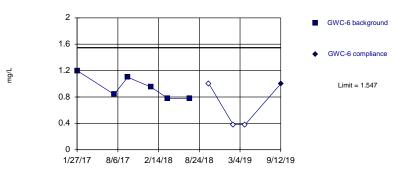


Background Data Summary: Mean=1.11, Std. Dev.=0.4528, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.761, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Sulfate Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

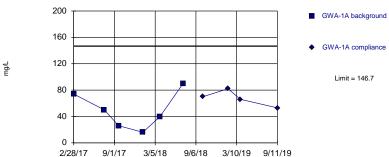
Sanitas'* v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit Intrawell Parametric



Background Data Summary: Mean=0.9417, Std. Dev.=0.1758, n=6. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8839, critical = 0.713. Kappa = 3.441 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Within Limit Prediction Limit Intrawell Parametric



Background Data Summary: Mean=49.33, Std. Dev.=28.3, n=6. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9577, critical = 0.713. Kappa = 3.441 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0154

Constituent: Total Dissolved Solids Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Prediction Limit

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

8/31/16

Within Limit

Intrawell Parametric

GWA-3A background

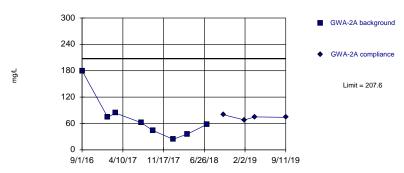
GWA-3A compliance

Limit = 79.05

Background Data Summary: Mean=29.43, Std. Dev.=15.82, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9656, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

4/9/17 11/16/17 6/26/18

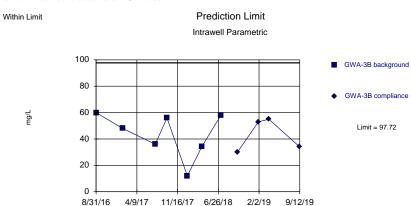
Within Limit Prediction Limit Intrawell Parametric



Background Data Summary: Mean=70.25, Std. Dev.=48.5, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8038, critical = 0.749. Kappa = 2.831 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Total Dissolved Solids Analysis Run 2/17/2020 12:37 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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Background Data Summary: Mean=43.43, Std. Dev.=17.31, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8898, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

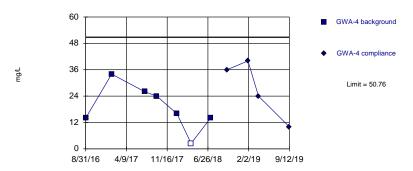
2/2/19

9/12/19

Hollow symbols indicate censored values.



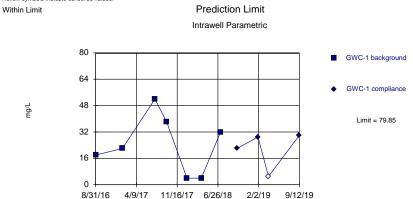




Background Data Summary: Mean=18.64, Std. Dev.=10.24, n=7, 14.29% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9672, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha =

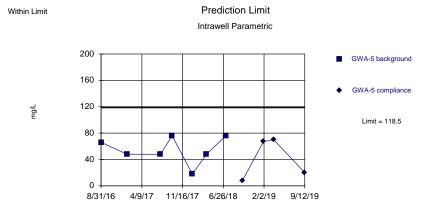
> Constituent: Total Dissolved Solids Analysis Run 2/17/2020 12:37 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.



Background Data Summary: Mean=24.29, Std. Dev.=17.72, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9449, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha =

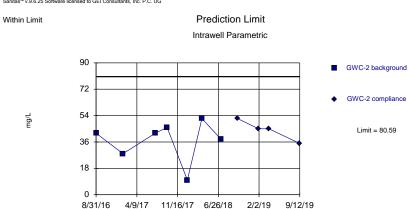
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG



Background Data Summary: Mean=54.29, Std. Dev.=20.48, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8842, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

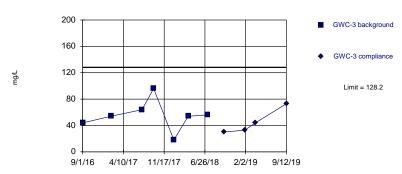
> Constituent: Total Dissolved Solids Analysis Run 2/17/2020 12:37 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG



Background Data Summary: Mean=36.86, Std. Dev.=13.95, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8883, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Prediction Limit Within Limit Intrawell Parametric



Background Data Summary: Mean=55.14, Std. Dev.=23.29, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.928, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha =

> Constituent: Total Dissolved Solids Analysis Run 2/17/2020 12:37 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

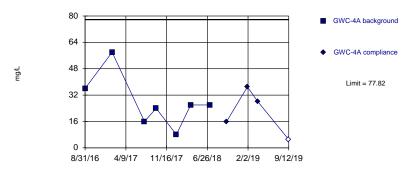
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Prediction Limit Within Limit Intrawell Parametric 700 GWC-5 background 560 GWC-5 compliance 420 Limit = 692.3 280 140 4/10/17 11/17/17 6/26/18 9/12/19 9/1/16 2/2/19

Background Data Summary: Mean=227.7, Std. Dev.=148.1, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9329, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha =

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

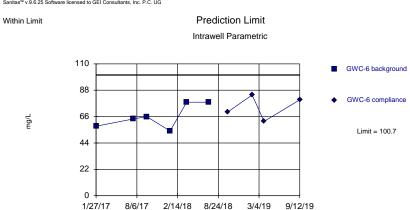
Prediction Limit Within Limit Intrawell Parametric



Background Data Summary: Mean=27.71, Std. Dev.=15.98, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9186, critical = 0.73. Kappa = 3.136 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

> Constituent: Total Dissolved Solids Analysis Run 2/17/2020 12:37 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG



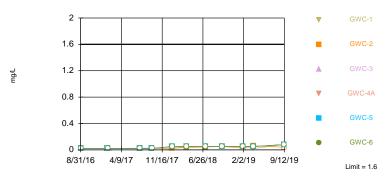
Background Data Summary: Mean=66.33, Std. Dev.=9.993, n=6. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9019, critical = 0.713. Kappa = 3.441 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Interwell Prediction Limit - All Results

		F	Plant McIntosh	Client: GEI	Data: McIn	itosh No	o 3 CC	R Printe	ed 2/13/2020,	12:10 PM	
Constituent	<u>Well</u>	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	NDs	Transform	<u>Alpha</u>	Method
Boron (mg/L)	GWC-1	1.6	n/a	9/12/2019	0.08ND	No	70	77.14	n/a	0.0003873	NP (NDs) 1 of 2
Boron (mg/L)	GWC-2	1.6	n/a	9/12/2019	0.039ND	No	70	77.14	n/a	0.0003873	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-2	0.21	n/a	9/12/2019	0.2ND	No	70	87.14	n/a	0.0003873	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-3	0.21	n/a	9/12/2019	0.2ND	No	70	87.14	n/a	0.0003873	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-4A	0.21	n/a	9/12/2019	0.2ND	No	70	87.14	n/a	0.0003873	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-5	0.21	n/a	9/12/2019	0.026ND	No	70	87.14	n/a	0.0003873	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-6	0.21	n/a	9/12/2019	0.2ND	No	70	87.14	n/a	0.0003873	NP (NDs) 1 of 2
Boron (mg/L)	GWC-3	1.6	n/a	9/12/2019	0.08ND	No	70	77.14	n/a	0.0003873	NP (NDs) 1 of 2
Boron (mg/L)	GWC-4A	1.6	n/a	9/12/2019	0.08ND	No	70	77.14	n/a	0.0003873	NP (NDs) 1 of 2
Boron (mg/L)	GWC-5	1.6	n/a	9/12/2019	0.08ND	No	70	77.14	n/a	0.0003873	NP (NDs) 1 of 2
Boron (mg/L)	GWC-6	1.6	n/a	9/12/2019	0.08ND	No	70	77.14	n/a	0.0003873	NP (NDs) 1 of 2
Calcium (mg/L)	GWC-1	19	n/a	9/12/2019	0.25ND	No	69	0	n/a	0.0004008	NP (normality) 1 of 2
Calcium (mg/L)	GWC-2	19	n/a	9/12/2019	2.05	No	69	0	n/a	0.0004008	NP (normality) 1 of 2
Calcium (mg/L)	GWC-3	19	n/a	9/12/2019	1.9	No	69	0	n/a	0.0004008	NP (normality) 1 of 2
Calcium (mg/L)	GWC-4A	19	n/a	9/12/2019	0.065ND	No	69	0	n/a	0.0004008	NP (normality) 1 of 2
Calcium (mg/L)	GWC-5	19	n/a	9/12/2019	9.1	No	69	0	n/a	0.0004008	NP (normality) 1 of 2
Calcium (mg/L)	GWC-6	19	n/a	9/12/2019	1.7	No	69	0	n/a	0.0004008	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-1	0.21	n/a	9/12/2019	0.2ND	No	70	87.14	n/a	0.0003873	NP (NDs) 1 of 2

Within Limit

Prediction Limit
Interwell Non-parametric



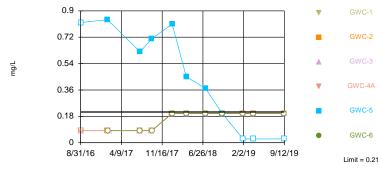
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 70 background values. 77.14% NDs. Annual per-constituent alpha = 0.004638. Individual comparison alpha = 0.0003873 (1 of 2). Comparing 6 points to limit.

Constituent: Boron Analysis Run 2/13/2020 12:09 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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Within Limit

Prediction Limit Interwell Non-parametric

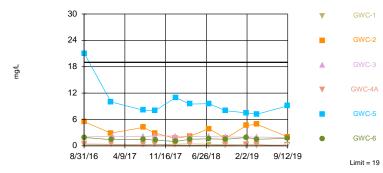


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 70 background values. 87.14% NDs. Annual per-constituent alpha = 0.004638. Individual comparison alpha = 0.0003873 (1 of 2). Comparing 6 points to limit.

Constituent: Fluoride Analysis Run 2/13/2020 12:09 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values

Within Limit Prediction Limit
Interwell Non-parametric

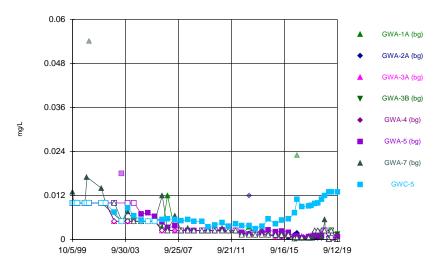


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 69 background values. Annual per-constituent alpha = 0.004799. Individual comparison alpha = 0.0044098 (1 of 2). Comparing 6 points to limit.

Constituent: Calcium Analysis Run 2/13/2020 12:09 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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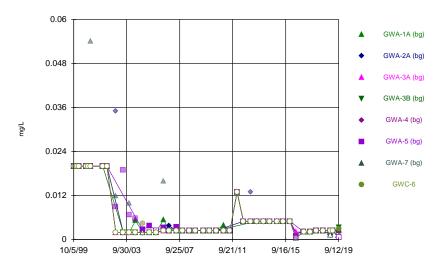




Constituent: Cobalt Analysis Run 2/17/2020 1:15 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Time Series



Constituent: Copper Analysis Run 2/17/2020 1:16 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

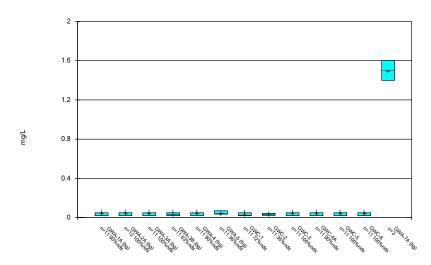
Box & Whiskers Plot

		Plant McIntosh	Client: GEI	Data: McIntosh	No 3 CCR	Printed 2/13/2020, 12:5	52 PM			
<u>Constituent</u>	<u>Well</u>		<u>N</u>	<u>Mean</u>	Std. Dev.	Std. Err.	<u>Median</u>	Min.	Max.	%NDs
Boron (mg/L)	GWA-1A (bg)		11	0.04291	0.0182	0.005486	0.05	0.021	0.08	90.91
Boron (mg/L)	GWA-2A (bg)		12	0.04283	0.01821	0.005257	0.05	0.021	0.08	100
Boron (mg/L)	GWA-3A (bg)		11	0.03955	0.01976	0.005956	0.05	0.021	0.08	100
Boron (mg/L)	GWA-3B (bg)		11	0.03582	0.01869	0.005636	0.029	0.021	0.08	63.64
Boron (mg/L)	GWA-4 (bg)		11	0.04273	0.01836	0.005535	0.05	0.021	0.08	90.91
Boron (mg/L)	GWA-5 (bg)		11	0.04636	0.01743	0.005256	0.042	0.021	0.073	36.36
Boron (mg/L)	GWC-1		11	0.03745	0.01971	0.005944	0.025	0.021	0.08	72.73
Boron (mg/L)	GWC-2		11	0.03436	0.01318	0.003973	0.03	0.021	0.062	36.36
Boron (mg/L)	GWC-3		11	0.04218	0.01895	0.005714	0.05	0.021	0.08	100
Boron (mg/L)	GWC-4A		11	0.04236	0.01874	0.005649	0.05	0.021	0.08	90.91
Boron (mg/L)	GWC-5		11	0.04218	0.01895	0.005714	0.05	0.021	0.08	100
Boron (mg/L)	GWC-6		11	0.04218	0.01895	0.005714	0.05	0.021	0.08	100
Boron (mg/L)	GWA-7A (bg)		3	1.5	0.1	0.05774	1.5	1.4	1.6	0
Calcium (mg/L)	GWA-1A (bg)		10	1.77	0.3433	0.1086	1.7	1.5	2.7	0
Calcium (mg/L)	GWA-2A (bg)		12	3.467	0.257	0.0742	3.4	3.1	4	0
Calcium (mg/L)	GWA-3A (bg)		11	1.973	0.3069	0.09253	1.9	1.5	2.4	0
Calcium (mg/L)	GWA-3B (bg)		11	2.818	0.867	0.2614	2.7	1.6	4.4	0
Calcium (mg/L)	GWA-4 (bg)		11	0.9582	0.09108	0.02746	0.98	0.84	1.1	0
Calcium (mg/L)	GWA-5 (bg)		11	3.045	0.9802	0.2955	3.1	1.7	4.8	0
Calcium (mg/L)	GWC-1		10	0.169	0.07633	0.02414	0.17	0.06	0.3	40
Calcium (mg/L)	GWC-2		11	3.327	1.364	0.4112	2.9	1.7	5.5	0
Calcium (mg/L)	GWC-3		11	2.082	0.1168	0.03521	2.9	1.7	2.3	0
. = :	GWC-4A		10	0.3245		0.03297	0.34	0.065	0.44	10
Calcium (mg/L) Calcium (mg/L)	GWC-4A		11	9.909	0.1043	1.163	9.1	7.2	21	0
, ,	GWC-6		11	1.527	3.858 0.2573	0.07757	1.5	1.2	1.9	0
Calcium (mg/L)			3	17.33			1.5	15		0
Calcium (mg/L)	GWA-7A (bg)		3 11	7.991	2.082 0.3807	1.202 0.1148	8	7.1	19 8.5	0
Chloride (mg/L)	GWA-1A (bg)									0
Chloride (mg/L)	GWA-2A (bg)		12	12.25	0.4523	0.1306	12	12	13	0
Chloride (mg/L)	GWA-3A (bg)		11	10.7	3.637	1.097	9.4	6.8	16	0
Chloride (mg/L)	GWA-3B (bg)		11	10.84	8.568	2.583	7.9	2	26	
Chloride (mg/L)	GWA-4 (bg)		11	5.182	1.048	0.3159	4.9	3.7	6.9	0
Chloride (mg/L)	GWA-5 (bg)		11	9.364	4.345	1.31	9.1	3.3	17	0
Chloride (mg/L)	GWC-1		11	4.85	0.6329	0.1908	4.7	4.1	6.4	0
Chloride (mg/L)	GWC-2		11	5.332	0.2883	0.08694	5.4	4.6	5.6	0
Chloride (mg/L)	GWC-3		11	10.01	0.6172	0.1861	10	8.8	11	0
Chloride (mg/L)	GWC-4A		11	13.63	2.393	0.7216	14	9.9	19	0
Chloride (mg/L)	GWC-5		11	5.85	2.834	0.8545	6.9	0.5	8.3	27.27
Chloride (mg/L)	GWC-6		10	7.45	0.5836	0.1845	7.3	6.8	8.5	0
Chloride (mg/L)	GWA-7A (bg)		3	6.667	0.5132	0.2963	6.8	6.1	7.1	0
Fluoride (mg/L)	GWA-1A (bg)		11	0.1602	0.05551	0.01674	0.2	0.082	0.2	90.91
Fluoride (mg/L)	GWA-2A (bg)		12	0.1537	0.05754	0.01661	0.2	0.082	0.2	91.67
Fluoride (mg/L)	GWA-3A (bg)		11	0.1571	0.05953	0.01795	0.2	0.082	0.2	100
Fluoride (mg/L)	GWA-3B (bg)		11	0.11	0.07516	0.02266	0.082	0.026	0.2	90.91
Fluoride (mg/L)	GWA-4 (bg)		11	0.1261	0.07386	0.02227	0.089	0.026	0.2	90.91
Fluoride (mg/L)	GWA-5 (bg)		11	0.1102	0.06755	0.02037	0.13	0.026	0.21	54.55
Fluoride (mg/L)	GWC-1		11	0.1571	0.05953	0.01795	0.2	0.082	0.2	100
Fluoride (mg/L)	GWC-2		11	0.1571	0.05953	0.01795	0.2	0.082	0.2	100
Fluoride (mg/L)	GWC-3		11	0.1571	0.05953	0.01795	0.2	0.082	0.2	100
Fluoride (mg/L)	GWC-4A		11	0.1571	0.05953	0.01795	0.2	0.082	0.2	100
Fluoride (mg/L)	GWC-5		11	0.4453	0.3351	0.101	0.45	0.026	0.84	45.45

Box & Whiskers Plot

		Plant McIntosh	Client: GEI	Data: McIntosh	h No 3 CCR Prir	nted 2/13/2020, 12	2:52 PM			
<u>Constituent</u>	<u>Well</u>		<u>N</u>	<u>Mean</u>	Std. Dev.	Std. Err.	<u>Median</u>	Min.	Max.	%NDs
Fluoride (mg/L)	GWC-6		10	0.1646	0.057	0.01802	0.2	0.082	0.2	100
Fluoride (mg/L)	GWA-7A (bg)		3	0.2	0	0	0.2	0.2	0.2	100
pH (S.U.)	GWA-1A (bg)		30	5.188	0.3818	0.0697	5.17	4.35	6.63	0
pH (S.U.)	GWA-2A (bg)		30	5.418	0.3777	0.06895	5.395	4.67	6.94	0
pH (S.U.)	GWA-3A (bg)		32	4.857	0.4482	0.07924	4.875	3.59	6.42	0
pH (S.U.)	GWA-3B (bg)		29	4.902	0.4368	0.08112	4.97	3.74	5.62	0
pH (S.U.)	GWA-4 (bg)		31	4.936	0.4944	0.0888	4.92	3.68	6.51	0
pH (S.U.)	GWA-5 (bg)		31	4.522	0.519	0.09321	4.54	3.71	6.3	0
pH (S.U.)	GWC-1		30	4.803	0.4544	0.08296	4.905	3.23	5.39	0
pH (S.U.)	GWC-2		32	5.107	0.4351	0.07692	5.145	4.29	6.08	0
pH (S.U.)	GWC-3		30	5.19	0.4525	0.08262	5.145	4.47	6.91	0
pH (S.U.)	GWC-4A		31	4.701	0.2681	0.04815	4.73	4	5.33	0
pH (S.U.)	GWC-5		31	5.666	1.107	0.1989	5.48	4.28	8.32	0
pH (S.U.)	GWC-6		32	5.064	0.3705	0.0655	5.025	4.36	5.99	0
pH (S.U.)	GWA-7A (bg)		3	5.29	0.2869	0.1656	5.15	5.1	5.62	0
Sulfate (mg/L)	GWA-1A (bg)		11	1.118	0.5437	0.1639	1	0.7	2.7	81.82
Sulfate (mg/L)	GWA-2A (bg)		12	0.9833	0.2623	0.07571	1	0.7	1.7	91.67
Sulfate (mg/L)	GWA-3A (bg)		11	0.7218	0.2573	0.07757	0.7	0.38	1	100
Sulfate (mg/L)	GWA-3B (bg)		11	6.745	3.275	0.9875	7.2	1.5	11	0
Sulfate (mg/L)	GWA-4 (bg)		11	4.209	1.328	0.4006	3.7	3	7	0
Sulfate (mg/L)	GWA-5 (bg)		11	17.82	6.322	1.906	17	10	31	0
Sulfate (mg/L)	GWC-1		11	0.7218	0.2573	0.07757	0.7	0.38	1	100
Sulfate (mg/L)	GWC-2		11	0.7782	0.2424	0.07309	0.7	0.38	1	100
Sulfate (mg/L)	GWC-3		11	0.8345	0.2105	0.06348	1	0.38	1	100
Sulfate (mg/L)	GWC-4A		11	1.032	0.4133	0.1246	1	0.38	1.8	18.18
Sulfate (mg/L)	GWC-5		11	29.15	32.18	9.704	25	3	110	0
Sulfate (mg/L)	GWC-6		10	0.841	0.2771	0.08762	0.895	0.38	1.2	30
Sulfate (mg/L)	GWA-7A (bg)		3	83.67	2.309	1.333	85	81	85	0
Total Dissolved S	GWA-1A (bg)		10	56.7	24.15	7.636	59.5	16	90	0
Total Dissolved S	GWA-2A (bg)		12	71.58	38.83	11.21	71	24	180	0
Total Dissolved S	GWA-3A (bg)		11	31.27	17.16	5.174	32	4	56	9.091
Total Dissolved S	GWA-3B (bg)		11	43.27	15.14	4.565	48	12	60	0
Total Dissolved S	GWA-4 (bg)		11	21.86	11.73	3.537	24	2.5	40	9.091
Total Dissolved S	GWA-5 (bg)		11	49.55	24.48	7.382	48	8	76	0
Total Dissolved S	GWC-1		11	23.27	15.18	4.577	22	4	52	9.091
Total Dissolved S	GWC-2		11	39.55	12.05	3.634	42	10	52	0
Total Dissolved S	GWC-3		11	51.45	21.61	6.516	54	18	96	0
Total Dissolved S	GWC-4A		11	25.45	14.88	4.487	26	5	58	9.091
Total Dissolved S	GWC-5		11	185.3	132.5	39.95	160	44	500	0
Total Dissolved S	GWC-6		10	69.4	10.2	3.226	68	54	84	0
Total Dissolved S	GWA-7A (bg)		3	163.3	20.82	12.02	170	140	180	0
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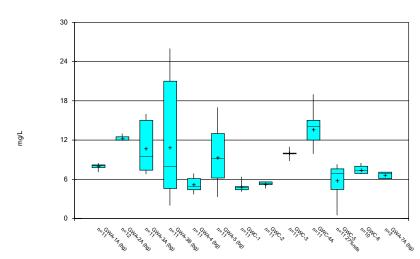
Box & Whiskers Plot



Constituent: Boron Analysis Run 2/13/2020 12:51 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

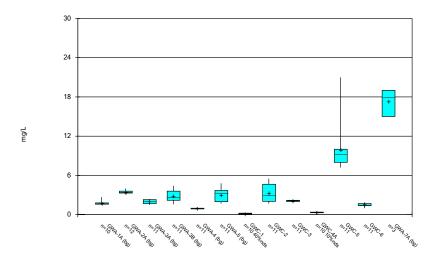
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Box & Whiskers Plot



Constituent: Chloride Analysis Run 2/13/2020 12:51 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

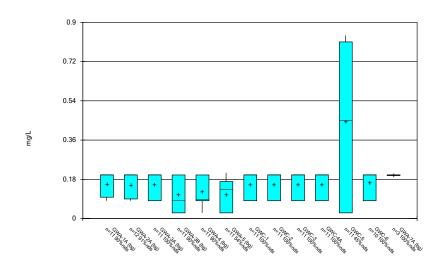
Box & Whiskers Plot



Constituent: Calcium Analysis Run 2/13/2020 12:51 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

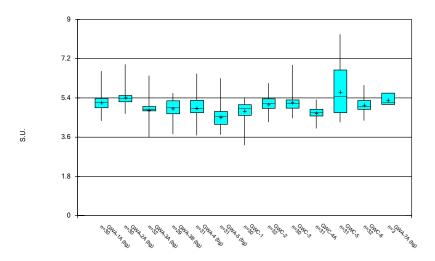
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Box & Whiskers Plot



Constituent: Fluoride Analysis Run 2/13/2020 12:51 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

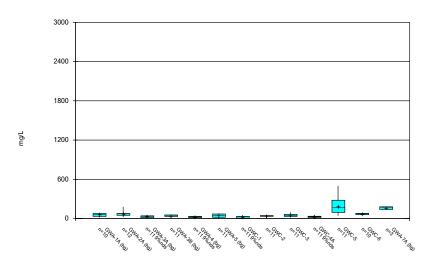
Box & Whiskers Plot



Constituent: pH Analysis Run 2/13/2020 12:51 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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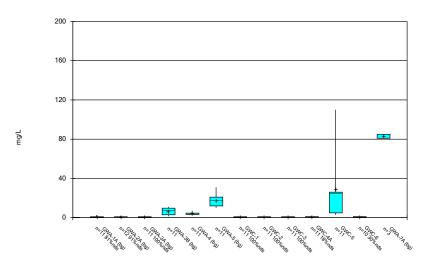
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 2/13/2020 12:51 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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Box & Whiskers Plot



Constituent: Sulfate Analysis Run 2/13/2020 12:51 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Intrawell Prediction Limit - Significant Results

Plant McIntosh Client: GEI Data: McIntosh No 3 CCR Printed 2/4/2020, 9:19 AM Constituent <u>Well</u> Lower Lim. Upper Lim. <u>Date</u> Observ. Sig. Bg N %NDs **Transform** <u>Alpha</u> <u>Method</u> Barium (mg/L) GWA-3A 9/12/2019 0.073 44 0.001254 Param 1 of 2 0.06197 n/a Yes 0 No Cobalt (mg/L) GWC-5 0.011 n/a 9/12/2019 0.013 Yes 44 27.27 n/a 0.0009963 NP (normality) 1 of 2 Copper (mg/L) NP (NDs) 1 of 2 GWA-7 0.0025 n/a 9/12/2019 0.0026 Yes 37 100 0.001361 n/a Copper (mg/L) GWC-6 0.0025 9/12/2019 0.003 0.001159 NP (NDs) 1 of 2 n/a Yes 40 100 n/a

Intrawell Prediction Limit - All Results

			Plant McIntosh	Client: GEI	Data: McIr	ntosh N	10 3 C	CR Prin	ted 2/4/2020,	9:21 AM	
Constituent	<u>Well</u>	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	N <u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	Method
Barium (mg/L)	GWA-1A	0.2179	n/a	9/11/2019	0.022	No	43	0	In(x)	0.001097	Param 1 of 2
Barium (mg/L)	GWA-2A	0.17	n/a	9/11/2019	0.04	No	42	0	n/a	0.001077	NP (normality) 1 of 2
Barium (mg/L)	GWA-3A	0.06197	n/a	9/12/2019	0.073	Yes	44	0	No	0.001254	Param 1 of 2
Barium (mg/L)	GWA-3B	0.1148	n/a	9/12/2019	0.076	No	31	0	No	0.001097	Param 1 of 2
Barium (mg/L)	GWA-4	0.05495	n/a	9/12/2019	0.044	No	44	0	No	0.001097	Param 1 of 2
Barium (mg/L)	GWA-5	0.1829	n/a	9/12/2019	0.086	No	43	0	No	0.001097	Param 1 of 2
Barium (mg/L)	GWA-7	0.3	n/a	9/12/2019	0.015	No	43	0	n/a	0.001037	NP (normality) 1 of 2
Barium (mg/L)	GWC-1	0.06059	n/a	9/12/2019	0.016	No	16	0	sqrt(x)	0.001097	Param 1 of 2
Barium (mg/L)	GWC-2	0.08842	n/a	9/12/2019	0.0585	No	44	0	No	0.001097	Param 1 of 2
Barium (mg/L)	GWC-3	0.06343	n/a	9/12/2019	0.037	No	40	0	In(x)	0.001097	Param 1 of 2
Barium (mg/L)	GWC-4A	0.08619	n/a	9/12/2019	0.026	No	44	0	No	0.001097	Param 1 of 2
Barium (mg/L)	GWC-5	0.6036	n/a	9/12/2019	0.59	No	43	0	In(x)	0.001097	Param 1 of 2
Barium (mg/L)	GWC-6	0.05579	n/a	9/12/2019	0.052	No	40	0	In(x)	0.001097	Param 1 of 2
Beryllium (mg/L)	GWA-1A	0.004	n/a	9/11/2019	0.00018ND	No	43	86.05	n/a	0.001037	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-2A	0.004	n/a	9/11/2019	0.00018ND	No	42	83.33	n/a	0.001077	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-3A	0.004	n/a	9/12/2019	0.00018ND	No	44	79.55	n/a	0.0009963	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-3B	0.004	n/a	9/12/2019	0.00018ND	No	33	87.88	n/a	0.001701	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-4	0.004	n/a	9/12/2019	0.001ND	No	44	88.64	n/a	0.0009963	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-5	0.004	n/a	9/12/2019	0.00018ND	No	44	79.55	n/a	0.0009963	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-7	0.0041	n/a	9/12/2019	0.00018ND	No	42	80.95	n/a	0.001077	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-1	0.004	n/a	9/12/2019	0.00018ND	No	44	95.45	n/a	0.0009963	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-2	0.004	n/a	9/12/2019	0.001ND	No	44	86.36	n/a	0.0009963	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-3	0.004	n/a	9/12/2019	0.00018ND	No	44	86.36	n/a	0.0009963	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-4A	0.004	n/a	9/12/2019	0.00018ND	No	44	93.18	n/a	0.0009963	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-5	0.004	n/a	9/12/2019	0.0017	No	44	75	n/a	0.0009963	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-6	0.004	n/a	9/12/2019	0.00018ND	No	43	86.05	n/a	0.001037	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-1A	0.0256	n/a	9/11/2019	0.0076	No	39	12.82	sqrt(x)	0.001097	Param 1 of 2
Chromium (mg/L)	GWA-2A	0.023	n/a	9/11/2019	0.004	No	41	53.66	n/a	0.001118	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-3A	0.01	n/a	9/12/2019	0.002ND	No	44	38.64	n/a	0.0009963	NP (normality) 1 of 2
Chromium (mg/L)	GWA-3B	0.01	n/a	9/12/2019	0.002ND	No	32	78.13	n/a	0.001803	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-4	0.01	n/a	9/12/2019	0.002ND	No	42	83.33	n/a	0.001077	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-5	0.01	n/a	9/12/2019	0.0032	No	41	56.1	n/a	0.001118	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-7	0.01047	n/a	9/12/2019	0.0035	No	29	6.897	No	0.001097	Param 1 of 2
Chromium (mg/L)	GWC-1	0.01	n/a	9/12/2019	0.002ND	No	43	97.67	n/a	0.001037	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-2	0.01	n/a	9/12/2019	0.0049	No	41	24.39	n/a	0.001118	NP (normality) 1 of 2
Chromium (mg/L)	GWC-3	0.019	n/a	9/12/2019	0.0039	No	41	17.07	n/a	0.001118	NP (normality) 1 of 2
Chromium (mg/L)	GWC-4A	0.01	n/a	9/12/2019	0.0028	No	42	95.24	n/a	0.001077	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-5	0.01	n/a	9/12/2019	0.0051	No	41	90.24	n/a	0.001118	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-6	0.01	n/a	9/12/2019	0.0022	No	40	87.5	n/a	0.001159	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-1A	0.012	n/a	9/11/2019	0.000075NI		43	76.74	n/a	0.001037	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-2A	0.01	n/a	9/11/2019	0.000075NI		41	70.73	n/a	0.001118	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-3A	0.01	n/a	9/12/2019	0.0015	No	43	74.42	n/a	0.001037	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-3B	0.01	n/a	9/12/2019	0.0014	No	31	74.19	n/a	0.001905	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-4	0.01	n/a	9/12/2019	0.00091	No	44	75	n/a	0.0009963	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-5	0.01	n/a	9/12/2019	0.00074	No	43	41.86	n/a	0.001037	NP (normality) 1 of 2
Cobalt (mg/L)	GWA-7	0.017	n/a	9/12/2019	0.000075NI		43	81.4	n/a	0.001037	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-1	0.0025	n/a	9/12/2019	0.000075NI		43	100	n/a	0.001037	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-2	0.01	n/a	9/12/2019	0.000885	No	44	70.45	n/a	0.0009963	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-3	0.01	n/a	9/12/2019	0.0005	No	44	79.55	n/a	0.0009963	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-4A	0.01	n/a	9/12/2019	0.0003 0.000075NI		44	77.27	n/a	0.0009963	NP (NDs) 1 of 2
oodan (mg/L)	3110 7/1	0.01	11/4	3/12/2013	J.00007 JINI	2110	77	11.21	11/4	0.000000	141 (1403) 1 012

Intrawell Prediction Limit - All Results

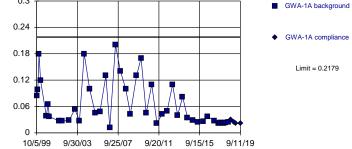
			Plant McIntosh	Client: GEI	Data: McIn	ntosh N	No 3 CC	CR Prin	ted 2/4/2020,	9:21 AM	
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	Transform	<u>Alpha</u>	Method
Cobalt (mg/L)	GWC-5	0.011	n/a	9/12/2019	0.013	Yes	44	27.27	n/a	0.0009963	NP (normality) 1 of 2
Cobalt (mg/L)	GWC-6	0.01	n/a	9/12/2019	0.00077	No	44	81.82	n/a	0.0009963	NP (NDs) 1 of 2
Copper (mg/L)	GWA-1A	0.02	n/a	9/11/2019	0.002ND	No	41	85.37	n/a	0.001118	NP (NDs) 1 of 2
Copper (mg/L)	GWA-2A	0.02	n/a	9/11/2019	0.00063ND	No	36	94.44	n/a	0.001429	NP (NDs) 1 of 2
Copper (mg/L)	GWA-3A	0.02	n/a	9/12/2019	0.0024	No	41	97.56	n/a	0.001118	NP (NDs) 1 of 2
Copper (mg/L)	GWA-3B	0.02	n/a	9/12/2019	0.0032	No	28	96.43	n/a	0.002337	NP (NDs) 1 of 2
Copper (mg/L)	GWA-4	0.02	n/a	9/12/2019	0.0022	No	41	97.56	n/a	0.001118	NP (NDs) 1 of 2
Copper (mg/L)	GWA-5	0.02	n/a	9/12/2019	0.00063ND	No	36	86.11	n/a	0.001429	NP (NDs) 1 of 2
Copper (mg/L)	GWA-7	0.0025	n/a	9/12/2019	0.0026	Yes	37	100	n/a	0.001361	NP (NDs) 1 of 2
Copper (mg/L)	GWC-1	0.0025	n/a	9/12/2019	0.001515	No	40	100	n/a	0.001159	NP (NDs) 1 of 2
Copper (mg/L)	GWC-2	0.02	n/a	9/12/2019	0.001315	No	39	97.44	n/a	0.001226	NP (NDs) 1 of 2
Copper (mg/L)	GWC-3	0.02	n/a	9/12/2019	0.00063ND	No	41	97.56	n/a	0.001118	NP (NDs) 1 of 2
Copper (mg/L)	GWC-4A	0.0025	n/a	9/12/2019	0.002ND	No	41	100	n/a	0.001118	NP (NDs) 1 of 2
Copper (mg/L)	GWC-5	0.02	n/a	9/12/2019	0.00063ND	No	41	95.12	n/a	0.001118	NP (NDs) 1 of 2
Copper (mg/L)	GWC-6	0.0025	n/a	9/12/2019	0.003	Yes	40	100	n/a	0.001159	NP (NDs) 1 of 2
Lead (mg/L)	GWA-1A	0.013	n/a	9/11/2019	0.001ND	No	37	94.59	n/a	0.001361	NP (NDs) 1 of 2
Lead (mg/L)	GWA-2A	0.013	n/a	9/11/2019	0.00013ND	No	41	92.68	n/a	0.001118	NP (NDs) 1 of 2
Lead (mg/L)	GWA-3A	0.013	n/a	9/12/2019	0.001ND	No	44	97.73	n/a	0.0009963	NP (NDs) 1 of 2
Lead (mg/L)	GWA-3B	0.013	n/a	9/12/2019	0.00013ND	No	31	74.19	n/a	0.001905	NP (NDs) 1 of 2
Lead (mg/L)	GWA-4	0.013	n/a	9/12/2019	0.001ND	No	43	95.35	n/a	0.001037	NP (NDs) 1 of 2
Lead (mg/L)	GWA-5	0.013	n/a	9/12/2019	0.00013ND	No	43	83.72	n/a	0.001037	NP (NDs) 1 of 2
Lead (mg/L)	GWA-7	0.013	n/a	9/12/2019	0.00013ND	No	29	89.66	n/a	0.002172	NP (NDs) 1 of 2
Lead (mg/L)	GWC-1	0.0013	n/a	9/12/2019	0.001ND	No	43	100	n/a	0.001037	NP (NDs) 1 of 2
Lead (mg/L)	GWC-2	0.013	n/a	9/12/2019	0.001ND	No	42	97.62	n/a	0.001077	NP (NDs) 1 of 2
Lead (mg/L)	GWC-3	0.013	n/a	9/12/2019	0.001ND	No	40	95	n/a	0.001159	NP (NDs) 1 of 2
Lead (mg/L)	GWC-4A	0.0013	n/a	9/12/2019	0.001ND	No	43	100	n/a	0.001037	NP (NDs) 1 of 2
Lead (mg/L)	GWC-5	0.013	n/a	9/12/2019	0.00013ND	No	42	97.62	n/a	0.001077	NP (NDs) 1 of 2
Lead (mg/L)	GWC-6	0.013	n/a	9/12/2019	0.00013ND	No	40	95	n/a	0.001159	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-1A	0.03429	n/a	9/11/2019	0.0014	No	41	43.9	x^(1/3)	0.001097	Param 1 of 2
Vanadium (mg/L)	GWA-2A	0.023	n/a	9/11/2019	0.0016	No	36	55.56	n/a	0.001429	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-3A	0.01	n/a	9/12/2019	0.002	No	40	97.5	n/a	0.001159	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-3B	0.01	n/a	9/12/2019	0.0041	No	24	79.17	n/a	0.003124	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-4	0.01	n/a	9/12/2019	0.0017	No	40	95	n/a	0.001159	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-5	0.01	n/a	9/12/2019	0.004	No	39	82.05	n/a	0.001226	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-7	0.11	n/a	9/12/2019	0.0037	No	38	55.26	n/a	0.001294	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-1	0.01	n/a	9/12/2019	0.0023	No	41	97.56	n/a	0.001118	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-2	0.01	n/a	9/12/2019	0.0021	No	40	92.5	n/a	0.001159	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-3	0.0025	n/a	9/12/2019	0.0022	No	37	100	n/a	0.001361	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-4A	0.0025	n/a	9/12/2019	0.0021	No	41	100	n/a	0.001118	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-5	0.017	n/a	9/12/2019	0.0044	No	40	85	n/a	0.001159	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-6	0.01	n/a	9/12/2019	0.0043	No	40	97.5	n/a	0.001159	NP (NDs) 1 of 2
Zinc (mg/L)	GWA-1A	0.0659	n/a	9/11/2019	0.0062	No	41	31.71	sqrt(x)	0.001097	Param 1 of 2
Zinc (mg/L)	GWA-2A	0.119	n/a	9/11/2019	0.0057	No	37	13.51	ln(x)	0.001097	Param 1 of 2
Zinc (mg/L)	GWA-3A	0.02	n/a	9/12/2019	0.0081	No	38	52.63	n/a	0.001294	NP (NDs) 1 of 2
Zinc (mg/L)	GWA-3B	0.02	n/a	9/12/2019	0.01	No	26	61.54	n/a	0.002667	NP (NDs) 1 of 2
Zinc (mg/L)	GWA-4	0.03944	n/a	9/12/2019	0.0073	No	41	19.51	ln(x)	0.001097	Param 1 of 2
Zinc (mg/L)	GWA-5	0.068	n/a	9/12/2019	0.0074	No	40	20	n/a	0.001159	NP (normality) 1 of 2
Zinc (mg/L)	GWA-7	0.11	n/a	9/12/2019	0.0059	No	39	41.03	n/a	0.001226	NP (normality) 1 of 2
Zinc (mg/L)	GWC-1	0.02	n/a	9/12/2019	0.0032ND	No	41	53.66	n/a	0.001118	NP (NDs) 1 of 2
Zinc (mg/L)	GWC-2	0.02173	n/a	9/12/2019	0.00995	No	40	25	In(x)	0.001097	Param 1 of 2

Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 3 CCR Printed 2/4/2020, 9:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	<u> %NDs</u>	Transform	<u>Alpha</u>	Method
Zinc (mg/L)	GWC-3	0.02	n/a	9/12/2019	0.0058	No	37	35.14	n/a	0.001361	NP (normality) 1 of 2
Zinc (mg/L)	GWC-4A	0.02	n/a	9/12/2019	0.0093	No	39	48.72	n/a	0.001226	NP (normality) 1 of 2
Zinc (mg/L)	GWC-5	0.03818	n/a	9/12/2019	0.033	No	41	9.756	ln(x)	0.001097	Param 1 of 2
Zinc (mg/L)	GWC-6	0.01803	n/a	9/12/2019	0.011	No	35	34.29	x^(1/3)	0.001097	Param 1 of 2

Within Limit Prediction Limit Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-2.976, Std. Dev.=0.7397, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9246, critical = 0.923. Kappa = 1.963 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

Constituent: Barium Analysis Run 2/4/2020 9:15 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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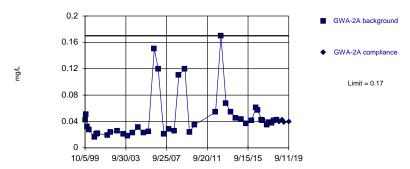
Exceeds Limit Intrawell Parametric

0.08
0.064
0.048
0.048
0.032
0.016
0.032
0.016
0.05/99 9/30/03 9/25/07 9/21/11 9/16/15 9/12/19

Background Data Summary (based on square root transformation): Mean=0.2146, Std. Dev.=0.01714, n=44. Normality test: Shapiro Wilk (@alpha = 0.01, calculated = 0.9248, critical = 0.9248. Kappa = 0.051329. Report alpha = 0.001329. Report alpha = 0.00132

Constituent: Barium Analysis Run 2/17/2020 1:40 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

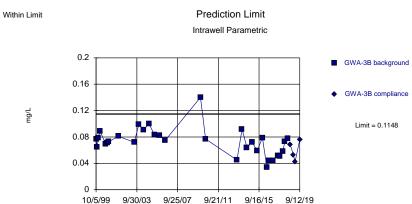
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 42 background values. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Constituent: Barium Analysis Run 2/4/2020 9:15 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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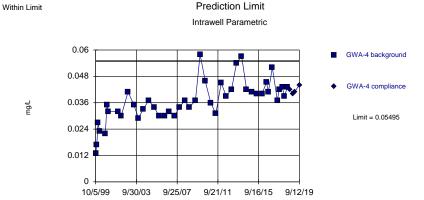
Background Data Summary: Mean=0.07316, Std. Dev.=0.02058, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9415, critical = 0.902. Kappa = 2.023 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

Constituent: Barium Analysis Run 2/4/2020 9:16 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

0.06

10/5/99

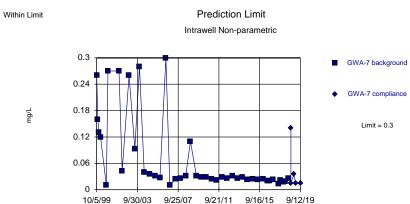
9/30/03



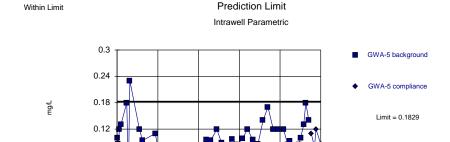
Background Data Summary: Mean=0.03676, Std. Dev.=0.009285, n=44. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9733, critical = 0.924. Kappa = 1.959 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.01027

Constituent: Barium Analysis Run 2/4/2020 9:16 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 43 background values. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).



Background Data Summary: Mean=0.09849, Std. Dev.=0.04301, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9538, critical = 0.923. Kappa = 1.963 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

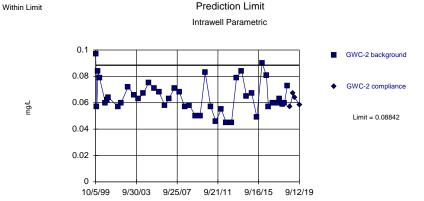
9/25/07 9/21/11 9/16/15 9/12/19

Constituent: Barium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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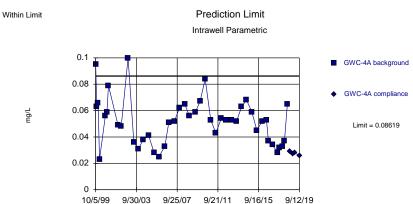
Background Data Summary (based on square root transformation): Mean=0.1593, Std. Dev.=0.03852, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8905, critical = 0.844. Kappa = 2.255 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.



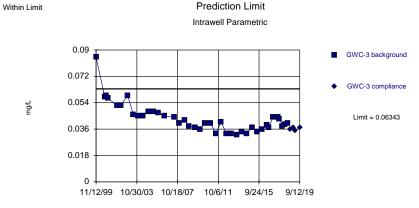
Background Data Summary: Mean=0.06488, Std. Dev.=0.01202, n=44. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9555, critical = 0.924. Kappa = 1.959 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.01026.

Constituent: Barium Analysis Run 2/4/2020 9:16 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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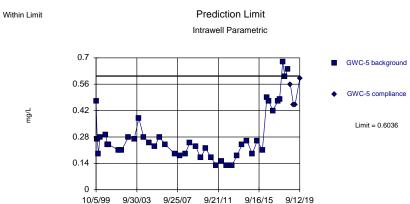
Background Data Summary: Mean=0.05181, Std. Dev.=0.01754, n=44. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9494, critical = 0.924. Kappa = 1.959 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.



Background Data Summary (based on natural log transformation): Mean=-3.161, Std. Dev.=0.2041, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9214, critical = 0.919. Kappa = 1.975 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

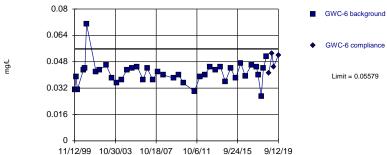
Constituent: Barium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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Background Data Summary (based on natural log transformation): Mean=-1.344, Std. Dev.=0.4273, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.931, critical = 0.923. Kappa = 1.963 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

Within Limit Prediction Limit Intrawell Parametric

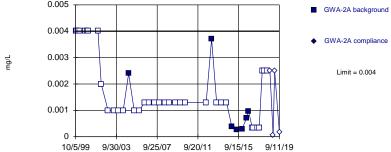


Background Data Summary (based on natural log transformation): Mean=-3.205, Std. Dev.=0.1612, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9261, critical = 0.919. Kappa = 1.975 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

Constituent: Barium Analysis Run 2/4/2020 9:16 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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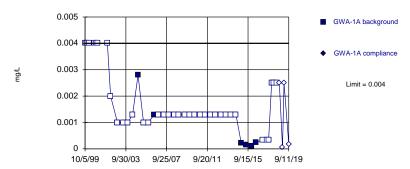
Within Limit Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

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Within Limit Prediction Limit
Intrawell Non-parametric

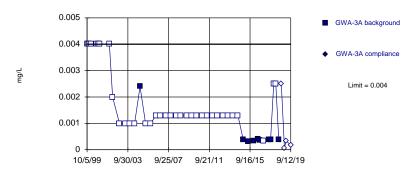


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 86.05% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Beryllium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

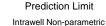
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

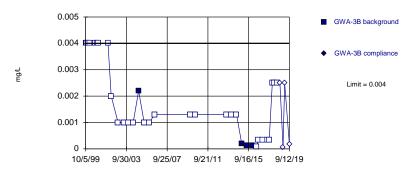
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 79.55% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Within Limit

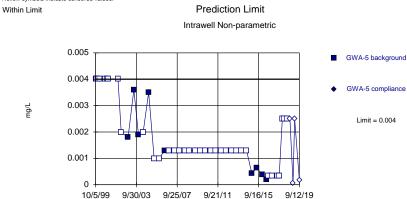




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 33 background values. 87.88% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2).

Constituent: Beryllium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

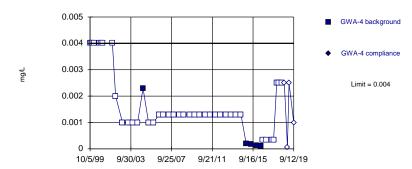
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 79.55% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

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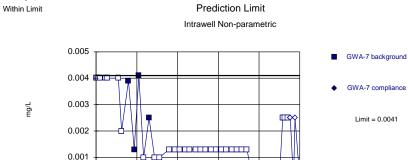
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 88.64% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Constituent: Beryllium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 80.95% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

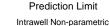
9/21/11 9/16/15 9/12/19

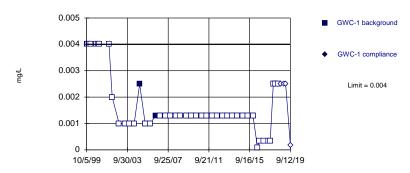
9/30/03

10/5/99

9/25/07

Within Limit

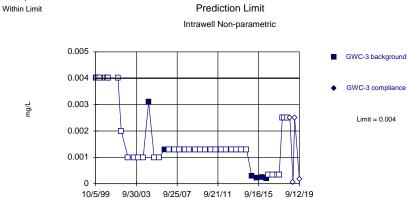




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 95.45% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Constituent: Beryllium Analysis Run 2/4/2020 9:16 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

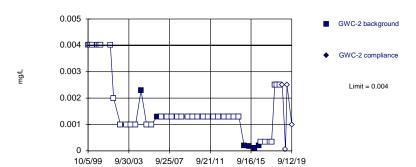
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 86.36% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

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Within Limit Prediction Limit
Intrawell Non-parametric

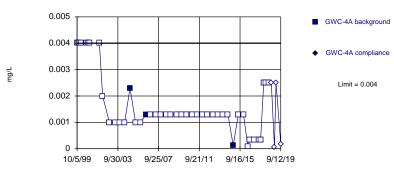


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 86.36% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Constituent: Beryllium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

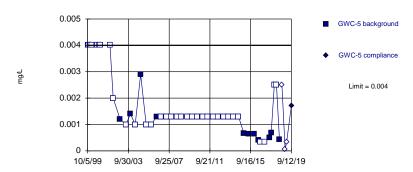
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.





Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 93.18% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

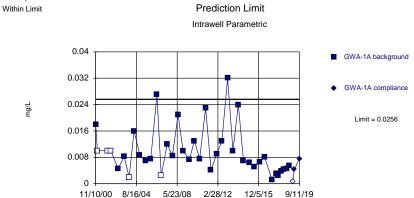
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 75% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Constituent: Beryllium Analysis Run 2/4/2020 9:16 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

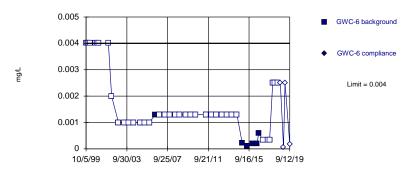
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.



Background Data Summary (based on square root transformation): Mean=0.09352, Std. Dev.=0.03357, n=39, 12.82% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9491, critical = 0.917. Kappa = 1.98 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

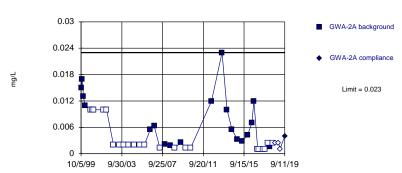


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 86.05% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Beryllium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

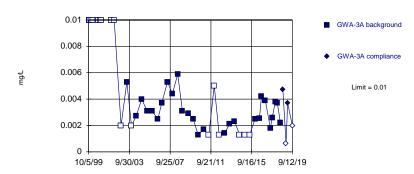
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 53.66% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Prediction Limit Within Limit Intrawell Non-parametric

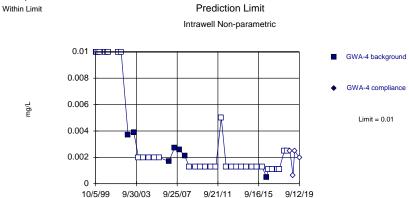


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 38.64% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

> Constituent: Chromium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

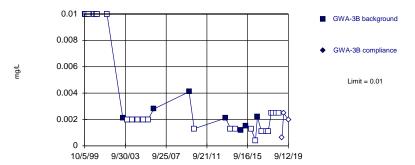
10/5/99



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

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Prediction Limit Within Limit Intrawell Non-parametric

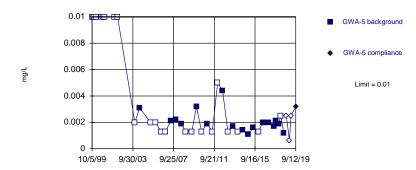


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

> Constituent: Chromium Analysis Run 2/17/2020 1:43 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

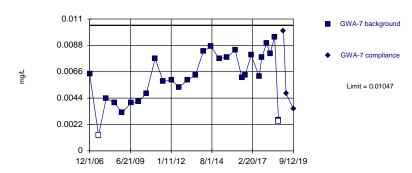
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 56.1% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Prediction Limit Within Limit Intrawell Parametric

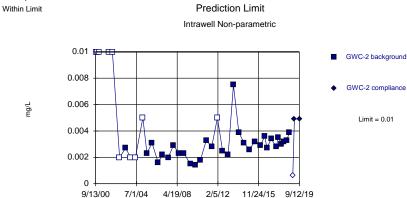


Background Data Summary: Mean=0.006072, Std. Dev.=0.002158, n=29, 6.897% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.956, critical = 0.898. Kappa = 2.039 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

> Constituent: Chromium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

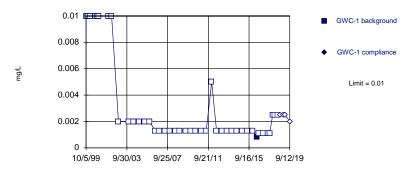
9/13/00



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. 24.39% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

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Prediction Limit Within Limit Intrawell Non-parametric

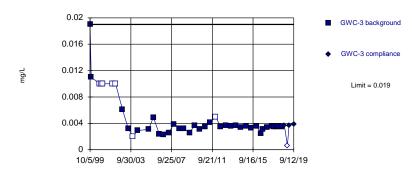


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 97.67% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

> Constituent: Chromium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

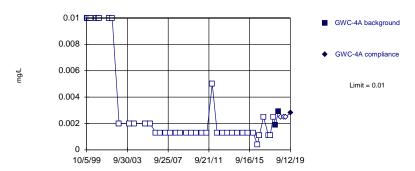
Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. 17.07% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Within Limit

Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 95.24% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

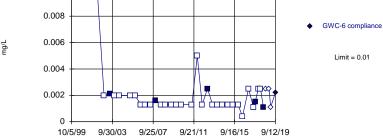
> Constituent: Chromium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

> > **Prediction Limit**

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

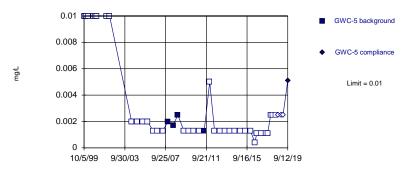
Within Limit

Intrawell Non-parametric 0.01 GWC-6 background 0.008 0.006 Limit = 0.01 0.004



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Prediction Limit Within Limit Intrawell Non-parametric

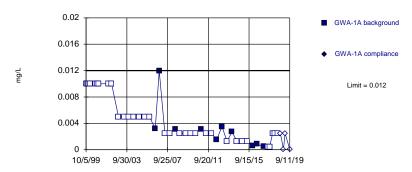


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 90.24% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

> Constituent: Chromium Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

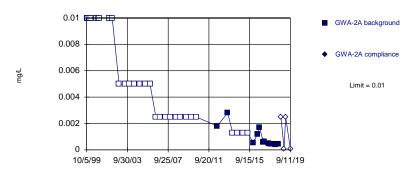
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 76.74% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Prediction Limit Within Limit Intrawell Non-parametric

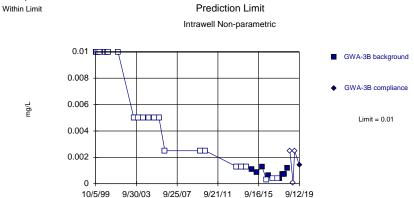


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 70.73% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

> Constituent: Cobalt Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

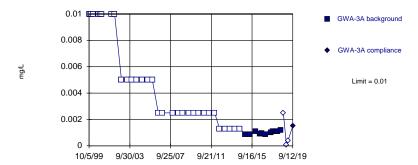
10/5/99



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 74.19% NDs. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

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Prediction Limit Within Limit Intrawell Non-parametric

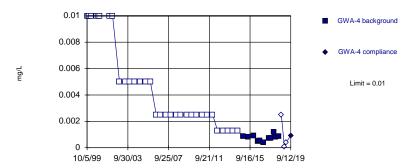


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 74.42% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

> Constituent: Cobalt Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

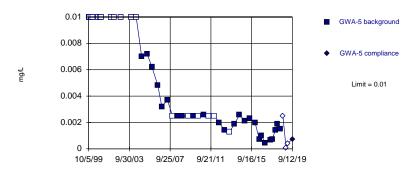
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 75% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 43 background values. 41.86% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

> Constituent: Cobalt Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

10/5/99

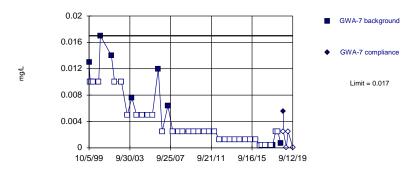
Prediction Limit Within Limit Intrawell Non-parametric 0.01 GWC-1 background 0.008 GWC-1 compliance 0.006 Limit = 0.0025 0.004 0.002

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 43) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

9/30/03 9/25/07 9/21/11 9/16/15 9/12/19

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Prediction Limit Within Limit Intrawell Non-parametric

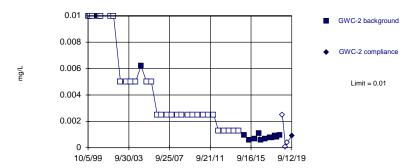


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 81.4% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

> Constituent: Cobalt Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

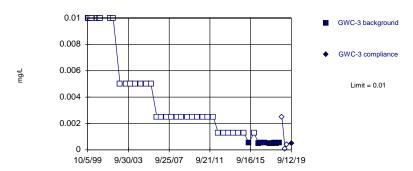
Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 70.45% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Hollow symbols indicate censored values

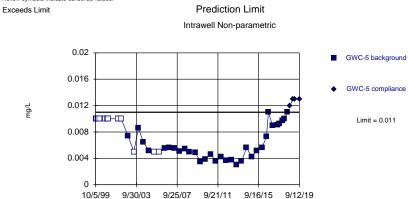
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 79.55% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Constituent: Cobalt Analysis Run 2/4/2020 9:16 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

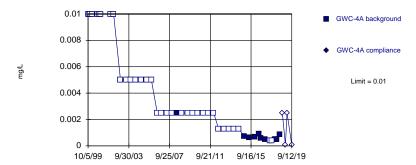
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 27.27% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

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Within Limit Prediction Limit
Intrawell Non-parametric

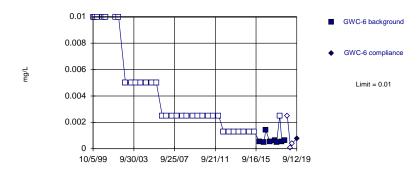


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 77.27% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Constituent: Cobalt Analysis Run 2/4/2020 9:16 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas $^{\text{\tiny M}}$ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

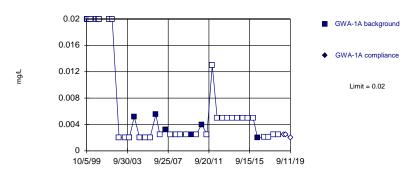
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 85.37% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Constituent: Copper Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

0

10/5/99

Within Limit Prediction Limit Intrawell Non-parametric

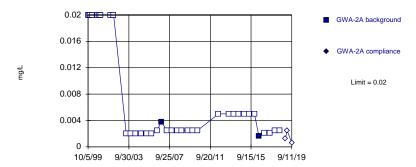
0.02 GWA-3A background
0.016 GWA-3A compliance
0.012 Limit = 0.02

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 97.56% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.00118 (1 of 2).

9/30/03 9/25/07 9/21/11 9/16/15 9/12/19

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Within Limit Prediction Limit
Intrawell Non-parametric

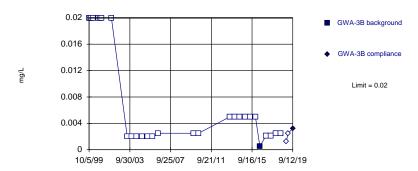


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 36 background values. 94.44% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

Constituent: Copper Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

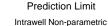
Sanitas $^{\text{\tiny M}}$ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

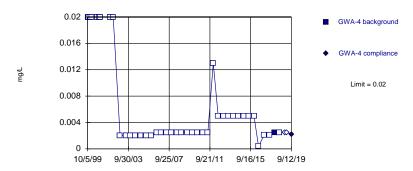
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 28 background values. 96.43% NDs. Well-constituent pair annual alpha = 0.004669. Individual comparison alpha = 0.002337 (1 of 2).

Within Limit



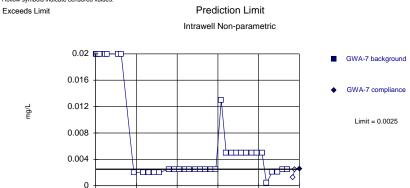


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 97.56% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.00118 (1 of 2).

Constituent: Copper Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

10/5/99



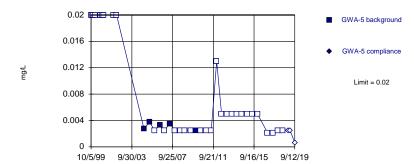
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 37) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

9/30/03 9/25/07 9/21/11 9/16/15 9/12/19

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit Intrawell Non-parametric

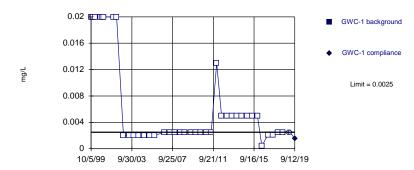


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 36 background values. 86.11% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

Constituent: Copper Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

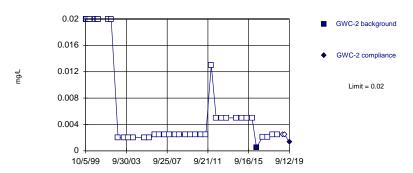
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 40) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Within Limit

Prediction Limit
Intrawell Non-parametric



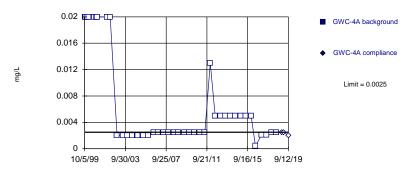
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 97.44% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Constituent: Copper Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Within Limit



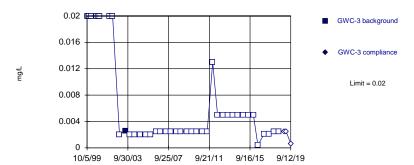


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 41) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

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Within Limit

Prediction Limit Intrawell Non-parametric

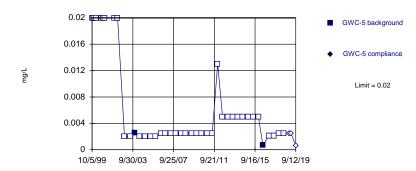


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 97.56% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Constituent: Copper Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

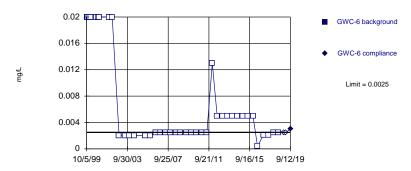
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 95.12% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Exceeds Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 40) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Constituent: Copper Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Prediction Limit

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

10/5/99

Within Limit

0.02
0.016
0.012
0.008
0.004

□ GWA-2A background
□ GWA-2A compliance
Limit = 0.013

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 92.68% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.00118 (1 of 2).

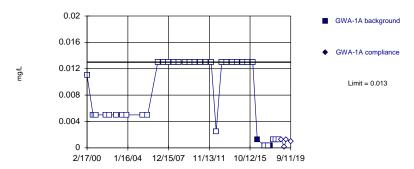
9/30/03 9/25/07 9/20/11 9/15/15 9/11/19

Н

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit Prediction Limit

Intrawell Non-parametric

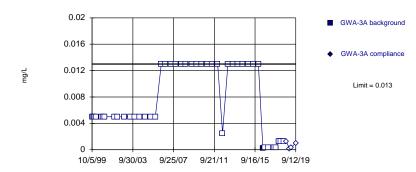


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 37 background values. 94.59% NDs. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

Constituent: Lead Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

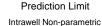
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

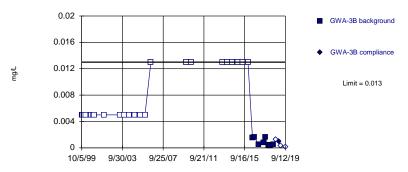
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 97.73% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Within Limit

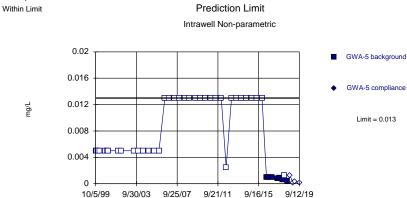




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 74.19% NDs. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

Constituent: Lead Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

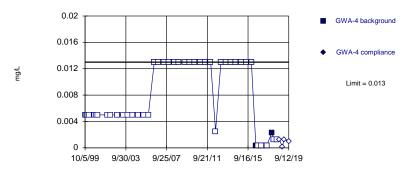
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 83.72% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

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Within Limit Prediction Limit
Intrawell Non-parametric

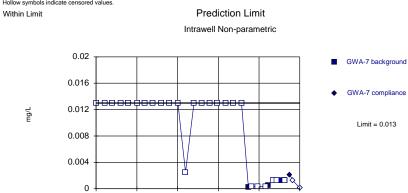


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 95.35% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Lead Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas'* v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

12/1/06 6/21/09



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 89.66% NDs. Well-constituent pair annual alpha = 0.00434. Individual comparison alpha = 0.002172 (1 of 2).

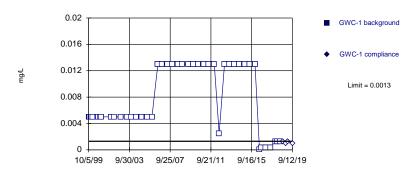
2/20/17 9/12/19

1/11/12 8/1/14

SanitasTM v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

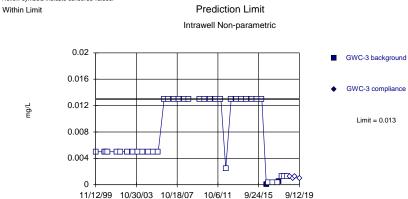




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 43) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Lead Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

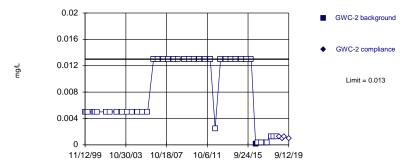
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

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Within Limit Prediction Limit
Intrawell Non-parametric

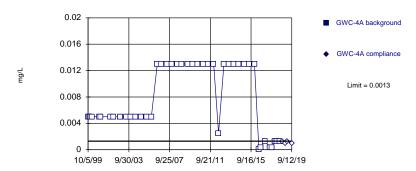


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 97.62% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Constituent: Lead Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

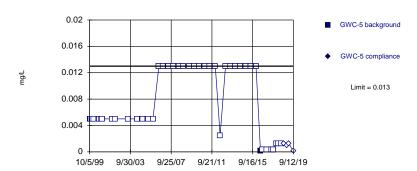
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 43) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

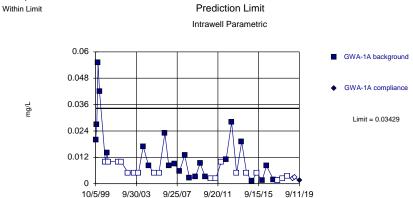
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 97.62% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Constituent: Lead Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

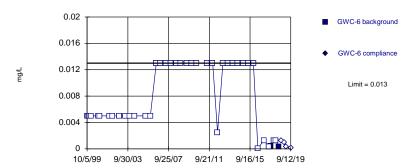
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.179, Std. Dev.=0.07397, n=41, 43.9% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9366, critical = 0.92. Kappa = 1.971 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

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Within Limit Prediction Limit
Intrawell Non-parametric

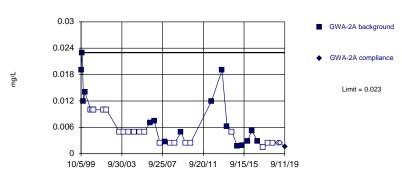


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Constituent: Lead Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

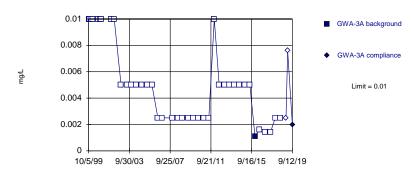
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.





Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 36 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

Prediction Limit Within Limit Intrawell Non-parametric

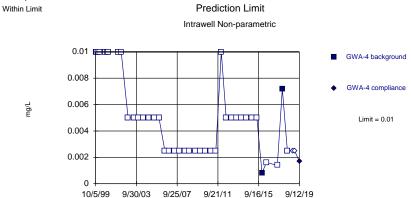


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

> Constituent: Vanadium Analysis Run 2/4/2020 9:17 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

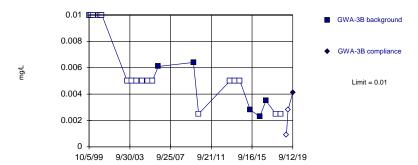
10/5/99



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha =

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Prediction Limit Within Limit Intrawell Non-parametric

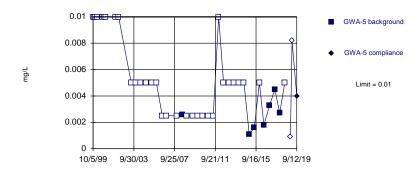


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 79.17% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

> Constituent: Vanadium Analysis Run 2/4/2020 9:17 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

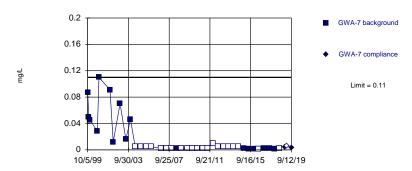
Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 82.05% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 38 background values. 55.26% NDs. Well-constituent pair annual alpha = 0.002586. Individual comparison alpha = 0.001294 (1 of 2).

Constituent: Vanadium Analysis Run 2/4/2020 9:17 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Prediction Limit

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Within Limit

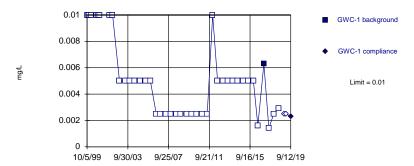
11/12/99 10/30/03 10/18/07 10/6/11 9/24/15 9/12/19

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 92.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

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Within Limit Prediction Limit

Intrawell Non-parametric

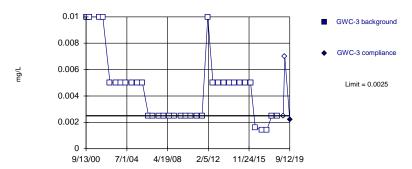


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 97.56% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Constituent: Vanadium Analysis Run 2/4/2020 9:17 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

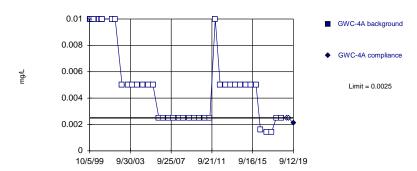
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 37) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

Prediction Limit Within Limit Intrawell Non-parametric

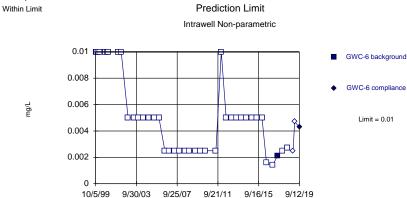


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 41) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

> Constituent: Vanadium Analysis Run 2/4/2020 9:17 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

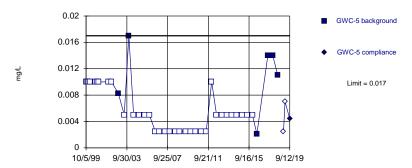
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

10/5/99



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Prediction Limit Within Limit Intrawell Non-parametric

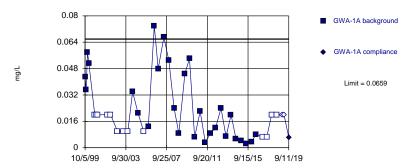


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 85% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

> Constituent: Vanadium Analysis Run 2/4/2020 9:17 AM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

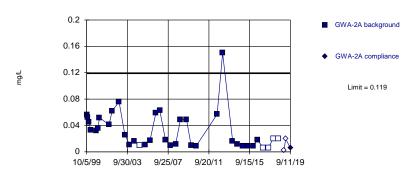
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.





Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.1238, Std. Dev.=0.0674, n=41, 31.71% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9257, critical = 0.92. Kappa = 1.971 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.77, Std. Dev.=0.8253, n=37, 13.51% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.931, critical = 0.914. Kappa = 1.989 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

Constituent: Zinc Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Prediction Limit

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

0.004

10/5/99

Within Limit

Intrawell Non-parametric

0.02 GWA-3B background

0.016

0.012

0.008

Limit = 0.02

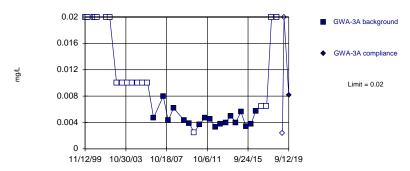
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 61.54% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

9/30/03 9/25/07 9/21/11 9/16/15 9/12/19

Constituent: Zinc Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 38 background values. 52.63% NDs. Well-constituent pair annual alpha = 0.002586. Individual comparison alpha = 0.001294 (1 of 2).

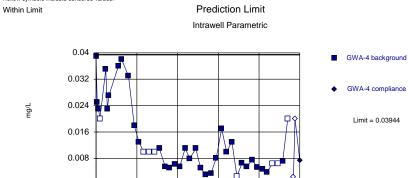
Constituent: Zinc Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.

10/5/99

9/30/03

9/25/07

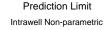


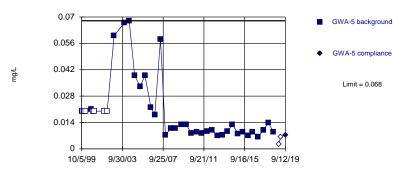
Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-4.795, Std. Dev=0.7926, n=41, 19.51% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9508, critical = 0.92. Kappa = 1.971 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

9/21/11 9/16/15 9/12/19

Constituent: Zinc Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Within Limit Predic



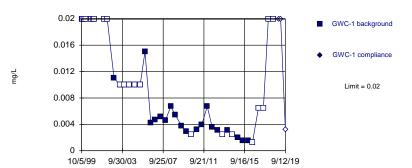


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 20% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Constituent: Zinc Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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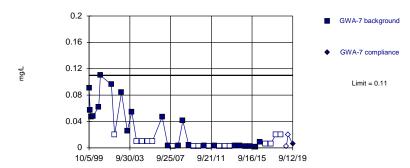
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 53.66% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.00118 (1 of 2).

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Within Limit Prediction Limit
Intrawell Non-parametric

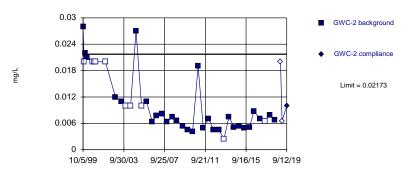


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 39 background values. 41.03% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Constituent: Zinc Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

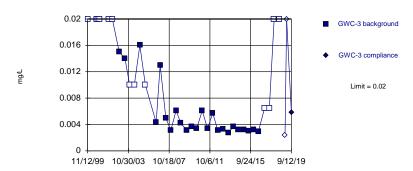
 $\mbox{Sanitas} \mbox{\ensuremath{^{\text{IN}}}} \ v. 9.6.25 \ \mbox{Software licensed to GEI Consultants, Inc. P.C. \ \mbox{UG} \\ \mbox{Hollow symbols indicate censored values.}$

Within Limit Prediction Limit Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-4.968, Std. Dev.=0.5767, n=40, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9301, critical = 0.919. Kappa = 1.975 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

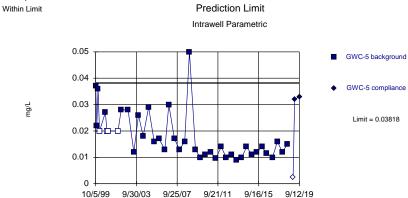
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 37 background values. 35.14% NDs. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

Constituent: Zinc Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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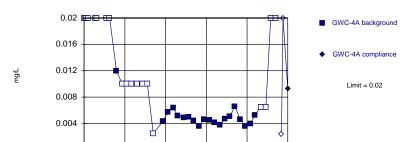
Background Data Summary (based on natural log transformation): Mean=-4.113, Std. Dev.=0.43, n=41, 9.756% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9313, critical = 0.92. Kappa = 1.971 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

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10/5/99

9/30/03

Within Limit Prediction Limit
Intrawell Non-parametric

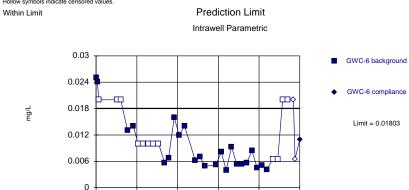


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 39 background values. 48.72% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

9/25/07 9/21/11 9/16/15 9/12/19

Constituent: Zinc Analysis Run 2/4/2020 9:17 AM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas $^{\text{\tiny{NM}}}$ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG Hollow symbols indicate censored values.



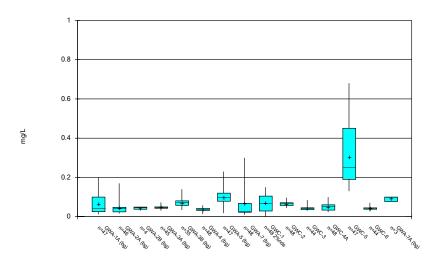
Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.193, Std. Dev=0.03465, n=35, 34.29% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.912, critical = 0.91. Kappa = 1.997 (c=8, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001097.

11/12/99 10/30/03 10/18/07 10/6/11 9/24/15 9/12/19

		Plant McIntosh	Client: GEI	Data: McIntosh No 3 CCR		Printed 2/4/2020, 4:47	PM			
Constituent	Well		<u>N</u>	<u>Mean</u>	Std. Dev.	Std. Err.	<u>Median</u>	Min.	Max.	%NDs
Barium (mg/L)	GWA-1A (bg)		47	0.06331	0.05087	0.007421	0.04	0.012	0.2	0
Barium (mg/L)	GWA-2A (bg)		46	0.04614	0.03403	0.005017	0.039	0.016	0.17	0
Barium (mg/L)	GWA-2B (bg)		4	0.0435	0.006807	0.003403	0.045	0.035	0.049	0
Barium (mg/L)	GWA-3A (bg)		45	0.04691	0.008496	0.001266	0.045	0.031	0.073	0
Barium (mg/L)	GWA-3B (bg)		35	0.07163	0.02032	0.003435	0.073	0.034	0.14	0
Barium (mg/L)	GWA-4 (bg)		48	0.03717	0.009001	0.001299	0.037	0.013	0.058	0
Barium (mg/L)	GWA-5 (bg)		47	0.09851	0.0414	0.006039	0.095	0.018	0.23	0
Barium (mg/L)	GWA-7 (bg)		48	0.06827	0.08588	0.0124	0.0275	0.01	0.3	0
Barium (mg/L)	GWC-1		48	0.06934	0.0458	0.006611	0.0655	0.000185	0.15	2.083
Barium (mg/L)	GWC-2		48	0.06461	0.01159	0.001673	0.063	0.045	0.097	0
Barium (mg/L)	GWC-3		44	0.04268	0.009816	0.00148	0.04	0.032	0.085	0
Barium (mg/L)	GWC-4A		48	0.04979	0.01811	0.002613	0.052	0.023	0.1	0
Barium (mg/L)	GWC-5		47	0.3062	0.148	0.02159	0.25	0.13	0.68	0
Barium (mg/L)	GWC-6		44	0.04171	0.007113	0.001072	0.042	0.027	0.071	0
Barium (mg/L)	GWA-7A (bg)		3	0.09233	0.01328	0.007667	0.1	0.077	0.1	0
Beryllium (mg/L)	GWA-1A (bg)		47	0.001695	0.00125	0.0001824	0.0013	0.000057	0.004	87.23
Beryllium (mg/L)	GWA-2A (bg)		46	0.001733	0.001289	0.0001901	0.0013	0.000057	0.004	84.78
Beryllium (mg/L)	GWA-2B (bg)		4	0.000	0.00116	0.0005798	0.00026	0.000057	0.0025	100
Beryllium (mg/L)	GWA-3A (bg)		48	0.00158	0.001244	0.0001795	0.0013	0.000057	0.004	81.25
Beryllium (mg/L)	GWA-3B (bg)		37	0.001747	0.001413	0.0002324	0.0013	0.000057	0.004	89.19
Beryllium (mg/L)	GWA-4 (bg)		48	0.001665	0.001236	0.0001783	0.0013	0.000057	0.004	89.58
Beryllium (mg/L)	GWA-5 (bg)		48	0.001805	0.001262	0.0001822	0.0013	0.000057	0.004	81.25
Beryllium (mg/L)	GWA-7 (bg)		47	0.001767	0.001298	0.0001893	0.0013	0.000057	0.0041	82.98
Beryllium (mg/L)	GWC-1		48	0.001774	0.001177	0.0001698	0.0013	0.00009	0.004	95.83
Beryllium (mg/L)	GWC-2		48	0.001667	0.001234	0.0001781	0.0013	0.000057	0.004	87.5
Beryllium (mg/L)	GWC-3		48	0.001672	0.001256	0.0001813	0.0013	0.000057	0.004	87.5
Beryllium (mg/L)	GWC-4A		48	0.001694	0.001216	0.0001754	0.0013	0.000057	0.004	93.75
Beryllium (mg/L)	GWC-5		48	0.001663	0.001203	0.0001737	0.0013	0.000057	0.004	75
Beryllium (mg/L)	GWC-6		47	0.001635	0.001255	0.0001831	0.0013	0.000057	0.004	87.23
Beryllium (mg/L)	GWA-7A (bg)		3	0.000	0.0001419	0.0000	0.00018	0.000057	0.00034	100
Chromium (mg/L)	GWA-1A (bg)		47	0.01205	0.01171	0.001708	0.0082	0.00063	0.059	14.89
Chromium (mg/L)	GWA-2A (bg)		45	0.005438	0.00517	0.0007707	0.0025	0.0011	0.023	55.56
Chromium (mg/L)	GWA-2B (bg)		4	0.001558	0.0008473	0.0004236	0.00155	0.00063	0.0025	100
Chromium (mg/L)	GWA-3A (bg)		48	0.004189	0.003064	0.0004422	0.0031	0.00063	0.01	39.58
Chromium (mg/L)	GWA-3B (bg)		35	0.003715	0.003536	0.0005977	0.0021	0.0004	0.01	80
Chromium (mg/L)	GWA-4 (bg)		46	0.003422	0.003382	0.0004986	0.002	0.0005	0.01	84.78
Chromium (mg/L)	GWA-5 (bg)		45	0.00359	0.003339	0.0004977	0.002	0.00063	0.01	57.78
Chromium (mg/L)	GWA-7 (bg)		48	0.01728	0.02455	0.003544	0.00705	0.0013	0.097	4.167
Chromium (mg/L)	GWC-1		47	0.003274	0.003376	0.0004924	0.0013	0.0008	0.01	97.87
Chromium (mg/L)	GWC-2		48	0.004519	0.003581	0.0005168	0.0031	0.00063	0.017	25
Chromium (mg/L)	GWC-3		45	0.004641	0.003296	0.0004914	0.0036	0.00063	0.019	17.78
Chromium (mg/L)	GWC-4A		46	0.003337	0.003399	0.0005011	0.0016	0.0004	0.01	93.48
Chromium (mg/L)	GWC-5		45	0.003442	0.003426	0.0005107	0.002	0.0004	0.01	88.89
Chromium (mg/L)	GWC-6		44	0.003225	0.003305	0.0004983	0.0018	0.0004	0.01	86.36
Chromium (mg/L)	GWA-7A (bg)		3	0.002333	0.0002887	7 0.0001667	0.0025	0.002	0.0025	100
Cobalt (mg/L)	GWA-1A (bg)		47	0.004142	0.003469	0.000506	0.0025	0.000075	0.012	78.72
Cobalt (mg/L)	GWA-2A (bg)		45	0.003762	0.003474	0.0005179	0.0025	0.000075	0.01	73.33
Cobalt (mg/L)	GWA-2B (bg)		4	0.0041	0.001236	0.0006178	0.0045	0.0023	0.0051	0
Cobalt (mg/L)	GWA-3A (bg)		47	0.003713	0.003375	0.0004923	0.0025	0.000075	0.01	74.47
Cobalt (mg/L)	GWA-3B (bg)		35	0.003883	0.003709	0.0006269	0.0025	0.000075	0.01	74.29
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		Plant McIntosh	Client: GEI	Data: McIntosh	n No 3 CCR Pri	inted 2/4/2020, 4:47	7 PM			
<u>Constituent</u>	<u>Well</u>		<u>N</u>	<u>Mean</u>	Std. Dev.	Std. Err.	<u>Median</u>	Min.	Max.	%NDs
Cobalt (mg/L)	GWA-4 (bg)		48	0.003619	0.003401	0.0004909	0.0025	0.000075	0.01	75
Cobalt (mg/L)	GWA-5 (bg)		47	0.004306	0.003673	0.0005358	0.0025	0.000075	0.01	44.68
Cobalt (mg/L)	GWA-7 (bg)		48	0.004346	0.004246	0.0006129	0.0025	0.000075	0.017	81.25
Cobalt (mg/L)	GWC-1		47	0.003776	0.00336	0.0004901	0.0025	0.000075	0.01	100
Cobalt (mg/L)	GWC-2		48	0.003655	0.003406	0.0004917	0.0025	0.000075	0.01	70.83
Cobalt (mg/L)	GWC-3		48	0.003587	0.003431	0.0004952	0.0025	0.000075	0.01	79.17
Cobalt (mg/L)	GWC-4A		48	0.003609	0.003421	0.0004938	0.0025	0.000075	0.01	79.17
Cobalt (mg/L)	GWC-5		48	0.007325	0.002993	0.000432	0.00605	0.003	0.013	25
Cobalt (mg/L)	GWC-6		48	0.003658	0.00338	0.0004879	0.0025	0.000075	0.01	81.25
Cobalt (mg/L)	GWA-7A (bg)		3	0.0045	0.0002	0.0001155	0.0045	0.0043	0.0047	0
Copper (mg/L)	GWA-1A (bg)		44	0.006843	0.007001	0.001056	0.00285	0.002	0.02	86.36
Copper (mg/L)	GWA-2A (bg)		39	0.006821	0.0074	0.001185	0.0025	0.00063	0.02	94.87
Copper (mg/L)	GWA-2B (bg)		3	0.003467	0.0003512	0.0002028	0.0035	0.0031	0.0038	0
Copper (mg/L)	GWA-3A (bg)		44	0.006662	0.007082	0.001068	0.0025	0.002	0.02	95.45
Copper (mg/L)	GWA-3B (bg)		31	0.007297	0.007707	0.001384	0.0025	0.0005	0.02	93.55
Copper (mg/L)	GWA-4 (bg)		44	0.00662	0.007114	0.001072	0.0025	0.0004	0.02	95.45
Copper (mg/L)	GWA-5 (bg)		39	0.007337	0.007174	0.001072	0.0025	0.00063	0.02	87.18
Copper (mg/L)	GWA-7 (bg)		40	0.0066	0.007278	0.001117	0.0025	0.0004	0.02	97.5
Copper (mg/L)	GWC-1		43	0.0067	0.007003	0.001117	0.0025	0.0004	0.02	97.67
Copper (mg/L)	GWC-2		42	0.00675	0.00716	0.001033	0.0025	0.0005	0.02	95.24
Copper (mg/L)	GWC-3		44	0.006598	0.007132	0.00112	0.0025	0.0004	0.02	97.73
Copper (mg/L)	GWC-4A		44	0.006616	0.007132	0.001073	0.0025	0.0004	0.02	100
Copper (mg/L)	GWC-5		44	0.006605	0.007117	0.001073	0.0025	0.0004	0.02	95.45
Copper (mg/L)	GWC-6		43	0.006747	0.007120	0.001074	0.0025	0.0004	0.02	97.67
Copper (mg/L)	GWA-7A (bg)		3	0.000747	0.007131	0.00109	0.0025	0.0004	0.02	66.67
Lead (mg/L)	GWA-7A (bg) GWA-1A (bg)		3 41	0.002033	0.001403	0.000811	0.0023	0.00013	0.0041	95.12
Lead (mg/L)	GWA-1A (bg) GWA-2A (bg)		45	0.007497	0.003300	0.000723	0.005	0.000094	0.013	93.12
	GWA-2A (bg) GWA-2B (bg)		43	0.000	0.00463	0.000723	0.003	0.00013	0.013	100
Lead (mg/L) Lead (mg/L)	GWA-2B (bg) GWA-3A (bg)		48	0.000	0.0005708	0.0002634	0.00115	0.000094	0.0013	97.92
Lead (mg/L)	GWA-3A (bg) GWA-3B (bg)		35	0.007637	0.003134	0.0007439	0.005	0.000094	0.013	74.29
	GWA-3B (bg) GWA-4 (bg)		47	0.003032	0.005063	0.0007385	0.005	0.00013	0.013	95.74
Lead (mg/L) Lead (mg/L)	GWA-4 (bg) GWA-5 (bg)		47	0.007222	0.005065	0.0007363	0.005	0.000094	0.013	95.74 85.11
	GWA-7 (bg)		48	0.007093			0.003	0.000094		70.83
Lead (mg/L)	GWC-1		46 47	0.01003	0.009055 0.005067	0.001307 0.0007391	0.015	0.00013	0.044 0.013	100
Lead (mg/L)	GWC-2		46	0.007216	0.005067	0.0007537	0.005	0.00008	0.013	97.83
Lead (mg/L) Lead (mg/L)	GWC-3		46	0.007264	0.005112	0.0007337		0.0001	0.013	95.45
Lead (mg/L) Lead (mg/L)	GWC-4A		44 47	0.007063	0.005231	0.0007887	0.005 0.005	0.00009	0.013	100
Lead (mg/L)	GWC-5 GWC-6		46	0.007144 0.007145	0.005227	0.0007707	0.005	0.0001	0.013	97.83 95.45
Lead (mg/L) Lead (mg/L)	GWA-7A (bg)		44 3	0.007145	0.005194	0.000783	0.005	0.00008 0.001	0.013	95.45 100
:					0.0001732	0.0001	0.001		0.0013	
Vanadium (mg/L)	GWA-1A (bg)		44 30	0.01001 0.006474	0.01094 0.00529	0.001649 0.000847	0.0053 0.005	0.0012 0.0014	0.055 0.023	45.45 56.41
Vanadium (mg/L)	GWA-2A (bg)		39							
Vanadium (mg/L)	GWA-2B (bg)		3	0.002367	0.0002309	0.0001333	0.0025	0.0021	0.0025	66.67 05.35
Vanadium (mg/L)	GWA-3A (bg)		43	0.00506	0.003084	0.0004704	0.005	0.0011	0.01	95.35
Vanadium (mg/L)	GWA-3B (bg)		27	0.005607	0.002934	0.0005646	0.005	0.0009	0.01	77.78
Vanadium (mg/L)	GWA-4 (bg)		43	0.005063	0.003067	0.0004677	0.005	0.00082	0.01	93.02
Vanadium (mg/L)	GWA-5 (bg)		42	0.005195	0.00306	0.0004722	0.005	0.0009	0.01	80.95
Vanadium (mg/L)	GWA-7 (bg)		41	0.01621	0.02757	0.004305	0.005	0.001	0.11	53.66
Vanadium (mg/L)	GWC-1		44	0.005102	0.002953	0.0004452	0.005	0.0014	0.01	95.45
Vanadium (mg/L)	GWC-2		43	0.00506	0.002865	0.000437	0.005	0.0015	0.01	90.7

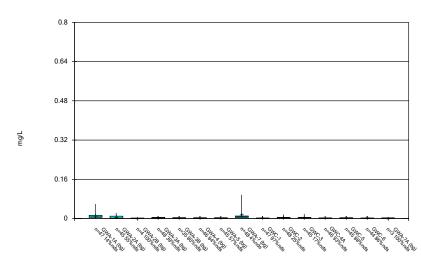
		Plant McIntosh	Client: GEI	Data: McIntosh No 3 CCR		Printed 2/4/2020, 4:47	PM			
Constituent	<u>Well</u>		<u>N</u>	<u>Mean</u>	Std. Dev.	Std. Err.	<u>Median</u>	Min.	Max.	%NDs
Vanadium (mg/L)	GWC-3		40	0.00459	0.00268	0.0004237	0.005	0.0014	0.01	97.5
Vanadium (mg/L)	GWC-4A		44	0.004977	0.00301	0.0004538	0.005	0.0014	0.01	97.73
Vanadium (mg/L)	GWC-5		43	0.006342	0.003819	0.0005824	0.005	0.0021	0.017	83.72
Vanadium (mg/L)	GWC-6		43	0.005158	0.002939	0.0004482	0.005	0.0014	0.01	95.35
Vanadium (mg/L)	GWA-7A (bg)		3	0.003267	0.001779	0.001027	0.0025	0.002	0.0053	66.67
Zinc (mg/L)	GWA-1A (bg)		44	0.02262	0.01868	0.002816	0.02	0.0026	0.074	34.09
Zinc (mg/L)	GWA-2A (bg)		40	0.03041	0.02818	0.004456	0.019	0.0024	0.15	17.5
Zinc (mg/L)	GWA-2B (bg)		3	0.005467	0.002702	0.00156	0.0065	0.0024	0.0075	66.67
Zinc (mg/L)	GWA-3A (bg)		41	0.00973	0.006681	0.001043	0.0065	0.0024	0.02	53.66
Zinc (mg/L)	GWA-3B (bg)		29	0.0129	0.00626	0.001162	0.01	0.0024	0.02	62.07
Zinc (mg/L)	GWA-4 (bg)		44	0.01339	0.01047	0.001579	0.01	0.0024	0.039	22.73
Zinc (mg/L)	GWA-5 (bg)		43	0.01885	0.0166	0.002531	0.013	0.0024	0.068	23.26
Zinc (mg/L)	GWA-7 (bg)		42	0.02285	0.02969	0.004582	0.0076	0.0017	0.11	42.86
Zinc (mg/L)	GWC-1		44	0.009709	0.00733	0.001105	0.0066	0.0013	0.02	56.82
Zinc (mg/L)	GWC-2		43	0.01076	0.006868	0.001047	0.0077	0.0025	0.028	27.91
Zinc (mg/L)	GWC-3		40	0.00914	0.006872	0.001087	0.00595	0.0024	0.02	37.5
Zinc (mg/L)	GWC-4A		42	0.009752	0.00658	0.001015	0.0065	0.0024	0.02	50
Zinc (mg/L)	GWC-5		44	0.01835	0.009524	0.001436	0.0155	0.0024	0.05	11.36
Zinc (mg/L)	GWC-6		38	0.01091	0.006154	0.0009983	0.00965	0.004	0.025	36.84
Zinc (mg/L)	GWA-7A (bg)		3	0.007633	0.005882	0.003396	0.0065	0.0024	0.014	66.67



Constituent: Barium Analysis Run 2/4/2020 4:44 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

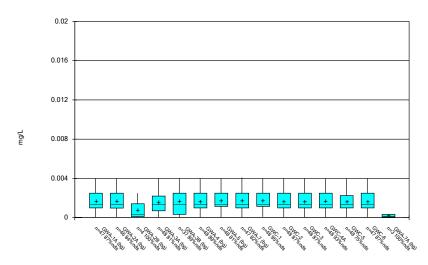
$\text{Sanitas}^{\text{\tiny{TM}}} \text{ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG}$

Box & Whiskers Plot



Constituent: Chromium Analysis Run 2/4/2020 4:44 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

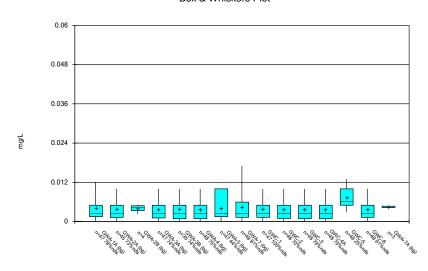
Box & Whiskers Plot



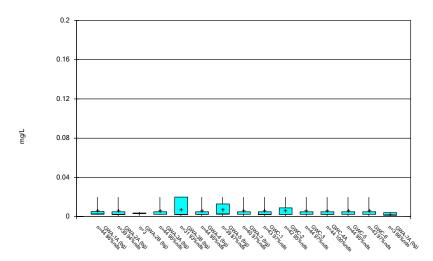
Constituent: Beryllium Analysis Run 2/4/2020 4:44 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

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Box & Whiskers Plot



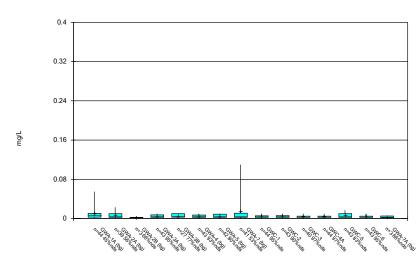
Constituent: Cobalt Analysis Run 2/4/2020 4:44 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR



Constituent: Copper Analysis Run 2/4/2020 4:44 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

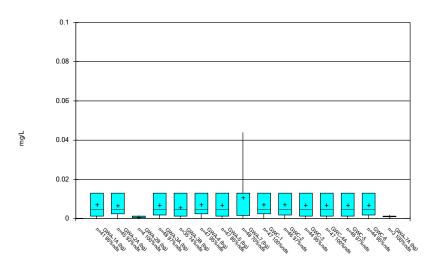
Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot



Constituent: Vanadium Analysis Run 2/4/2020 4:44 PM Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

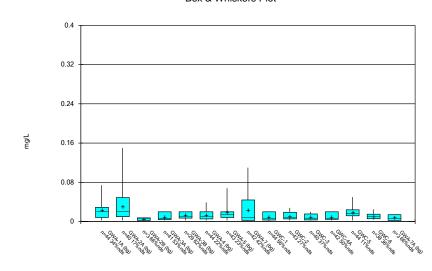
Box & Whiskers Plot



Constituent: Lead Analysis Run 2/4/2020 4:44 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR

Sanitas™ v.9.6.25 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot



Constituent: Zinc Analysis Run 2/4/2020 4:44 PM
Plant McIntosh Client: GEI Data: McIntosh No 3 CCR



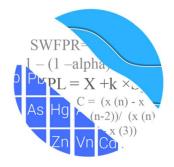
First 2020 Semiannual Statistical Analysis of Appendix I, II, and III Constituents

(Completed by Groundwater Stats Consulting, LLC)

GROUNDWATER STATS CONSULTING

July 27, 2020

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



Re: Plant McIntosh Landfill #3

Statistical Analysis - March/April 2020 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 March/April 2020 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 from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the CCR program in 2016, and sampling for 16 parameters in accordance with the Georgia EPD's Solid Waste Permit began for some wells 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 are screened in this report.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- Upgradient wells: GWA-1A, GWA-2A, GWA-2B, GWA-3A, GWA-3B, GWA-4, GWA-5, GWA-7, and GWA-7A
- Downgradient wells: GWC-1, GWC-2, GWC-3, GWC-4A, GWC-4B, GWC-5 and GWC-6

At least 8 background samples have been collected at each of the groundwater monitoring wells except for upgradient wells GWA-2B and GWA-7A which have insufficient data for calculation of prediction limits. Additionally, during this sample event, well GWC-3 was inaccessible and, therefore, no prediction limits are included for this well in this report.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Dr. Jim Loftis, Civil & Environmental Engineering professor emeritus at Colorado State University and Senior Advisor to Groundwater Stats Consulting. The analysis is prepared according to the recommended statistical methodology prepared in the Fall 2017 by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance.

The following constituents were evaluated in this report:

- o **CCR Appendix III -** boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- o **Georgia EPD** 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 well/constituent pairs with 100% nondetects follows this letter.

Due to varying detection limits in background data sets, generally due to improved laboratory practices, a substitution of the most recent reporting limit is used for all nondetects when computing prediction limits. Note that for calculation of intrawell prediction limits, substitution of the most recent reporting limit is performed separately for each well/parameter pair. In some cases, the reporting limit provided by the laboratory contained varying limits for a given parameter; therefore, the substitution may differ from well to well. This generally gives the most conservative limit in each case. In the time series plots, however, no substitutions are made. The data are printed and plotted as originally recorded.

Time series plots for reported Appendix III (CCR) and IV (Georgia EPD) parameters 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 background screening in 2019 for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance recommendations as discussed below, and were based on the following:

CCR Appendix III Constituents:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan (chloride, pH, sulfate, TDS)
- Interwell Prediction Limits with 1-of-2 resample plan (boron, calcium, fluoride)
- # Constituents: 7
- # Downgradient wells: 7

Georgia EPD Constituents:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan (Georgia EPD constituents)
- # Constituents: 8
- # Downgradient wells: 7

Summary of CCR Background Screening Conducted in 2019

Outlier and Trend Testing

Time series plots are used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III (as well as Appendix IV) parameters are formally tested using Tukey's box plot method and, when identified, 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. Those findings were submitted with the screening report, and a summary of flagged values follows this letter (Figure C). 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.

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 substitution of the most recent reporting limit was applied when varying detection limits existed in data.

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.

While trends may be visually apparent, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, 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. When the historical records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed several statistically significant decreasing trends and two statistically significant increasing trends in upgradient wells for the Appendix III parameters. All trends noted were relatively low in magnitude when compared to average concentrations; therefore, no adjustments were made to the data sets.

<u>Appendix III – Determination of Spatial Variation</u>

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average

concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified no variation among upgradient well data for the following Appendix III parameters: boron and fluoride, making these constituents eligible for interwell analyses. Variation was noted for calcium, chloride, pH, sulfate, and TDS. These constituents were further evaluated as described below for the appropriateness of intrawell testing to accommodate the groundwater quality. A summary table of the ANOVA results was included with the screening report.

<u>Appendix III – Intrawell Method Eligibility Screening</u>

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are conservative (i.e. lower) from a regulatory perspective, and that will rapidly identify a change in more recent compliance data from within a given well. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Prior to performing intrawell prediction limits, several steps are required to reasonably demonstrate downgradient water quality does not have existing impacts from the practices of the facility.

Exploratory data analysis was used as a general comparison of concentrations in downgradient wells for all Appendix III parameters recommended for intrawell analyses to concentrations reported in upgradient wells. Upper tolerance limits are used in conjunction with confidence intervals to determine whether the estimated averages in downgradient wells are higher than observed levels upgradient of the facility. The upper tolerance limits were constructed to represent the extreme upper range of possible background levels at the site. Lower tolerance limits are included for pH and represent both the upper and lower ranges of possible measurements in background wells.

In cases where downgradient average concentrations are higher than observed concentrations upgradient for a given constituent, an independent study and hydrogeological investigation would be required to identify local geochemical conditions and expected groundwater quality for the region to justify an intrawell approach. Such an assessment is beyond the scope of services provided by Groundwater Stats Consulting. When there is not an obvious explanation for observed concentration differences in

downgradient wells relative to reported concentrations in upgradient wells, interwell prediction limits will initially be selected for the statistical method until further evidence shows that concentrations are due to natural variation rather than a result of the facility.

Parametric tolerance limits were constructed with a target of 99% confidence and 95% coverage using pooled upgradient well data for each of the Appendix III parameters recommended for intrawell analyses. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As more data are collected, the background population is better represented, and the confidence and coverage levels increase.

Confidence intervals were constructed on downgradient wells for each of the Appendix III parameters exhibiting spatial variation, using the tolerance limits discussed above, to determine intrawell eligibility. When the entire confidence interval is above a background standard for a given parameter, interwell methods are initially recommended as the statistical method. Note that this screening identifies whether confidence intervals are above a background standard but does not identify the reason for this occurrence. Therefore, only the wells/parameters with confidence intervals which did not exceed background standards are eligible for intrawell prediction limits.

For parameters where intrawell analyses are recommended, no confidence interval exceedances were noted for chloride, pH, sulfate and TDS. The confidence interval for calcium at well GWC-5 slightly exceeded its respective limit.

Therefore, based on the above screening, interwell methods are initially recommended for boron, calcium and fluoride while intrawell methods are recommended for chloride, pH, sulfate and TDS. Interwell prediction limits pool upgradient well data 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 statistically significant increases (SSIs). Intrawell prediction limits use screened historical data within a given well to establish limits for parameters at that well. The most recent sample from the same well is compared to its respective background. If further evaluation confirms natural variation in groundwater, intrawell methods will be considered for parameters currently recommended for interwell methods.

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 will be included during each sample event after careful screening for new outliers in upgradient wells. In

the intrawell case, data for all wells and constituents are re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, the earlier portion of data are deselected 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.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary.

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 nondetects, 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.

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of onehalf the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect 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% nondetects.

Summary of Background Screening for Georgia EPD Constituents Conducted in 2019

Outliers

Time series plots are used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells and parameters are formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, a few outliers were identified. Those findings were included in the screening report, and a summary of flagged values follows this letter (Figure C). As a general rule, when the most recent values are identified as outliers, values are not flagged in the database at this time (except in cases where they would cause background limits to be elevated) as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Due to changing reporting limits for many constituents, when the nondetects are replaced with the most recent reporting limit, previously flagged "J" values (or estimated values) may require flagging as outliers if they are much higher than current reporting limits. Additionally, in some cases historical nondetects require flagging because the reporting limit substitution results in these values being considerably higher than reported values. Of the outliers identified by Tukey's method, several values were flagged in the database, and the remaining values were similar to other measurements within a given well or neighboring wells or were reported nondetects. Several other values were flagged in addition to those identified by Tukey's because the values were higher than all remaining concentrations and would cause the statistical limits to be elevated.

Additionally, 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.

Seasonality

No obvious 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 Testing

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test, which tests for statistically significant increasing or decreasing trends, was used to evaluate data at all upgradient wells and downgradient wells with detections.

In the absence of suspected contamination, 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, all available data are evaluated to determine whether earlier concentration levels are significantly different from current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits. The results of the trend analysis were provided with the summary report.

Several statistically significant decreasing trends were noted in both upgradient and downgradient wells. No statistically significant increasing trends were noted except for barium in upgradient wells GWA-2A, GWA-3A and GWA-4. Of the trends identified, the majority were low relative to the average concentrations at their respective wells and, therefore, required no adjustments. A few records, however, for chromium and lead, contained several higher measurements earlier in the record which required deselecting so that resulting statistical limits are lower and capable of detecting future changes at a given well. Barium in well GWC-1 required deselection of the earlier portion of the record which contained higher reported measurements than those observed currently. The recent increasing trend in barium at well GWC-5 will require careful attention over the next few monitoring events. If the higher concentrations persist and cannot be explained by a source other than the facility, then that well/constituent pair should be placed in tracking mode and evaluated by a trend test rather than a prediction limit. A list of adjusted background date ranges for those special cases follows this letter.

<u>Determination of Spatial Variation</u>

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells for constituents detected in downgradient wells. The ANOVA assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells are not representative of the current background data population; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified significant differences among upgradient well data for all constituents except beryllium. Therefore, because this is a lined landfill with pre-waste data showing that metals occur naturally in low level concentrations, and no records were adjusted due to statistically significant increasing trends in downgradient well data, intrawell methods are recommended as the primary statistical method for all detected Georgia EPD well/constituent pairs. However, as noted above, barium at well GWC-5, though not yet adjusted, will require careful attention and further study.

Statistical Analysis of Appendix III Parameters – March/April 2020

For chloride, pH, sulfate, and TDS, intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical background data through October 2018 (Figure D). Intrawell prediction limits use screened historical data within a given well to establish limits for parameters at that well. The most recent sample from the same well is compared to its respective background.

For boron, calcium, and fluoride, interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all upgradient historical data through April 2020 (Figure E). Interwell prediction limits pool upgradient well data 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 statistically significant increases (SSIs).

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. Note that while the summary table generated in the Sanitas software program indicates a statistical exceedance of sulfate in well GWC-2, the reported result of 1 mg/L was not above the statistical limit of 1 mg/L and, therefore, is not considered a statistical exceedance. The following prediction limit exceedances were noted for Appendix III parameters:

Intrawell:

• Chloride: GWA-3A (upgradient)

• Sulfate: GWA-2A (upgradient), GWC-1, GWC-4A, GWC-6

• TDS: GWC-5

Interwell:

None

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 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. A trend test was also included for sulfate in well GWC-2 to provide further information about samples at this well. No statistically significant trends were noted in any of the downgradient wells. Statistically significant increasing trends were identified for chloride in upgradient wells GWA-3A and GWA-4. 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.

Statistical Analysis of Georgia EPD Parameters – March/April 2020

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed using all available data within each well with detections through October 2018 for the majority of constituents (Figure G). Copper, vanadium, and zinc used data through July 2018 for background. As previously discussed, no statistical analyses were included for well/constituent pairs where there are 100% nondetects in the downgradient well. 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 State parameters:

Intrawell:

• Barium: GWA-3A (upgradient), GWA-4 (upgradient), GWC-5

• Chromium: GWC-2

Lead: GWA-5 (upgradient)Vanadium: GWA-5 (upgradient)

In cases where downgradient average concentrations are higher than observed concentrations upgradient for a given constituent where intrawell analyses are recommended, the current assumption is that this is due to natural spatial variation rather than a result of practices at the landfill. Validation of this assumption requires a separate analysis or investigation that is beyond the scope of this data screening study. However, for this site, the pre-waste data support the assumption of natural variation rather than impacts of the landfill.

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 H). 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. No statistically significant trends were noted in downgradient wells. Statistically significant increasing trends were identified for barium in upgradient wells GWA-2A, GWA-3A, and GWA-4. Statistically significant decreasing trends were noted for barium in upgradient wells GWA-1A, GWA-3B, and GWA-7; and chromium in upgradient well GWA-5. 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 me.

For Groundwater Stats Consulting,

Kristina Rayner

Kristina L. Rayner

Groundwater Statistician

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Page 1

100% ND

Date: 6/12/2020 3:39 PM

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR SanitasMatrix (1)

Copper (mg/L)

GWC-4A

Lead (mg/L)

GWC-1, GWC-4A

Sanitas™ v.9.6.25 . U

Page 1

Date Ranges

Date: 6/10/2020 4:21 AM

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR SanitasMatrix (1)

Barium (mg/L)

GWC-1 background:1/21/2013-10/9/2018

Chromium (mg/L)

GWA-1A background:11/10/2000-10/8/2018

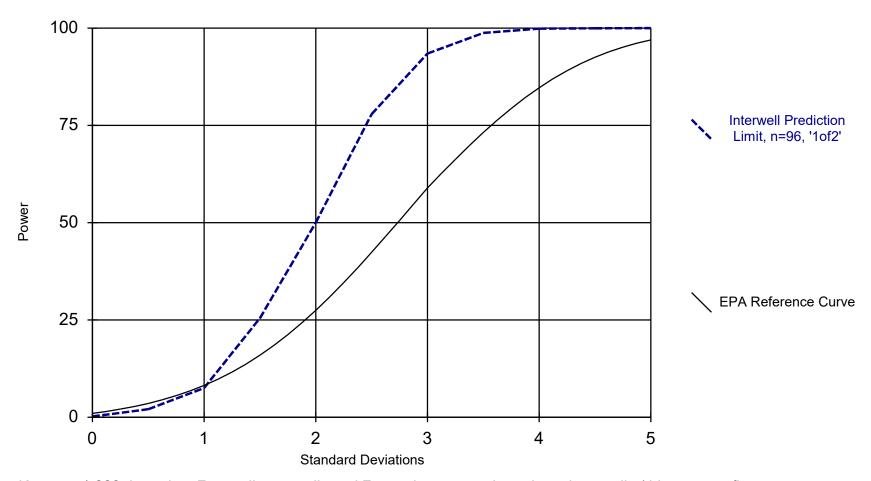
GWA-7 background:12/1/2006-10/9/2018

GWC-2 background:9/13/2000-10/9/2018

Lead (mg/L)

GWA-7 background:12/1/2006-10/9/2018

Power Curve - Federal

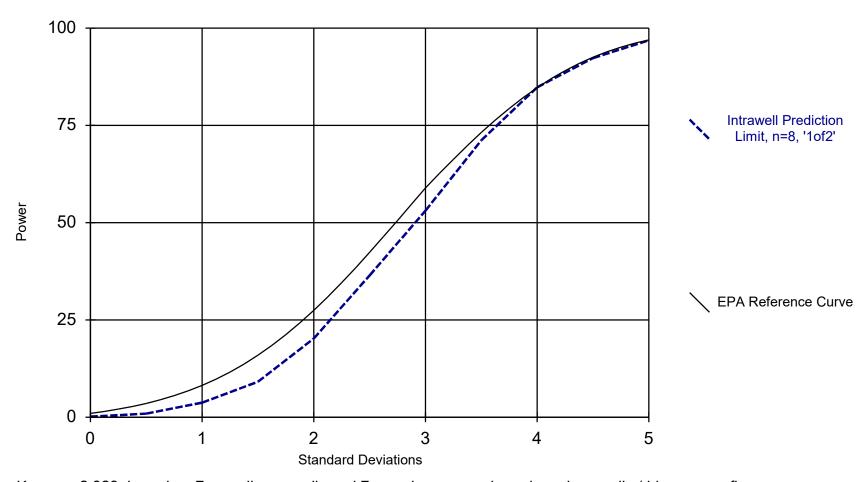


Kappa = 1.883, based on 7 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 6/15/2020 11:05 AM View: PL's State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Power Curve - Federal

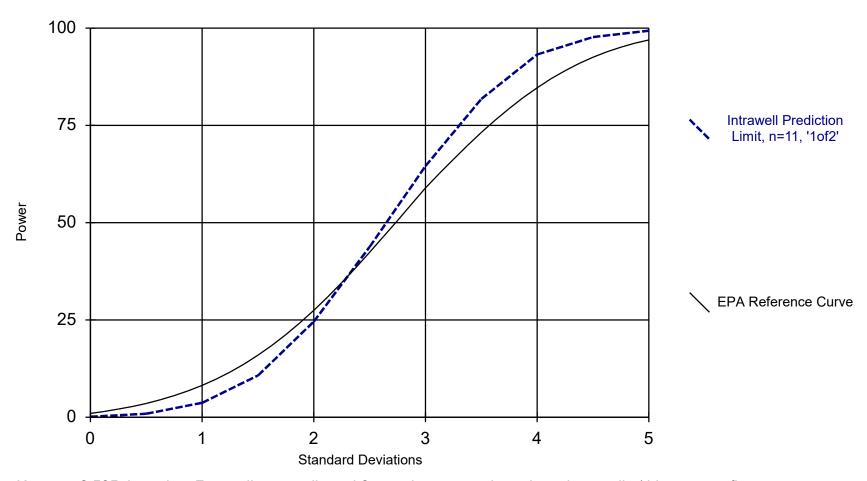


Kappa = 2.923, based on 7 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 6/15/2020 10:50 AM View: Trend Tests - State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Power Curve - State



Kappa = 2.595, based on 7 compliance wells and 8 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 6/15/2020 11:04 AM View: PL's State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Intrawell Prediction Limits - Significant Results (Federal)

	Plant McIntosh	Client: So	outhern Comp	any Data	a: McIn	tosh	LF 3 CCR	Printed 6/	15/2020	, 10:18 AM			
<u>Constituent</u> <u>Well</u>	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	N Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Chloride (mg/L) GWA-3	A 16.21	n/a	4/2/2020	20	Yes	8	8.963	2.481	0	None	No	0.001075	Param Intra 1 of 2
GWA-2	A 1.7	n/a	3/10/2020	2.3	Yes	9	n/a	n/a	88.89	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Gulfate (mg/L) GWC-1	1	n/a	3/11/2020	3.5	Yes	8	n/a	n/a	100	n/a	n/a	0.02144	NP Intra (NDs) 1 of 2
Sulfate (mg/L) GWC-2	1	n/a	3/31/2020	1	Yes	8	n/a	n/a	100	n/a	n/a	0.02144	NP Intra (NDs) 1 of 2
GWC-4.	A 2.327	n/a	3/31/2020	2.5	Yes	8	1.096	0.421	12.5	None	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L) GWC-6	1.474	n/a	3/11/2020	2.2	Yes	7	0.92	0.1704	0	None	No	0.001075	Param Intra 1 of 2
otal Dissolved Solids (mg/L) GWC-5	648.3	n/a	3/31/2020	750	Yes	8	204.8	151.7	0	None	No	0.001075	Param Intra 1 of 2

Interwell Prediction Limits - All Results (Federal - No Significant)

	ı	Plant McIntosh	Client: S	outhern Comp	Company Data: McIntosh LF 3 CCR			Printed 6/15/2020, 10:25 AM						
Constituent	Well	Upper Lim	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg 1	N Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Boron (mg/L)	GWC-1	1.9	n/a	3/11/2020	0.04J	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Boron (mg/L)	GWC-2	1.9	n/a	3/31/2020	0.046J	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Boron (mg/L)	GWC-4A	1.9	n/a	3/31/2020	0.08ND	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Boron (mg/L)	GWC-4B	1.9	n/a	3/31/2020	0.08ND	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Boron (mg/L)	GWC-5	1.9	n/a	3/31/2020	0.08ND	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Boron (mg/L)	GWC-6	1.9	n/a	3/11/2020	0.08ND	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Calcium (mg/L)	GWC-1	20	n/a	3/11/2020	1.6	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Calcium (mg/L)	GWC-2	20	n/a	3/31/2020	8.3	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Calcium (mg/L)	GWC-4A	20	n/a	3/31/2020	0.48J	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Calcium (mg/L)	GWC-4B	20	n/a	3/31/2020	0.26J	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Calcium (mg/L)	GWC-5	20	n/a	3/31/2020	12	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Calcium (mg/L)	GWC-6	20	n/a	3/11/2020	1.7	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-1	0.21	n/a	3/11/2020	0.1ND	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-2	0.21	n/a	3/31/2020	0.043J	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-4A	0.21	n/a	3/31/2020	0.028J	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-4B	0.21	n/a	3/31/2020	0.1ND	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-5	0.21	n/a	3/31/2020	0.16	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-6	0.21	n/a	3/11/2020	0.1ND	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2

Trend Test Summary - Significant Results (Federal)

 Plant McIntosh
 Client: Southern Company
 Data: McIntosh LF 3 CR
 Printed 6/15/2020, 10:32 AM

 Constituent
 Well
 Slope
 Calc.
 Critical
 Sig.
 N
 %NDs
 Normality
 Xform
 Alpha
 Method

 Chloride (mg/L)
 GWA-3A (bg)
 4.108
 77
 43
 Yes
 13
 0
 n/a
 n/a
 0.01
 NP

 Chloride (mg/L)
 GWA-4 (bg)
 0.809
 41
 38
 Yes
 12
 0
 n/a
 n/a
 0.01
 NP

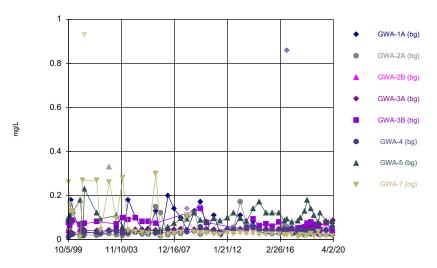
Intrawell Prediction Limits - Significant Results (State) Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 6/15/2020, 10:58 AM

	Pla	Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR					Printed 6/15/2020, 10:58 AM							
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	<u> Bg Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Barium (mg/L)	GWA-3A	0.0585	n/a	4/2/2020	0.088	Yes	44	0.04428	0.007109	0	None	No	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWA-4	0.05527	n/a	3/10/2020	0.058	Yes	45	0.03687	0.009212	0	None	No	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWC-5	0.6372	n/a	3/31/2020	0.67	Yes	44	-1.326	0.4377	0	None	In(x)	0.0009403	Param Intra 1 of 2
Chromium (mg/L)	GWC-2	0.004717	n/a	3/31/2020	0.005	Yes	41	0.04977	0.009395	24.39	Kaplan-Meier	sqrt(x)	0.0009403	Param Intra 1 of 2
Lead (mg/L)	GWA-5	0.0013	n/a	3/10/2020	0.0022	Yes	44	n/a	n/a	84.09	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-5	0.0082	n/a	3/10/2020	0.01	Yes	39	n/a	n/a	82.05	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2

Trend Test Summary - Significant Results (State) Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 6/15/2020, 11:08 AM

	Plant McIntosh Client: Southern Company D		Data: McIntos	Prin	ted 6/15	2020, 11	:08 AM				
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Barium (mg/L)	GWA-1A (bg)	-0.002394	-4.226	-2.58	Yes	48	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-2A (bg)	0.000979	2.662	2.58	Yes	47	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-3A (bg)	0.001027	6.613	2.58	Yes	49	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-3B (bg)	-0.001193	-201	-191	Yes	36	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-4 (bg)	0.0008915	5.665	2.58	Yes	49	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-7 (bg)	-0.001874	-5.76	-2.58	Yes	48	0	n/a	n/a	0.01	NP
Chromium (mg/L)	GWA-5 (bg)	-0.00002918	-2.918	-2.58	Yes	48	50	n/a	n/a	0.01	NP

FIGURE A.



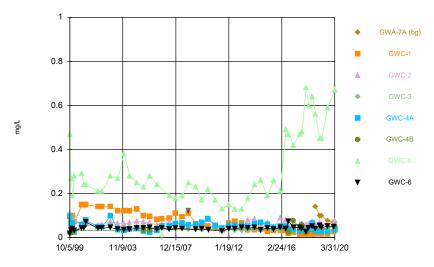
Constituent: Barium Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Time Series 0.02 GWA-1A (bg) GWA-2A (bg) 0.016 GWA-2B (bg) GWA-3A (bg) 0.012 GWA-3B (bg) GWA-4 (bg) 0.008 GWA-5 (bg) GWA-7 (bg) 0.004 10/5/99 11/10/03 12/16/07 1/21/12 2/26/16 4/2/20

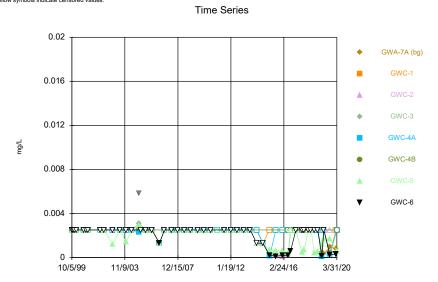
Constituent: Beryllium Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Time Series

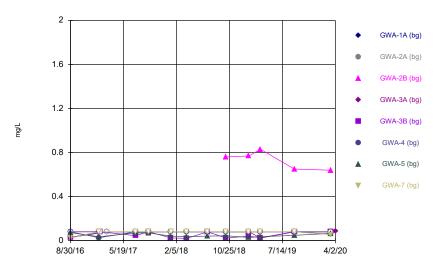


Constituent: Barium Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Beryllium Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



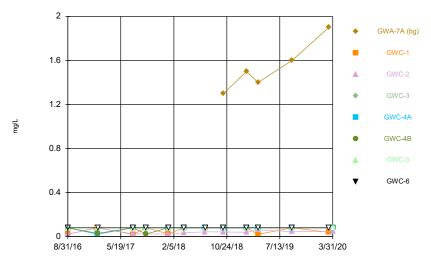
Constituent: Boron Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

${\sf Sanitas^{\sf TM}} \ v. 9. 6. 25g \ {\sf Sanitas} \ {\sf software} \ {\sf utilized} \ {\sf by} \ {\sf Groundwater} \ {\sf Stats} \ {\sf Consulting}. \ {\sf UG}$

Time Series 30 GWA-1A (bg) GWA-2A (bg) 24 GWA-2B (bg) GWA-3A (bg) GWA-3B (bg) GWA-4 (bg) 12 GWA-5 (bg) GWA-7 (bg) 8/30/16 5/19/17 2/5/18 10/25/18 7/14/19 4/2/20

Constituent: Calcium Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Time Series



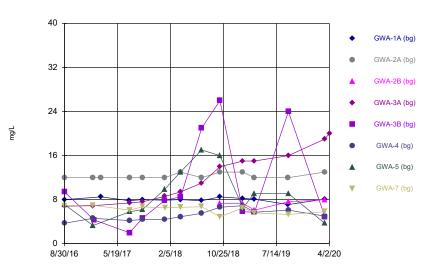
Constituent: Boron Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Time Series 30 GWA-7A (bg) GWC-1 24 18 GWC-4A mg/L GWC-4B 12 GWC-6 6 8/31/16 5/19/17 2/5/18 10/24/18 7/13/19 3/31/20

Constituent: Calcium Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR





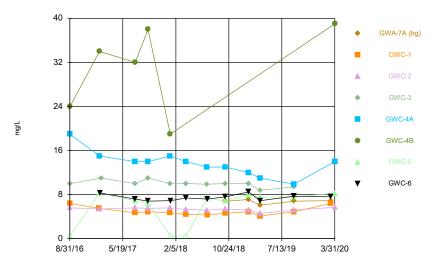
Constituent: Chloride Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Time Series 0.8 GWA-1A (bg) GWA-2A (bg) 0.64 GWA-2B (bg) GWA-3A (bg) 0.48 GWA-3B (bg) GWA-4 (bg) 0.32 GWA-5 (bg) GWA-7 (bg) 0.16 10/5/99 11/10/03 12/16/07 1/21/12 2/26/16 4/2/20

Constituent: Chromium Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Time Series



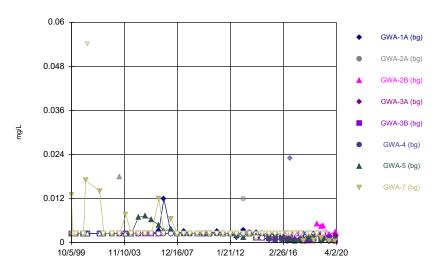
Constituent: Chloride Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Time Series

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

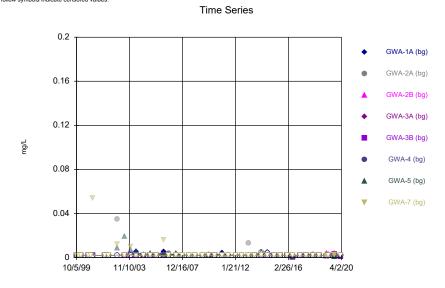
8.0 GWA-7A (bg) GWC-1 0.64 0.48 GWC-4A mg/L GWC-4B 0.32 GWC-6 0.16 0 WW 10/5/99 11/9/03 12/15/07 1/19/12 2/24/16 3/31/20

Constituent: Chromium Analysis Run 6/15/2020 1:23 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



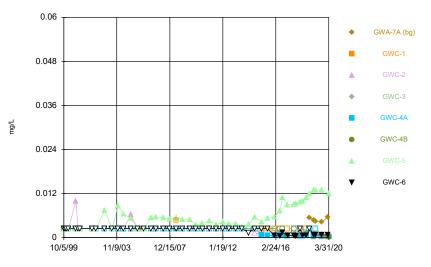
Constituent: Cobalt Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



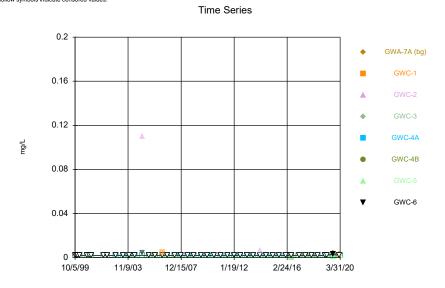
Constituent: Copper Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Time Series

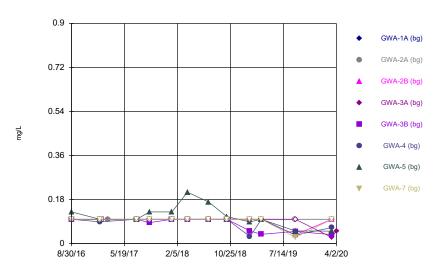


Constituent: Cobalt Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

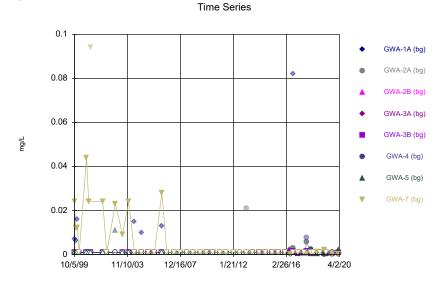


Constituent: Copper Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



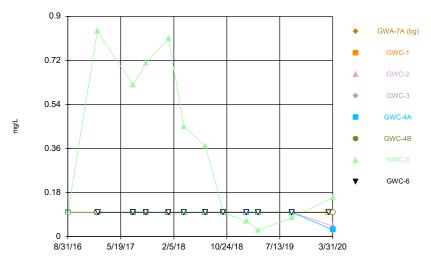
Constituent: Fluoride Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



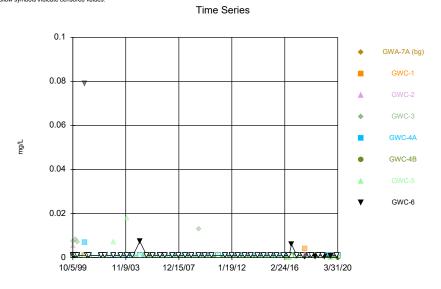
Constituent: Lead Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Time Series

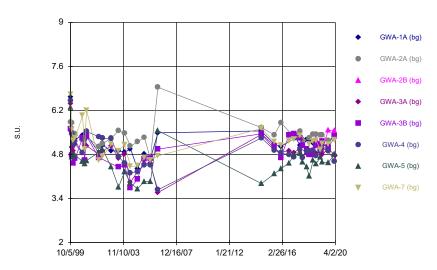


Constituent: Fluoride Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Lead Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



Constituent: pH Analysis Run 6/15/2020 1:23 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

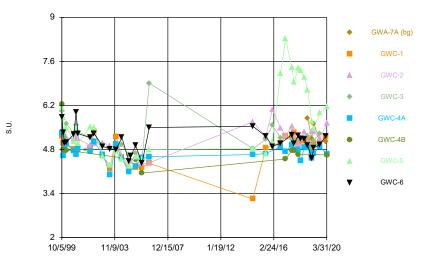
Time Series

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

200 GWA-1A (bg) GWA-2A (bg) 160 GWA-2B (bg) GWA-3A (bg) 120 GWA-3B (bg) GWA-4 (bg) 80 GWA-5 (bg) GWA-7 (bg) 40 8/30/16 5/19/17 2/5/18 10/25/18 7/14/19 4/2/20

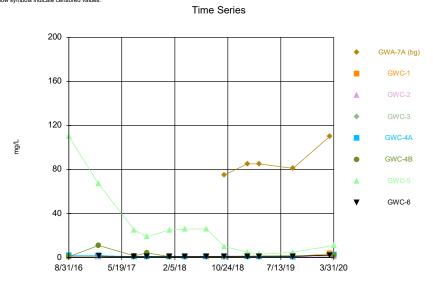
Constituent: Sulfate Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Time Series

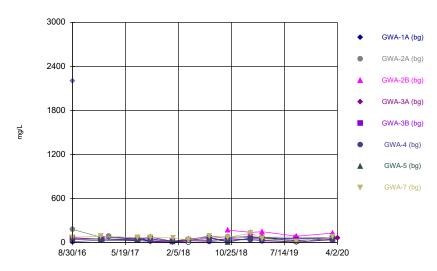


Constituent: pH Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Sulfate Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



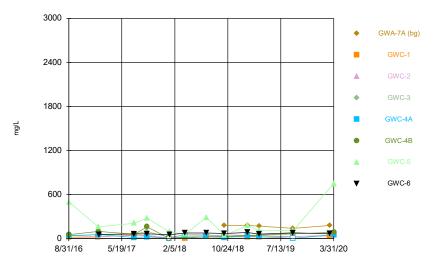
Constituent: Total Dissolved Solids Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Time Series 0.4 GWA-1A (bg) GWA-2A (bg) 0.32 GWA-2B (bg) GWA-3A (bg) 0.24 GWA-3B (bg) mg/L GWA-4 (bg) 0.16 GWA-5 (bg) GWA-7 (bg) 0.08 10/5/99 11/10/03 12/16/07 1/21/12 2/26/16 4/2/20

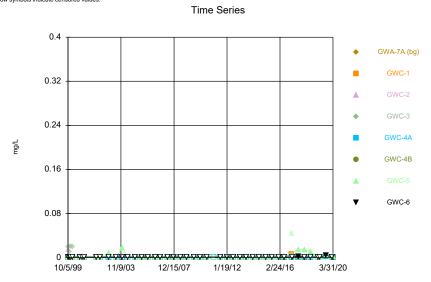
Constituent: Vanadium Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Time Series



Constituent: Total Dissolved Solids Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

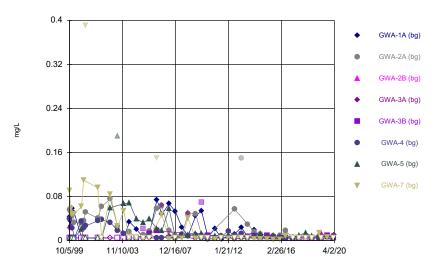
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Vanadium Analysis Run 6/15/2020 1:23 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

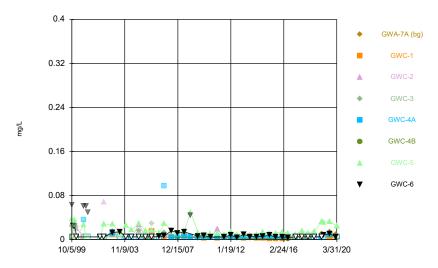




Constituent: Zinc Analysis Run 6/15/2020 1:23 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Time Series



	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
10/5/1999	0.084	0.042		0.031	0.077	0.013	0.1	0.26	
11/12/1999	0.099	0.051		0.023	0.065	0.017	0.086	0.16	
12/29/1999	0.18	0.032		0.033	0.079	0.027	0.12	0.13	
2/17/2000	0.12	0.027		0.026	0.089	0.023	0.13	0.12	
9/13/2000	0.038	0.016		0.044	0.069	0.022	0.18	0.01	
11/10/2000	0.065	0.021		0.044	0.071	0.035	0.018	0.27	
1/4/2001	0.037	0.022		0.043	0.073	0.032	0.23	0.93 (o)	
12/11/2001	0.027	0.019		0.041	0.081	0.032	0.12	0.27	
4/4/2002	0.027	0.024		0.038		0.03	0.094	0.043	
12/6/2002	0.028	0.026		0.044		0.041	0.33 (o)	0.26	
6/28/2003	0.054	0.021		0.045	0.072	0.035	0.11	0.093	
12/13/2003	0.027	0.018		0.039	0.099	0.029	0.057	0.28	
5/28/2004	0.18	0.023		0.042	0.091	0.033	0.035	0.04	
12/10/2004	0.1	0.031		0.045	0.1	0.037	0.04	0.035	
6/24/2005	0.045	0.023		0.042	0.083	0.034	0.037	0.031	
12/13/2005	0.048	0.025		0.043	0.082	0.03	0.039	0.027	
7/12/2006	0.13	0.15		0.043	0.075	0.03	0.042	0.3	
12/1/2006	0.012	0.12		0.041		0.032	0.044	0.011	
6/21/2007	0.2	0.021		0.043		0.03	0.058	0.024	
12/15/2007	0.14	0.028		0.045		0.034	0.073	0.026	
6/21/2008						0.037		0.032	
6/22/2008	0.1	0.026		0.05			0.096		
12/6/2008				0.14 (o)		0.034	0.094	0.11	
12/7/2008	0.043	0.11		,					
7/10/2009				0.046				0.031	
7/11/2009	0.13	0.12				0.037	0.12		
12/22/2009							0.089		
12/23/2009	0.17	0.024		0.049	0.14	0.058		0.028	
6/23/2010				0.043	0.077	0.046	0.081	0.028	
6/24/2010	0.045	0.035							
1/8/2011				0.047		0.036	0.097	0.024	
1/9/2011	0.11								
7/10/2011				0.035		0.031	0.084	0.022	
7/11/2011	0.022								
1/19/2012				0.05		0.045		0.028	
1/20/2012	0.043						0.099		
7/12/2012				0.042		0.039	0.12	0.026	
7/13/2012	0.05	0.054							
1/21/2013	0.11	0.17		0.048		0.042	0.095	0.031	
7/19/2013								0.026	
7/20/2013	0.04	0.067		0.047	0.045	0.054	0.086		
1/16/2014								0.028	
1/17/2014	0.082	0.054		0.049	0.092	0.057	0.14		
7/12/2014	0.034	0.045		0.043	0.064	0.042	0.17	0.023	
1/15/2015				0.05	0.072	0.041		0.024	
1/16/2015	0.029	0.043					0.12		
7/15/2015	0.025	0.037		0.044	0.059	0.04	0.12	0.023	
1/16/2016	0.026	0.041		0.048	0.079	0.04	0.12	0.024	
6/22/2016	0.0374 (D)			0.0471 (D)		0.0453	0.0839	0.02	
6/23/2016		0.0606		(2)	0.034				
8/30/2016								0.02	
8/31/2016				0.043	0.044	0.041	0.093		
5.5./2010				5.5.5		0.0	0.000		

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
9/1/2016	0.86 (o)	0.057							
1/18/2017		0.042							
1/19/2017				0.052		0.052	0.079	0.023	
1/23/2017					0.044				
2/28/2017	0.027	0.041							
7/17/2017	0.022								
7/18/2017		0.035		0.046	0.052	0.037			
7/19/2017							0.085	0.013	
9/20/2017	0.023	0.039		0.053	0.051			0.021	
9/21/2017						0.042	0.1		
1/8/2018	0.022	0.038							
1/9/2018				0.05	0.058	0.043	0.13		
1/10/2018								0.018	
3/27/2018	0.023	0.041		0.054		0.039	0.18		
3/28/2018					0.073			0.019	
7/10/2018	0.024	0.042		0.056	0.078	0.043	0.14	0.026	
10/8/2018	0.03	0.04	0.049		0.068	0.042	0.11		0.14
10/9/2018				0.061				0.014	
1/30/2019	0.024	0.042	0.041	0.071	0.053	0.04	0.079	0.036	0.1
3/27/2019	0.021	0.039					0.12		
3/28/2019			0.035	0.068	0.042	0.041		0.014	0.1
9/11/2019	0.022	0.04							
9/12/2019			0.049	0.073	0.076	0.044	0.086	0.015	0.077
3/10/2020	0.018	0.044	0.047	0.082		0.058	0.081		
3/11/2020					0.035			0.014	0.067
4/2/2020				0.088					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
10/5/1999	0.096	0.097	0.11 (o)	0.095	0.021	0.47	0.017
11/12/1999	0.085	0.057	0.085	0.063	0.021	0.27	0.031
12/29/1999	0.1	0.084	0.093 (o)	0.066		0.19	0.039
2/17/2000	0.072	0.079	0.096 (o)	0.023	0.032	0.28	0.031
9/13/2000	0.15	0.06	0.058	0.056		0.29	0.043
11/10/2000	0.15	0.062	0.059	0.059		0.24	0.044
1/4/2001	0.15	0.064	0.057	0.079		0.24	0.071
12/11/2001	0.14	0.057	0.052	0.049		0.21	0.042
4/4/2002	0.14	0.06	0.052	0.048		0.21	0.043
12/6/2002	0.14	0.072	0.059	0.1		0.28	0.046
6/28/2003	0.12	0.066	0.046	0.036		0.27	0.038
12/13/2003	0.12	0.063	0.045	0.031		0.38	0.035
5/28/2004	0.12	0.067	0.045	0.038		0.28	0.037
12/10/2004	0.13	0.075	0.048	0.041		0.25	0.043
6/24/2005	0.1	0.071	0.048	0.028	0.031	0.23	0.044
12/13/2005	0.096	0.068	0.047	0.025	0.035	0.28	0.045
7/12/2006	0.083	0.058	0.045	0.033		0.24	0.037
12/1/2006	0.084	0.063	<0.0013 (o)	0.051		0.019 (o)	0.044
6/21/2007	0.087	0.071	0.044	0.052		0.19	0.037
12/15/2007	0.11	0.068	0.04	0.062		0.18	0.042
6/21/2008	0.093		0.042	0.065		0.19	
6/22/2008		0.057					0.04
12/6/2008	0.11	0.058	0.038	0.056			
12/7/2008						0.25	0.12 (o)
7/11/2009	0.064	0.05	0.037	0.059		0.23	0.038
12/23/2009	0.052	0.05	0.036	0.067		0.17	0.04
6/23/2010	0.051	0.083	0.04	0.084		0.22	
6/24/2010							0.035
1/8/2011	0.052	0.057	0.04	0.053		0.17	
7/10/2011	0.036	0.046	0.033	0.043		0.13	
7/11/2011							0.03
1/19/2012			0.041				
1/20/2012	0.065	0.055		0.054		0.15	0.039
7/12/2012	0.074	0.045	0.033	0.053		0.13	
7/13/2012							0.04
1/21/2013	0.066	0.045	0.033	0.053		0.13	0.045
7/19/2013			0.032				
7/20/2013	0.035	0.079		0.052		0.18	0.043
1/17/2014	0.036	0.084	0.034	0.063		0.24	0.045
7/11/2014				0.068		0.26	
7/12/2014	0.037	0.065	0.033				0.036
1/15/2015	0.007	0.067	0.037	0.050		0.40	0.044
1/16/2015	0.027	0.040	0.004	0.059		0.19	0.044
7/15/2015	0.031	0.049	0.034	0.045		0.26	0.038
1/16/2016	0.032	0.00	0.036	0.050		0.21	0.047
1/17/2016	0.0000	0.09		0.052	0.0000		
6/22/2016	0.0323	0.0806	0.0392	0.0528	0.0392	0.401	0.0000
6/23/2016	0.010	0.057	0.0388	0.027		0.491	0.0393
8/31/2016	0.019	0.057	0.027	0.037	0.022	0.47	0.075
9/1/2016	0.022		0.037		0.023	0.47	0.075
1/23/2017 1/24/2017	0.023	0.06				0.42	
1/24/201/		0.06				0.42	

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
1/25/2017				0.034	0.077		
1/27/2017							0.046
2/2/2017			0.044				
7/19/2017	0.013	0.06					
7/20/2017			0.044	0.028	0.04	0.47	0.045
9/21/2017	0.016	0.063	0.043	0.032	0.058	0.48	
9/22/2017							0.04
1/9/2018	0.016	0.059	0.038	0.033	0.023		
1/10/2018						0.68	0.027
3/28/2018	0.014		0.039	0.037		0.6	
3/29/2018		0.06					0.044
7/10/2018		0.073	0.04	0.065			
7/11/2018	0.016					0.64	0.051
10/9/2018	0.015	0.057	0.036	0.029		0.56	0.041
1/30/2019	0.018		0.037	0.027			
1/31/2019		0.067				0.45	0.053
3/28/2019	0.014	0.064	0.035	0.028		0.45	0.045
9/12/2019	0.016	0.06	0.037	0.026		0.59	0.052
3/11/2020	0.027						0.048
3/31/2020		0.077		0.036	0.052	0.67	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
10/5/1999	<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	
12/29/1999	<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	
9/13/2000	<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	
1/4/2001	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	0.016 (o)	
12/11/2001	<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	
12/6/2002	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	0.0018	0.0039	
6/28/2003	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	0.0036	0.0013	
12/13/2003	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	0.0019	0.0041	
5/28/2004	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
12/10/2004	0.0028	0.0024		0.0024	0.0022	0.0023	0.0035	0.0025	
6/24/2005	<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	
7/12/2006	0.0013	<0.0025		<0.0025	<0.0025	<0.0025	0.0013	0.005 (o)	
12/1/2006	<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	
12/15/2007	<0.0025	<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			<0.0025		
12/6/2008				<0.0025		<0.0025	<0.0025	<0.0025	
12/7/2008	<0.0025	<0.0025		0.0020		0.0020	0.0020	0.0020	
7/10/2009	0.0020	0.0020		<0.0025				<0.0025	
7/11/2009	<0.0025	<0.0025		10.0020		<0.0025	<0.0025	-0.0020	
12/22/2009	-0.0020	-0.0020				-0.0020	<0.0025		
12/23/2009	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	10.0020	<0.0025	
6/23/2010	-0.0020	-0.0020		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
6/24/2010	<0.0025	<0.0025		10.0020	-0.0020	-0.0020	10.0020	-0.0020	
1/8/2011	10.0023	10.0025		<0.0025		<0.0025	<0.0025	<0.0025	
1/9/2011	<0.0025			10.0020		-0.0020	10.0020	-0.0020	
7/10/2011	10.0023			<0.0025		<0.0025	<0.0025	<0.0025	
7/11/2011	<0.0025			10.0023		10.0025	10.0023	10.0025	
1/19/2012	10.0023			<0.0025		<0.0025		<0.0025	
1/20/2012	<0.0025			10.0023		10.0025	<0.0025	10.0025	
7/12/2012	10.0023			<0.0025		<0.0025	<0.0025	<0.0025	
7/13/2012	<0.0025	<0.0025		10.0023		10.0025	10.0023	10.0025	
1/21/2013	<0.0025	0.0023		<0.0025		<0.0025	<0.0025	<0.0025	
7/19/2013	10.0023	0.0037		10.0023		10.0025	10.0023	<0.0025	
7/20/2013	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	~ 0.0023	
1/16/2014	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0013 (J)	
	<0.0013 (J)	~0.0012 (I)		<0.002E	<0.0012 (1)	<0.0012 (I)	<0.0012 (1)	<0.0013 (3)	
1/17/2014	* *	<0.0013 (J)		<0.0025 <0.0025	<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	<0.0012 (1)	
7/12/2014	<0.0013 (J)	<0.0013 (J)			<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	
1/15/2015	0.00033 (1)	0.00038 (1)		0.00039 (J)	0.00019 (J)	0.0002 (J)	0.00043 (1)	0.00027 (J)	
1/16/2015	0.00022 (J)	0.00038 (J)		0.0002171	0.0001271	0.00018 (1)	0.00043 (J)	0.00024 (1)	
7/15/2015	0.00015 (J)	0.00027 (J)		0.00031 (J)	0.00012 (J)	0.00018 (J)	0.00064 (J)	0.00021 (J)	
1/16/2016	0.00011 (J)	0.00029 (J)		0.00034 (J)	0.00013 (J)	0.00013 (J)	0.00039 (J)	0.00016 (J)	
6/22/2016	0.00025 (JD)	0.0007.41		0.0004 (J)	-0.0005	0.0001 (J)	0.0002 (J)	0.0002 (J)	
6/23/2016		0.0007 (J)			<0.0025			-0.0005	
8/30/2016				0.00005 ())	-0.0005	-0.0005	<0.000E	<0.0025	
8/31/2016				0.00035 (J)	<0.0025	<0.0025	<0.0025		

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
9/1/2016	0.0084 (o)	0.00097 (J)							
1/18/2017		<0.0025							
1/19/2017				<0.0025		<0.0025	<0.0025	<0.0025	
1/23/2017					<0.0025				
2/28/2017	<0.0025	<0.0025							
7/17/2017	<0.0025								
7/18/2017		<0.0025		0.00038 (J)	<0.0025	<0.0025			
7/19/2017							<0.0025	<0.0025	
9/20/2017	<0.0025	<0.0025		0.00039 (J)	<0.0025			<0.0025	
9/21/2017						<0.0025	<0.0025		
1/8/2018	<0.0025	<0.0025							
1/9/2018				<0.0025	<0.0025	<0.0025	<0.0025		
1/10/2018								<0.0025	
3/27/2018	<0.0025	<0.0025		<0.0025		<0.0025	<0.0025		
3/28/2018					<0.0025			<0.0025	
7/10/2018	<0.0025	<0.0025		0.00038 (J)	<0.0025	<0.0025	<0.0025	<0.0025	
10/8/2018	<0.0025	<0.0025	0.0014 (J)		<0.0025	<0.0025	<0.0025		<0.0025
10/9/2018				<0.0025				<0.0025	
1/30/2019	0.00026 (J)	0.00037 (J)	0.0019 (J)	0.00051 (J)	0.0003 (J)	0.00019 (J)	0.00024 (J)	0.00047 (J)	0.00047 (J)
3/27/2019	<0.0025	<0.0025					<0.0025		
3/28/2019			0.0017 (J)	0.00046 (J)	<0.0025	<0.0025		<0.0025	0.00034 (J)
9/11/2019	0.00019 (J)	0.00028 (J)							
9/12/2019			0.00088 (J)	0.00084 (J)	0.00035 (J)	<0.0025	0.00036 (J)	0.00024 (J)	0.00097 (J)
3/10/2020	0.00018 (J)	0.00035 (J)	0.00087 (J)	0.00058 (J)		0.00029 (J)	0.00028 (J)		
3/11/2020					<0.0025			<0.0025	0.00078 (J)
4/2/2020				0.00062 (J)					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
10/5/1999	<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
12/29/1999	<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
9/13/2000	<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
1/4/2001	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
12/11/2001	<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
12/6/2002	<0.0025	<0.0025	<0.0025	<0.0025		0.0012	<0.0025
6/28/2003	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
12/13/2003	<0.0025	<0.0025	<0.0025	<0.0025		0.0014	<0.0025
5/28/2004	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
12/10/2004	0.0025	0.0023	0.0031	0.0023		0.0029	0.0058 (o)
2/5/2005							<0.0025
6/24/2005	<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
7/12/2006	0.0013	0.0013	0.0013	0.0013		0.0013	0.0013
12/1/2006	<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
12/15/2007	<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
12/6/2008	<0.0025	<0.0025	<0.0025	<0.0025			0.0020
12/7/2008						<0.0025	<0.0025
7/11/2009	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
12/23/2009	<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	0.0020
6/24/2010	0.0020	0.0020	0.0020	0.0020		0.0020	<0.0025
1/8/2011	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	0.0020
7/10/2011	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	
7/11/2011	-0.0020	-0.0020	-0.0020	-0.0020		-0.0020	<0.0025
1/19/2012			<0.0025				-0.0020
1/20/2012	<0.0025	<0.0025	-0.0020	<0.0025		<0.0025	<0.0025
7/12/2012	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	·0.0025
7/13/2012	-0.0020	-0.0020	-0.0020	-0.0020		-0.0020	<0.0025
1/21/2013	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
7/19/2013	10.0023	10.0020	<0.0025	10.0025		10.0025	·0.0025
7/20/2013	<0.0025	<0.0025	-0.0020	<0.0025		<0.0025	<0.0025
1/17/2014	<0.0025	<0.0013 (J)	<0.0025	<0.0025		<0.0013 (J)	<0.0013 (J)
7/11/2014	10.0023	10.0013 (0)	10.0025	<0.0023		<0.0013 (J)	·0.0013 (0)
7/11/2014	<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	10.0013 (0)		10.0013 (0)	<0.0013 (J)
1/15/2015	10.0013 (0)	0.00019 (J)	0.00013 (J)				·0.0013 (0)
1/16/2015	<0.0025	0.00013 (0)	0.00020 (0)	0.00012 (J)		0.00067 (J)	0.00021 (J)
7/15/2015	<0.0025	0.00018 (J)	0.00022 (J)	<0.0025		0.00067 (J)	0.00021 (J) 0.00011 (J)
1/16/2016	<0.0025	0.00010 (0)	0.00022 (J) 0.00025 (J)	-0.0020		0.00065 (J)	0.00011 (J)
1/17/2016	-0.0020	0.0001171	0.00020 (0)	<0.0025		0.00000 (0)	J.00013 (J)
	<0.0025	0.00011 (J)			<0.0025		
6/22/2016 6/23/2016	<0.0025	0.0002 (J)	0.0003 (1)	<0.0025	<0.0025	0.0004 (1)	0.0003 (1)
8/31/2016	<0.0025	<0.0025	0.0002 (J)	<0.0025		0.0004 (J)	0.0002 (J)
9/1/2016	<0.0025	~U.UU20	<0.0025	~U.UU20	<0.0025	<0.0025	0.0006 / 1
	<0.0025		<0.0025		<0.0025	<0.0025	0.0006 (J)
1/23/2017	-0.0020						

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
1/24/2017		<0.0025				<0.0025	
1/25/2017				<0.0025	<0.0025		
1/27/2017							<0.0025
2/2/2017			<0.0025				
7/19/2017	<0.0025	<0.0025					
7/20/2017			<0.0025	<0.0025	<0.0025	0.00049 (J)	<0.0025
9/21/2017	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.00068 (J)	
9/22/2017							<0.0025
1/9/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		
1/10/2018						<0.0025	<0.0025
3/28/2018	<0.0025		<0.0025	<0.0025		<0.0025	
3/29/2018		<0.0025					<0.0025
7/10/2018		<0.0025	<0.0025	<0.0025			
7/11/2018	<0.0025					0.00043 (J)	<0.0025
10/9/2018	<0.0025	<0.0025	<0.0025	<0.0025		0.00054 (J)	<0.0025
1/30/2019	<0.0025		0.00033 (J)	7E-05 (J)			
1/31/2019		6.5E-05 (J)				0.0012 (J)	0.00012 (J)
3/28/2019	<0.0025	<0.0025	<0.0025	<0.0025		0.0017 (J)	<0.0025
9/12/2019	0.00043 (J)	<0.0025	0.00026 (J)	0.00028 (J)		0.0017	0.00025 (J)
3/11/2020	<0.0025						0.0003 (J)
3/31/2020		<0.0025		<0.0025	<0.0025	0.0006 (J)	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
8/30/2016								0.024 (J)	
8/31/2016				<0.08	0.029 (J)	<0.08	0.073		
9/1/2016	0.029 (J)	<0.08							
1/18/2017		<0.08							
1/19/2017				<0.08		0.027 (J)	0.036 (J)	<0.08	
1/23/2017					<0.08				
2/28/2017	<0.08	<0.08							
7/17/2017	<0.08								
7/18/2017		<0.08		<0.08	0.045 (J)	<0.08			
7/19/2017							0.07	<0.08	
9/20/2017	<0.08	<0.08		<0.08	<0.08			<0.08	
9/21/2017						<0.08	0.07		
1/8/2018	<0.08	<0.08							
1/9/2018				<0.08	0.026 (J)	<0.08	0.042 (J)		
1/10/2018								<0.08	
3/27/2018	<0.08	<0.08		<0.08		<0.08	0.037 (J)		
3/28/2018					0.021 (J)			<0.08	
7/10/2018	<0.08	<0.08		<0.08	<0.08	<0.08	0.042 (J)	<0.08	
10/8/2018	<0.08	<0.08	0.76		0.024 (J)	<0.08	0.044 (J)		1.3
10/9/2018				<0.08				<0.08	
1/30/2019	<0.08	<0.08	0.77	<0.08	0.041 (J)	<0.08	0.03 (J)	<0.08	1.5
3/27/2019	<0.08	<0.08					0.036 (J)		
3/28/2019			0.83	0.024 (J)	0.027 (J)	<0.08		<0.08	1.4
9/11/2019	<0.08	<0.08							
9/12/2019			0.65	<0.08	<0.08	<0.08	0.048 (J)	<0.08	1.6
3/10/2020	<0.08	<0.08	0.64	0.059 (J)		<0.08	0.066 (J)		
3/11/2020					<0.08			0.055 (J)	1.9
4/2/2020				0.084					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
8/31/2016	0.023 (J)	0.023 (J)		<0.08			
9/1/2016			<0.08		<0.08	<0.08	<0.08
1/23/2017	<0.08						
1/24/2017		<0.08				<0.08	
1/25/2017				0.023 (J)	0.03 (J)		
1/27/2017							<0.08
2/2/2017			<0.08				
7/19/2017	0.021 (J)	0.026 (J)					
7/20/2017			<0.08	<0.08	<0.08	<0.08	<0.08
9/21/2017	<0.08	0.025 (J)	<0.08	<0.08	0.024 (J)	<0.08	
9/22/2017							<0.08
1/9/2018	0.025 (J)	0.023 (J)	<0.08	<0.08	<0.08		
1/10/2018						<0.08	<0.08
3/28/2018	<0.08		<0.08	<0.08		<0.08	
3/29/2018		0.035 (J)					<0.08
7/10/2018		0.044 (J)	<0.08	<0.08			
7/11/2018	<0.08					<0.08	<0.08
10/9/2018	<0.08	0.043 (J)	<0.08	<0.08		<0.08	<0.08
1/30/2019	<0.08		<0.08	<0.08			
1/31/2019		0.04 (J)				<0.08	<0.08
3/28/2019	0.021 (J)	0.062	<0.08	<0.08		<0.08	<0.08
9/12/2019	<0.08	0.045 (J)	<0.08	<0.08		<0.08	<0.08
3/11/2020	0.04 (J)						<0.08
3/31/2020		0.046 (J)		<0.08	<0.08	<0.08	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
8/30/2016								1.4	
8/31/2016				1.5	2.7	0.88	3.7		
9/1/2016	26 (o)	4							
1/18/2017		3.3							
1/19/2017				1.8		1.1	2	1.3	
1/23/2017					3.7				
2/28/2017	2.7	3.8							
7/17/2017	1.7								
7/18/2017		3.1		1.7	2.8	0.86			
7/19/2017							2.6	0.95	
9/20/2017	1.5	3.2		1.7	2.7			0.97	
9/21/2017						0.9	2.7		
1/8/2018	1.7	3.4							
1/9/2018				1.9	2.5	1	4.1		
1/10/2018								1.2	
3/27/2018	1.7	3.5		1.9		0.89	4.8		
3/28/2018					2.2			1.2	
7/10/2018	1.7	3.4		1.9	1.6	0.99	3.7	1.4	
10/8/2018	1.6	3.7	17		1.6	1.1	3.2		17
10/9/2018				2.2				0.91	
1/30/2019	1.9	3.5	16	2.4	3.6	1	1.7	2	15
3/27/2019	1.6	3.4					3.1		
3/28/2019			16	2.4	4.4	0.98		1.5	18
9/11/2019	1.6	3.3							
9/12/2019			15	2.3	3.2	0.84	1.9	0.83	19
3/10/2020	2	3.4	14	2.8		1.1	2.9		
3/11/2020					4.4			0.88	20
4/2/2020				3					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
8/31/2016	0.22 (J)	5.5		0.42			
9/1/2016			2		0.16 (J)	21	1.9
1/23/2017	1.3 (o)						
1/24/2017		2.9				10	
1/25/2017				0.37	0.89		
1/27/2017							1.4
2/2/2017			2.2				
7/19/2017	0.19 (J)	4.2					
7/20/2017			2.1	0.29	0.17 (J)	8.1	1.5
9/21/2017	0.3	2.9	2.3	0.3	0.49	8	
9/22/2017							1.3
1/9/2018	0.16 (J)	1.7	2.2	0.38	0.17 (J)		
1/10/2018						11	1
3/28/2018	0.14 (J)		2.1	0.44		9.5	
3/29/2018		2.2					1.5
7/10/2018		3.9	2.1	2 (o)			
7/11/2018	0.18 (J)					9.6	1.6
10/9/2018	0.13 (J)	1.7	2	0.34		8	1.5
1/30/2019	0.24 (J)		2	0.34			
1/31/2019		4.8				7.5	1.9
3/28/2019	0.15 (J)	4.9	2	0.3		7.2	1.5
9/12/2019	<0.5 (D)	2	1.9	0.3 (J)		9.1	1.7
3/11/2020	1.6						1.7
3/31/2020		8.3		0.48 (J)	0.26 (J)	12	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
8/30/2016								6.9	
8/31/2016				6.8	9.4	3.7	7.1		
9/1/2016	8	12							
1/18/2017		12							
1/19/2017				6.9		4.6	3.3	7	
1/23/2017					4.3				
2/28/2017	8.5	12							
7/17/2017	7.8								
7/18/2017		12		7.4	2	4.2			
7/19/2017							5.8	6.1	
9/20/2017	8	12		7.6	4.6			6.7	
9/21/2017						4.4	6.2		
1/8/2018	7.9	12							
1/9/2018				8.6	7.9	4.4	9.9		
1/10/2018								6.5	
3/27/2018	8	13		9.4		4.9	13		
3/28/2018					8.5			6.6	
7/10/2018	7.8	12		11	21	5.5	17	6.7	
10/8/2018	8.5	13	7.3		26	6.6	16		6.8
10/9/2018				14				4.9	
1/30/2019	8.2	13	7.3	15	5.8	6.9	6.5	6.5	7.1
3/27/2019	8.1	12					9.1		
3/28/2019			6.1	15	5.7	5.7		5.6	6.1
9/11/2019	7.1	12							
9/12/2019			7.6	16	24	6.1	9.1	5.3	6.8
3/10/2020	8.1	13	8	19		5	3.7		
3/11/2020					4.8			5.8	6.9
4/2/2020				20					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
8/31/2016	6.4	5.6		19			
9/1/2016			10		24	<1	
1/23/2017	5.5						
1/24/2017		5.4				8.3	
1/25/2017				15	34		
1/27/2017							8.3
2/2/2017			11				
7/19/2017	4.7	5.6					
7/20/2017			10	14	32	6.9	7.2
9/21/2017	4.9	5.5	11	14	38	6.4	
9/22/2017							6.8
1/9/2018	4.7	5.6	10	15	19		
1/10/2018						<1	6.9
3/28/2018	4.4		10	14		<1	
3/29/2018		5.3					7.4
7/10/2018		5.2	9.9	13			
7/11/2018	4.3					7.4	7.2
10/9/2018	4.6	5.4	10	13		6.8	7.6
1/30/2019	4.9		10	12			
1/31/2019		5.2				8	8.5
3/28/2019	4.1	4.6	8.8	11		7.5	6.9
9/12/2019	4.9	5.2	9.4	9.9		7.6	7.7
3/11/2020	6.4						7.6
3/31/2020		5.7		14	39	8.2	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
10/5/1999	0.023	0.015		<0.002	<0.002	<0.002	<0.002	0.097	
11/12/1999	0.03	0.017		<0.002	<0.002	<0.002	<0.002	0.056	
12/29/1999	0.059	0.013		<0.002	<0.002	<0.002	<0.002	0.05	
2/17/2000	0.048	0.011		<0.002	<0.002	<0.002	<0.002	0.058	
9/13/2000	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	0.043	
11/10/2000	0.018	<0.002		<0.002	<0.002	<0.002	<0.002	0.011	
1/4/2001	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	0.33 (o)	
12/11/2001	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	0.095	
4/4/2002	<0.002	<0.002		<0.002		<0.002	<0.002	0.015	
12/6/2002	0.0046	<0.002		<0.002		0.0037	0.027 (o)	0.07	
6/28/2003	0.0082	<0.002		0.0053	0.0021	0.0039	0.0051	0.016	
12/13/2003	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	0.038	
5/28/2004	0.016	<0.002		0.0027	<0.002	<0.002	0.0031	0.004	
12/10/2004	0.0087	<0.002		0.004	<0.002	<0.002	0.0067	0.0043	
6/24/2005	0.0069	<0.002		0.0031	<0.002	<0.002	<0.002	0.003	
12/13/2005	0.0075	<0.002		0.0031	<0.002	<0.002	<0.002	0.0037	
7/12/2006	0.027	0.0055		0.0025	0.0028	0.023 (o)	<0.002	0.071	
12/1/2006	<0.002	0.0063		0.0037		0.0017	<0.002	0.0064	
6/21/2007	0.012	<0.002		0.0053		0.0027	0.0021	<0.002	
12/15/2007	0.0085	0.0022		0.0044		0.0026	0.0022	0.0044	
6/21/2008						0.0021		0.004	
6/22/2008	0.021	0.0019		0.0059			0.0019		
12/6/2008				0.0031		<0.002	<0.002	0.0032	
12/7/2008	0.01	<0.002							
7/10/2009				0.0029				0.004	
7/11/2009	0.0073	0.0026				<0.002	<0.002		
12/22/2009							0.0032		
12/23/2009	0.013	<0.002		0.0025	0.0041	<0.002		0.0041	
6/23/2010				0.0013	<0.002	<0.002	<0.002	0.0048	
6/24/2010	0.0076	<0.002							
1/8/2011				0.0017		<0.002	0.0019	0.0077	
1/9/2011	0.023								
7/10/2011				<0.002		<0.002	<0.002	0.0058	
7/11/2011	0.0042								
1/19/2012				<0.002		<0.002		0.0059	
1/20/2012	0.009						<0.002		
7/12/2012				<0.002		<0.002	0.0044	0.0053	
7/13/2012	0.013	0.012							
1/21/2013	0.032	0.095 (o)		0.0014		<0.002	<0.002	0.0059	
7/19/2013								0.0063	
7/20/2013	0.01	0.023		0.0021	0.0021	<0.002	0.0017		
1/16/2014								0.0083	
1/17/2014	0.024	0.01		0.0023	<0.002	<0.002	<0.0013 (J)		
7/12/2014	0.0069	0.0055		<0.0013 (J)	<0.002	<0.002	0.0014	0.0087	
1/15/2015				<0.002	0.0012 (J)	<0.002		0.0077	
1/16/2015	0.0064	0.0033					0.0011 (J)		
7/15/2015	0.0051	0.0029		<0.002	0.0015	<0.002	0.0016	0.0078	
1/16/2016	0.0066	0.0042		0.0025	<0.002	<0.002	<0.002	0.0084	
6/22/2016	0.00815 (D)			0.00255 (JD)		0.0005 (J)	0.002 (J)	0.0061 (J)	
6/23/2016		0.007 (J)			<0.002				
8/30/2016								0.0063	
8/31/2016				0.0042	0.0022 (J)	<0.002	0.002 (J)		

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
9/1/2016	0.12 (o)	0.012							
1/18/2017		<0.002							
1/19/2017				0.0039		<0.002	0.002 (J)	0.008	
1/23/2017					<0.002				
2/28/2017	0.0012 (J)	<0.002							
7/17/2017	0.003								
7/18/2017		<0.002		0.0018 (J)	<0.002	<0.002			
7/19/2017							0.0017 (J)	0.0062	
9/20/2017	0.0025	<0.002		0.0026	<0.002			0.0078	
9/21/2017						<0.002	0.0021 (J)		
1/8/2018	0.0038	<0.002							
1/9/2018				0.0038	<0.002	0.0087	0.0019 (J)		
1/10/2018								0.009	
3/27/2018	0.0044	0.0016 (J)		0.0037		<0.002	<0.002		
3/28/2018					<0.002			0.0081	
7/10/2018	0.0045	<0.002		0.0022 (J)	<0.002	<0.002	0.0012 (J)	0.0095	
10/8/2018	0.0054	0.0011 (J)	<0.002		0.0013 (J)	<0.002	0.0015 (J)		<0.002
10/9/2018				0.0047				0.0026	
1/30/2019	0.0061	<0.002	0.003	0.005	0.007	0.00088 (J)	0.0014 (J)	0.01	<0.002
3/27/2019	0.0044	0.0015 (J)					<0.002		
3/28/2019			0.0017 (J)	0.0037	<0.002	<0.002		0.0048	<0.002
9/11/2019	0.0076	0.004							
9/12/2019			<0.002	<0.002	<0.002	<0.002	0.0032	0.0035	<0.002
3/10/2020	0.0041	0.0028	<0.002	<0.002		<0.002	0.0031		
3/11/2020					0.0017 (J)			0.0053	<0.002
4/2/2020				0.0031					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
10/5/1999	<0.002	0.017	0.019 (o)	<0.002	<0.002	<0.002	<0.002
11/12/1999	<0.002	<0.002	0.011 (o)	<0.002	<0.002	<0.002	<0.002
12/29/1999	<0.002	0.011	0.022 (o)	<0.002		<0.002	<0.002
2/17/2000	<0.002	0.013	0.02 (o)	<0.002	<0.002	<0.002	<0.002
9/13/2000	<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
1/4/2001	<0.002	<0.002	<0.002	<0.002		<0.002	0.016 (o)
12/11/2001	<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
12/6/2002	<0.002	<0.002	0.0061	<0.002		0.008 (o)	<0.002
6/28/2003	0.007 (o)	0.0027	0.0032	0.061 (o)		0.021 (o)	0.0021
12/13/2003	<0.002	<0.002	<0.002	<0.002		0.011 (o)	<0.002
5/28/2004	<0.002	<0.002	0.0029	<0.002		<0.002	<0.002
12/10/2004	<0.002	0.74 (o)	0.015 (o)	0.0059 (o)		<0.002	0.0046 (o)
2/5/2005		<0.002					
6/24/2005	<0.002	0.0023	0.0031	<0.002	<0.002	<0.002	<0.002
12/13/2005	<0.002	0.0031	0.0049	<0.002	<0.002	<0.002	<0.002
7/12/2006	<0.002	0.0016	0.0024	<0.002		<0.002	<0.002
12/1/2006	<0.002	0.0022	0.0023	<0.002		<0.002	<0.002
6/21/2007	<0.002	0.002	0.0026	<0.002		<0.002	<0.002
12/15/2007	<0.002	0.0029	0.0039	<0.002		0.002	0.0016
6/21/2008	<0.002		0.0032	<0.002		0.0017	
6/22/2008		0.0023					<0.002
12/6/2008	<0.002	0.0023	0.0032	<0.002			
12/7/2008						0.0025	<0.002
7/11/2009	<0.002	0.0015	0.0026	<0.002		<0.002	<0.002
12/23/2009	<0.002	0.0014	0.0037	<0.002		<0.002	<0.002
6/23/2010	<0.002	0.0018	0.0031	<0.002		<0.002	
6/24/2010							<0.002
1/8/2011	<0.002	0.0033	0.0035	<0.002		<0.002	
7/10/2011	<0.002	0.0028	0.0041	<0.002		0.0013	
7/11/2011							<0.002
1/19/2012			<0.002				
1/20/2012	<0.002	<0.002		<0.002		<0.002	<0.002
7/12/2012	<0.002	0.0025	0.0035	<0.002		<0.002	
7/13/2012							<0.002
1/21/2013	<0.002	0.0022	0.0037	<0.002		<0.002	0.0025
7/19/2013			0.0036				
7/20/2013	<0.002	0.0075		<0.002		<0.002	<0.002
1/17/2014	<0.002	0.0039	0.0037	<0.002		<0.002	<0.002
7/11/2014				<0.002		<0.002	
7/12/2014	<0.002	0.0031	0.0034				<0.002
1/15/2015		0.0026	0.0036				
1/16/2015	<0.002			<0.002		<0.002	<0.002
7/15/2015	<0.002	0.0032	0.0033	<0.002		<0.002	<0.002
1/16/2016	<0.002		0.0036			<0.002	<0.002
1/17/2016		0.0029		<0.002			
6/22/2016	0.0008 (J)	0.0036 (J)		<0.002	<0.002		
6/23/2016			0.0025 (J)			<0.002	<0.002
8/31/2016	<0.002	0.0027		<0.002			
9/1/2016			0.0031		<0.002	<0.002	0.0069 (o)
1/23/2017	<0.002						

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
1/24/2017		0.0034				<0.002	
1/25/2017				<0.002 (D)	<0.002 (D)		
1/27/2017							<0.002 (D)
2/2/2017			0.0034				
7/19/2017	<0.002	0.0028					
7/20/2017			0.0036	<0.002	<0.002	<0.002	<0.002
9/21/2017	<0.002	0.0035	0.0035	<0.002	<0.002	<0.002	
9/22/2017							0.0015 (J)
1/9/2018	<0.002	0.003	0.0035	<0.002	<0.002		
1/10/2018						<0.002	<0.002
3/28/2018	<0.002		0.0036	0.0019 (J)		<0.002	
3/29/2018		0.0032					<0.002
7/10/2018		0.0033	0.0035	0.0029			
7/11/2018	<0.002					<0.002	0.0011 (J)
10/9/2018	<0.002	0.0039	0.0037	<0.002		<0.002	<0.002
1/30/2019	0.0024 (J)		0.0047	<0.002			
1/31/2019		0.0061				<0.002	<0.002
3/28/2019	<0.002	0.0049	0.0037	<0.002		<0.002	0.0019 (J)
9/12/2019	<0.002	0.0048	0.0039	0.0028		0.0051	0.0022
3/11/2020	<0.002						<0.002
3/31/2020		0.005		<0.002	<0.002	<0.002	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
10/5/1999	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	0.013	
11/12/1999	<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	
2/17/2000	<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	
11/10/2000	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	0.017	
1/4/2001	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	0.054 (o)	
12/11/2001	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	0.014	
4/4/2002	<0.0025	<0.0025		<0.0025		<0.0025	<0.0025	<0.0025	
12/6/2002	<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	0.018 (o)	<0.0025	
12/13/2003	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	0.0076	
5/28/2004	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
12/10/2004	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	0.007	<0.0025	
6/24/2005	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	0.0072	<0.0025	
12/13/2005	<0.0025	<0.0025		<0.0025	<0.0025	<0.0025	0.0062	<0.0025	
7/12/2006	0.0032	<0.0025		<0.0025	<0.0025	<0.0025	0.0048	0.012	
12/1/2006	0.012	<0.0025		<0.0025		<0.0025	0.0032	<0.0025	
6/21/2007	<0.0025	<0.0025		0.0025		<0.0025	0.0037	0.0064	
12/15/2007	<0.0025	<0.0025		<0.0025		<0.0025	<0.0025	<0.0025	
6/21/2008						<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	
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		
12/22/2009							0.0025		
12/23/2009	<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	
6/24/2010	<0.0025	<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		<0.0025	
1/20/2012	<0.0025						<0.0025		
7/12/2012				<0.0025		<0.0025	0.002	<0.0025	
7/13/2012	0.0015	0.0018							
1/21/2013	0.0035	0.012 (o)		<0.0025		<0.0025	0.0014	<0.0025	
7/19/2013								<0.0025	
7/20/2013	<0.0025	0.0028		<0.0025	<0.0025	<0.0025	<0.0025		
1/16/2014								<0.0013 (J)	
1/17/2014	0.0027	<0.0025		<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	0.0019		
7/12/2014	<0.0013 (J)	<0.0013 (J)		<0.0013 (J)	<0.0013 (J)	<0.0013 (J)	0.0026	<0.0025	
1/15/2015				0.00086 (J)	0.0011 (J)	0.00084 (J)		<0.0025	
1/16/2015	<0.0025	<0.0025					0.0021		
7/15/2015	<0.0025	<0.0025		0.00087 (J)	0.00087 (J)	0.00083 (J)	0.0023	<0.0025	
1/16/2016	0.00059 (J)	0.00052 (J)		0.0011 (J)	0.0013	0.00092 (J)	0.002	<0.0025	
6/22/2016	0.00085 (JD)			0.0009 (J)		0.0005 (J)	0.0007 (J)	<0.0025	
6/23/2016		0.0012 (J)			<0.0025				
8/30/2016								<0.0025	
8/31/2016				0.00095 (J)	0.00061 (J)	0.00055 (J)	0.001 (J)		

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
9/1/2016	0.023 (o)	0.0017 (J)							
1/18/2017		0.0006 (J)							
1/19/2017				0.00087 (J)		0.00041 (J)	0.00046 (J)	<0.0025	
1/23/2017					<0.0025				
2/28/2017	0.00048 (J)	0.00063 (J)							
7/17/2017	<0.0025								
7/18/2017		0.00048 (J)		0.001 (J)	<0.0025	0.0007 (J)			
7/19/2017							0.00069 (J)	<0.0025	
9/20/2017	<0.0025	0.00044 (J)		0.0011 (J)	0.00041 (J)			0.00041 (J)	
9/21/2017						0.00073 (J)	0.00073 (J)		
1/8/2018	<0.0025	0.00044 (J)							
1/9/2018				0.0011 (J)	0.0007 (J)	0.0012 (J)	0.0014 (J)		
1/10/2018								<0.0025	
3/27/2018	<0.0025	0.0004 (J)		0.0011 (J)		0.00081 (J)	0.0019 (J)		
3/28/2018					0.00074 (J)			<0.0025	
7/10/2018	<0.0025	0.00044 (J)		0.0012 (J)	0.0012 (J)	0.00086 (J)	0.0015 (J)	0.00066 (J)	
10/8/2018	<0.0025	<0.0025	0.0051		<0.0025	<0.0025	<0.0025		0.0055
10/9/2018				<0.0025				<0.0025	
1/30/2019	0.00038 (J)	0.0005 (J)	0.0044	0.0014 (J)	0.0019 (J)	0.00092 (J)	0.00076 (J)	0.0012 (J)	0.0047
3/27/2019	<0.0025	<0.0025					0.0012 (J)		
3/28/2019			0.0046	0.0014 (J)	<0.0025	0.00089 (J)		<0.0025	0.0045
9/11/2019	0.00032 (J)	0.0004 (J)							
9/12/2019			0.0023	0.0015	0.0014	0.00091	0.00074	0.00048 (J)	0.0043
3/10/2020	0.00028 (J)	0.00044 (J)	0.003	0.0019		0.0009	0.00099		
3/11/2020					0.00038 (J)			0.00033 (J)	0.0056
4/2/2020				0.0017 (J)					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
10/5/1999	9 <0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
11/12/199	99 <0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
12/29/199	99 <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
9/13/2000	< 0.0025	0.01	<0.0025	<0.0025		<0.0025	<0.0025
11/10/200	00 <0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
1/4/2001	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
12/11/200	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
12/6/2002	< 0.0025	<0.0025	<0.0025	<0.0025		0.0074	<0.0025
6/28/2003	3 <0.0025	<0.0025	<0.0025	<0.0025		<0.0025	<0.0025
12/13/200	0.0025	<0.0025	<0.0025	<0.0025		0.0086	<0.0025
5/28/2004	< 0.0025	<0.0025	<0.0025	<0.0025		0.0065	<0.0025
12/10/200	<0.0025	0.0062	<0.0025	<0.0025		0.0052	<0.0025
6/24/2005	< 0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
12/13/200	05 <0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
7/12/2006	< 0.0025	<0.0025	<0.0025	<0.0025		0.0055	<0.0025
12/1/2006	< 0.0025	<0.0025	<0.0025	<0.0025		0.0056	<0.0025
6/21/2007	< 0.0025	<0.0025	<0.0025	<0.0025		0.0055	<0.0025
12/15/200	07 <0.0025	<0.0025	<0.0025	<0.0025		0.0051	<0.0025
6/21/2008	0.0048 (o)		<0.0025	0.0025		0.0054	
6/22/2008	3	<0.0025					<0.0025
12/6/2008	3 <0.0025	<0.0025	<0.0025	<0.0025			
12/7/2008	3					0.005	<0.0025
7/11/2009	<0.0025	<0.0025	<0.0025	<0.0025		0.0049	<0.0025
12/23/200	0.0025	<0.0025	<0.0025	<0.0025		0.0035	<0.0025
6/23/2010	<0.0025	<0.0025	<0.0025	<0.0025		0.0039	
6/24/2010)						<0.0025
1/8/2011	<0.0025	<0.0025	<0.0025	<0.0025		0.0046	
1/9/2011							<0.0025
7/10/201	<0.0025	<0.0025	<0.0025	<0.0025		0.0036	
7/11/201	I						<0.0025
1/19/2012	2		<0.0025				
1/20/2012		<0.0025		<0.0025		0.0042	<0.0025
7/12/2012		<0.0025	<0.0025	<0.0025		0.0037	
7/13/2012							<0.0025
1/21/2013		<0.0025	<0.0025	<0.0025		0.0038	<0.0025
7/19/2013			<0.0025				
7/20/2013		<0.0025		<0.0025		0.003	<0.0025
1/17/2014		<0.0025	<0.0025	<0.0025		0.0036	<0.0013 (J)
7/11/2014				<0.0025		0.0056	
7/12/2014		<0.0013 (J)	<0.0025				<0.0025
1/15/2019		0.00096 (J)	<0.0025	0.00074 (1)		0.0040	.0.005
1/16/2019		0.0000 (1)	0.00050 (1)	0.00071 (J)		0.0042	<0.0025
7/15/2019		0.0006 (J)	0.00052 (J)	0.00064 (J)		0.0052	<0.0025
1/16/2016		0.00000 (1)	<0.0025	0.00000 (1)		0.0056	0.00055 (J)
1/17/2016		0.00069 (J)		0.00066 (J)	<0.000E		
6/22/2016		0.0011 (J)	0.0005 (1)	0.0009 (J)	<0.0025	0.0072 (1)	0.0005 / 1)
6/23/2016		0.0006 (1)	0.0005 (J)	0.0006 (1)		0.0073 (J)	0.0005 (J)
8/31/2016 9/1/2016	6 <0.0025	0.0006 (J)	0.00052 (1)	0.0006 (J)	<0.000F	0.011	0.0014 / 1
1/23/2015	7 <0.0025		0.00052 (J)		<0.0025	0.011	0.0014 (J)
1/23/201	~U.UU25						

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
1/24/2017		0.00067 (J)				0.009	
1/25/2017				0.00047 (J)	0.00056 (J)		
1/27/2017							0.00052 (J)
2/2/2017			0.00054 (J)				
7/19/2017	<0.0025	0.00079 (J)					
7/20/2017			0.0005 (J)	<0.0025	<0.0025	0.0091	0.00062 (J)
9/21/2017	<0.0025	0.00077 (J)	0.00047 (J)	<0.0025	0.00046 (J)	0.0093	
9/22/2017							0.00048 (J)
1/9/2018	<0.0025	0.00092 (J)	0.00053 (J)	0.00048 (J)	<0.0025		
1/10/2018						0.0097	<0.0025
3/28/2018	<0.0025		0.0005 (J)	0.00048 (J)		0.01	
3/29/2018		0.0008 (J)					0.00052 (J)
7/10/2018		0.00097 (J)	0.00053 (J)	0.00084 (J)			
7/11/2018	<0.0025					0.011	0.00064 (J)
10/9/2018	<0.0025	<0.0025	<0.0025	<0.0025		0.012	<0.0025
1/30/2019	0.00023 (J)		0.00051 (J)	0.00038 (J)			
1/31/2019		0.00092 (J)				0.013	0.00076 (J)
3/28/2019	<0.0025	0.00072 (J)	0.00041 (J)	<0.0025		0.013	0.0007 (J)
9/12/2019	0.00027 (J)	0.0009	0.0005	0.00044 (J)		0.013	0.00077
3/11/2020	0.00026 (J)						0.00073
3/31/2020		0.00061 (J)		0.00033 (J)	0.00028 (J)	0.012	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
10/5/1999	<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	
12/29/1999	<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	
9/13/2000	<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	
1/4/2001	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	0.054 (o)	
12/11/2001	<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	
12/6/2002	<0.002	0.035 (o)		<0.002		<0.002	0.0089 (o)	0.012 (o)	
6/28/2003	<0.002	<0.002		<0.002	<0.002	<0.002	0.019 (o)	<0.002	
12/13/2003	<0.002	<0.002		<0.002	<0.002	<0.002	0.0067 (o)	0.01 (o)	
5/28/2004	0.0052	<0.002		<0.002	<0.002	<0.002	0.0057 (o)	<0.002	
12/10/2004	<0.002	<0.002		<0.002	<0.002	<0.002	0.0027	<0.002	
6/24/2005	<0.002	<0.002		<0.002	<0.002	<0.002	0.0038	<0.002	
12/13/2005	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	
7/12/2006	0.0055	<0.002		<0.002	<0.002	<0.002	0.0033	0.016 (o)	
12/1/2006	<0.002	0.0038		<0.002		<0.002	<0.002	<0.002	
6/21/2007	0.0032	<0.002		<0.002		<0.002	0.0035	<0.002	
12/15/2007	<0.002	<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			<0.002		
12/6/2008				<0.002		<0.002	<0.002	<0.002	
12/7/2008	<0.002	<0.002							
7/10/2009				<0.002				<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	<0.002		<0.002	
6/23/2010				<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	
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		<0.002	
1/20/2012	<0.002						<0.002		
7/12/2012				<0.002		<0.002	<0.002	<0.002	
7/13/2012	<0.002	<0.002							
1/21/2013	<0.002	0.013 (o)		<0.002		<0.002	<0.002	<0.002	
7/19/2013		(1)						<0.002	
7/20/2013	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002		
1/16/2014								<0.002	
1/17/2014	<0.005 (J)	<0.005 (J)		<0.002	<0.002	<0.002	<0.005 (J)		
7/12/2014	<0.005 (J)	<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	-	
7/15/2015	<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	
6/22/2016	0.002 (JD)			0.00205 (JD)		<0.002	0.001	<0.002	
6/23/2016	(02)	0.0016 (J)		,	0.0005 (J)				
1/18/2017		<0.002			(0)				
1/19/2017				<0.002		<0.002	<0.002	<0.002	
				0.002		0.002	0.002	0.002	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
1/23/2017					<0.002				
2/28/2017	<0.002								
7/17/2017	<0.002								
7/18/2017		<0.002		<0.002	<0.002	<0.002			
7/19/2017							<0.002	<0.002	
1/8/2018	<0.002	<0.002							
1/9/2018				<0.002	<0.002	0.0025	<0.002		
1/10/2018								<0.002	
7/10/2018	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	
1/30/2019	<0.002	0.0018 (J)	0.0035	<0.002	0.0015 (J)	<0.002	<0.002	0.0016 (J)	0.0018 (J)
3/27/2019	<0.002	<0.002					<0.002		
3/28/2019			0.0031	<0.002	<0.002	<0.002		<0.002	<0.002
9/11/2019	<0.002	0.0012 (J)							
9/12/2019			0.0038	0.0024	0.0032	0.0022	0.0011 (J)	0.0026	0.0041
3/10/2020	<0.002	<0.002	0.0021	0.00082 (J)		<0.002	0.0019 (J)		
3/11/2020					0.00067 (J)			<0.002	0.0032
4/2/2020				0.0019 (J)					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
10/5/1999	<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
12/29/1999	<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
9/13/2000	<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
1/4/2001	<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
4/4/2002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002
12/6/2002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002
6/28/2003	<0.002	<0.002	0.0026	<0.002		<0.002	<0.002
12/13/2003	<0.002	<0.002	<0.002	<0.002		0.0026	<0.002
5/28/2004	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002
12/10/2004	<0.002	0.11 (o)	<0.002	<0.002		<0.002	0.0044 (o)
6/24/2005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
12/13/2005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
7/12/2006	0.0047 (o)	<0.002	<0.002	<0.002		<0.002	<0.002
12/1/2006	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002
6/21/2007	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002
12/15/2007	<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
12/6/2008	<0.002	<0.002	<0.002	<0.002			
12/7/2008						<0.002	<0.002
7/11/2009	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002
12/23/2009	<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	
6/24/2010							<0.002
1/8/2011	<0.002	<0.002	<0.002	<0.002		<0.002	
1/9/2011							<0.002
7/10/2011	<0.002	<0.002	<0.002	<0.002		<0.002	
7/11/2011							<0.002
1/19/2012			<0.002				
1/20/2012	<0.002	<0.002		<0.002		<0.002	<0.002
7/12/2012	<0.002	<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	<0.002
7/19/2013			<0.002				
7/20/2013	<0.002	<0.002		<0.002		<0.002	<0.002
1/17/2014	<0.002	0.0065 (o)	<0.002	<0.002		<0.002	<0.002
7/11/2014	-0.000	10.000	-0.000	<0.002		<0.002	-0.000
7/12/2014	<0.002	<0.002	<0.002				<0.002
1/15/2015	-0.002	<0.002	<0.002	<0.000		-0.002	<0.000
1/16/2015	<0.002	<0.002	<0.000	<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 <0.002
1/16/2016	<0.002	<0.002	\0.002	<0.002		\0.002	<0.00Z
1/17/2016	<0.002	<0.002 0.0005 (J)		<0.002	<0.002		
6/22/2016 6/23/2016	<0.002	0.0005 (J)	<0.002	<0.002	~U.UUZ	0.0007 (J)	<0.002
1/23/2017	<0.002		~U.UUZ			0.0007 (3)	~U.UUZ
1/23/2017	~0.002	<0.002				<0.002	
1/24/2017		-U.UUZ		<0.002	<0.002	-0.002	
1/23/2017				~U.UUZ	~U.UUZ		

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
1/27/2017							<0.002
2/2/2017			<0.002				
7/19/2017	<0.002	<0.002					
7/20/2017			<0.002	<0.002	<0.002	<0.002	<0.002
1/9/2018	<0.002	<0.002	<0.002	<0.002	<0.002		
1/10/2018						<0.002	<0.002
7/10/2018		<0.002	<0.002	<0.002			
7/11/2018	<0.002					<0.002	<0.002
1/30/2019	<0.002		<0.002	<0.002			
1/31/2019		<0.002				<0.002	<0.002
3/28/2019	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002
9/12/2019	0.0024	0.002	0.0015 (J)	<0.002		0.00084 (J)	0.003
3/11/2020	<0.002						<0.002
3/31/2020		<0.002		<0.002	<0.002	<0.002	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
8/30/2016								<0.1	
8/31/2016				<0.1	<0.1	<0.1	0.13 (J)		
9/1/2016	<0.1	<0.1							
1/18/2017		<0.1							
1/19/2017				<0.1		0.089 (J)	<0.1	<0.1	
1/23/2017					<0.1				
2/28/2017	0.098 (J)	0.098 (J)							
7/17/2017	<0.1								
7/18/2017		<0.1		<0.1	<0.1	<0.1			
7/19/2017							<0.1	<0.1	
9/20/2017	<0.1	<0.1		<0.1	0.086 (J)			<0.1	
9/21/2017						<0.1	0.13 (J)		
1/8/2018	<0.1	<0.1							
1/9/2018				<0.1	<0.1	<0.1	0.13 (J)		
1/10/2018								<0.1	
3/27/2018	<0.1	<0.1		<0.1		<0.1	0.21		
3/28/2018					<0.1			<0.1	
7/10/2018	<0.1	<0.1		<0.1	<0.1	<0.1	0.17 (J)	<0.1	
10/8/2018	<0.1	<0.1	<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	<0.1	0.052 (J)	0.029 (J)	0.089 (J)	<0.1	<0.1
3/27/2019	<0.1	<0.1					0.1 (J)		
3/28/2019			<0.1	<0.1	0.038 (J)	<0.1		<0.1	<0.1
9/11/2019	<0.1	<0.1							
9/12/2019			0.036 (J)	<0.1	0.05 (J)	0.035 (J)	0.052 (J)	0.026 (J)	<0.1
3/10/2020	<0.1	<0.1	<0.1	0.026 (J)		0.066 (J)	0.051 (J)		
3/11/2020					0.037 (J)			<0.1	<0.1
4/2/2020				0.051 (J)					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
8/31/2016	<0.1	<0.1		<0.1			
9/1/2016			<0.1		<0.1	<0.1	
1/23/2017	<0.1						
1/24/2017		<0.1				0.84	
1/25/2017				<0.1	<0.1		
1/27/2017							<0.1
2/2/2017			<0.1				
7/19/2017	<0.1	<0.1					
7/20/2017			<0.1	<0.1	<0.1	0.62	<0.1
9/21/2017	<0.1	<0.1	<0.1	<0.1	<0.1	0.71	
9/22/2017							<0.1
1/9/2018	<0.1	<0.1	<0.1	<0.1	<0.1		
1/10/2018						0.81	<0.1
3/28/2018	<0.1		<0.1	<0.1		0.45	
3/29/2018		<0.1					<0.1
7/10/2018		<0.1	<0.1	<0.1			
7/11/2018	<0.1					0.37	<0.1
10/9/2018	<0.1	<0.1	<0.1	<0.1		0.098 (J)	<0.1
1/30/2019	<0.1		<0.1	<0.1			
1/31/2019		<0.1				0.063 (J)	<0.1
3/28/2019	<0.1	<0.1	<0.1	<0.1		0.027 (J)	<0.1
9/12/2019	<0.1	<0.1	<0.1	<0.1		0.078 (J)	<0.1
3/11/2020	<0.1						<0.1
3/31/2020		0.043 (J)		0.028 (J)	<0.1	0.16	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
10/5/1999	0.007 (o)	<0.001		<0.001	<0.001	<0.001	<0.001	0.024	
11/12/1999	0.0063 (o)	<0.001		<0.001	<0.001	<0.001	<0.001	0.012	
12/29/1999	0.016 (o)	<0.001		<0.001	<0.001	<0.001	<0.001	0.012	
2/17/2000	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	
9/13/2000	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	0.044	
11/10/2000	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	0.024	
1/4/2001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	0.094 (o)	
12/11/2001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	0.024	
4/4/2002	<0.001	<0.001		<0.001		<0.001	<0.001	<0.001	
12/6/2002	<0.001	<0.001		<0.001		<0.001	0.011 (o)	0.023	
6/28/2003	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	0.0091	
12/13/2003	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	0.024	
5/28/2004	0.015 (o)	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	
12/10/2004	0.01 (o)	<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	
12/13/2005	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	
7/12/2006	0.013 (o)	<0.001		<0.001	<0.001	<0.001	<0.001	0.028	
12/1/2006	<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	
12/15/2007	<0.001	<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			<0.001		
12/6/2008				<0.001		<0.001	<0.001	<0.001	
12/7/2008	<0.001	<0.001							
7/10/2009				<0.001				<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	<0.001		<0.001	
6/23/2010				<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	
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		<0.001	
1/20/2012	<0.001						<0.001		
7/12/2012				<0.001		<0.001	<0.001	<0.001	
7/13/2012	<0.001	<0.001							
1/21/2013	<0.001	0.021 (o)		<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		
1/16/2014								<0.001	
1/17/2014	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001		
7/12/2014	<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		
7/15/2015	<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	
6/22/2016	0.00125 (JD)			0.00025 (JD)		0.0003 (J)	0.001 (J)	0.0002 (J)	
6/23/2016		0.0025 (J)			0.0015 (J)				
8/30/2016								<0.001	
8/31/2016				<0.001	0.0016	<0.001	0.00099 (J)		

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
9/1/2016	0.082 (o)	0.0028							
1/18/2017		<0.001							
1/19/2017				<0.001		<0.001	0.001 (J)	<0.001	
1/23/2017					0.00055 (J)				
2/28/2017	<0.001	<0.001							
7/17/2017	<0.001								
7/18/2017		<0.001		<0.001	0.0008 (J)	<0.001			
7/19/2017							0.00081 (J)	<0.001	
9/20/2017	0.00035 (J)	0.0058		<0.001	0.0016			0.00054 (J)	
9/21/2017						0.0076 (o)	0.00086 (J)		
1/8/2018	<0.001	<0.001							
1/9/2018				<0.001	0.00041 (J)	0.0023	0.00059 (J)		
1/10/2018								<0.001	
3/27/2018	<0.001	<0.001		<0.001		<0.001	<0.001		
3/28/2018					0.00036 (J)			<0.001	
7/10/2018	<0.001	<0.001		<0.001	0.00053 (J)	<0.001	0.00045 (J)	0.0013	
10/8/2018	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001		<0.001
10/9/2018				<0.001				<0.001	
1/30/2019	0.00021 (J)	<0.001	0.00028 (J)	0.00034 (J)	0.001	0.00013 (J)	0.00064 (J)	0.0021	<0.001
3/27/2019	<0.001	<0.001					0.0012 (J)		
3/28/2019			<0.001	0.00038 (J)	0.00052 (J)	<0.001		<0.001	<0.001
9/11/2019	<0.001	0.00019 (J)							
9/12/2019			<0.001	<0.001	0.00069 (J)	<0.001	0.00082 (J)	0.00036 (J)	<0.001
3/10/2020	0.00015 (J)	<0.001	<0.001	0.00013 (J)		0.00031 (J)	0.0022		
3/11/2020					0.0011			0.00015 (J)	<0.001
4/2/2020				0.00062 (J)					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
10/5/1999	<0.001	0.0054 (o)	0.0074 (o)	<0.001	<0.001	<0.001	<0.001
11/12/1999	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/29/1999	<0.001	<0.001	0.0083 (o)	<0.001		<0.001	<0.001
2/17/2000	<0.001	<0.001	0.007 (o)	<0.001	<0.001	<0.001	<0.001
9/13/2000	<0.001	<0.001	<0.001	0.0067 (o)		<0.001	0.079 (o)
11/10/2000	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
1/4/2001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
12/11/2001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
4/4/2002	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
12/6/2002	<0.001	<0.001	<0.001	<0.001		0.007 (o)	<0.001
6/28/2003	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
12/13/2003	<0.001	<0.001	<0.001	<0.001		0.018 (o)	<0.001
5/28/2004	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
12/10/2004	<0.001	<0.001	<0.001	<0.001		<0.001	0.0073
6/24/2005	<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
7/12/2006	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
12/1/2006	<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
12/15/2007	<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
12/6/2008	<0.001	<0.001	<0.001	<0.001			
12/7/2008						<0.001	<0.001
7/11/2009	<0.001	<0.001	0.013 (o)	<0.001		<0.001	<0.001
12/23/2009	<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	
6/24/2010							<0.001
1/8/2011	<0.001	<0.001	<0.001	<0.001		<0.001	
7/10/2011	<0.001	<0.001	<0.001	<0.001		<0.001	
7/11/2011							<0.001
1/19/2012			<0.001				
1/20/2012	<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
7/13/2012	<0.001	-0.001	-0.001	<0.001		<0.001	<0.001
1/21/2013	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
7/19/2013 7/20/2013	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
1/17/2014	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
7/11/2014	\0.001	~0.001	\0.001	<0.001		<0.001	~0.001
7/11/2014	<0.001	<0.001	<0.001	\0.001		~0.001	<0.001
1/15/2015	10.001	<0.001	<0.001				١٥.٥٥١
1/16/2015	<0.001	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
1/16/2016	<0.001	0.001	<0.001	0.001		<0.001	<0.001
1/17/2016	9- -	<0.001	y	<0.001			
6/22/2016	<0.001	0.0001 (J)		<0.001	0.0002 (J)		
6/23/2016		\-/-/	9E-05 (J)		\-/	0.0001 (J)	<0.001
8/31/2016	<0.001	<0.001	. ,	<0.001		` '	-
9/1/2016			<0.001		<0.001	<0.001	0.006
1/23/2017	<0.001						
1/24/2017		<0.001				<0.001	

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
1/25/2017				<0.001 (D)	0.00071 (JD)		
1/27/2017							<0.001 (D)
2/2/2017			<0.001				
7/19/2017	<0.001	<0.001					
7/20/2017			<0.001	<0.001	<0.001	<0.001	<0.001
9/21/2017	0.004 (o)	0.0014 (o)	0.00052 (J)	<0.001	0.0007 (J)	<0.001	
9/22/2017							0.00042 (J)
1/9/2018	<0.001	<0.001	<0.001	<0.001	<0.001		
1/10/2018						<0.001	<0.001
3/28/2018	<0.001		<0.001	<0.001		<0.001	
3/29/2018		<0.001					<0.001
7/10/2018		<0.001	<0.001	<0.001			
7/11/2018	<0.001					<0.001	0.00037 (J)
10/9/2018	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
1/30/2019	<0.001		<0.001	<0.001			
1/31/2019		<0.001				<0.001	<0.001
3/28/2019	<0.001	<0.001	<0.001	<0.001		<0.001	0.00052 (J)
9/12/2019	<0.001	<0.001	<0.001	<0.001		0.00024 (J)	0.00065 (J)
3/11/2020	<0.001						<0.001
3/31/2020		<0.001		<0.001	0.00018 (J)	<0.001	

1001-1999		GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
1920 1930 523 509	10/5/1999	6.63	5.83		6.42	5.62	6.51	6.3	6.71	
1712/2000	11/12/1999	5.51	5.81		5.03	4.78	5.46	4.72	5.6	
P1120200	12/29/1999	5.23	5.09		4.92	4.53	5.13	4.8	5.24	
114700700	2/17/2000	5.29	5.47		5.13	4.68	5.22	4.78	5.33	
1/10/2011 3.4	9/13/2000	5.41	5.26		4.85	5.33	4.86	4.58	6.04	
12112011	11/10/2000	5.47	5.11		5.05	4.63	5.29	4.5	4.98	
4442002	1/4/2001	5.44	5.37		5.08	5.39	5.53	4.61	6.21	
12662002	12/11/2001	4.86	5.06		4.81	4.71	5.37	4.87	4.63	
0.0282003	4/4/2002	5.1	5.15		4.92		5.32	4.96	4.74	
12113/2003	12/6/2002	4.917 (D)	5.32 (D)		5.07 (D)		5.3 (D)	4.4 (D)	5.13 (D)	
	6/28/2003	4.91	5.56		4.69	4.4	4.73	3.77	4.92	
12/10/2004	12/13/2003	4.87	5.48		4.81	4.46	4.53	4.25	5.11	
624/2005	5/28/2004	4.98	5.07		3.93	3.74	4.22	3.9	4.42	
12/13/2005	12/10/2004	4.35	5.2		4.25	4.01	4.26	3.71	4.44	
7/1/22006 5.49 6.94 3.59 4.97 3.68 5.56 4.76 1/11/2014 5.55 5.66 1.71/2014 5.55 5.66 1.71/2014 5.43 3.88 5.63 1.81 1.91 5.49 5.08 4.94 4.19 5.2 1.11/2016 5.06 5.81 4.87 4.71 4.85 4.35 5.09 1.71/2017 5.22 1.71/2017 5.22 1.71/2017 4.79 4.53 5.09 1.71/2017 1.71/2017 5.37 1.71/2017 4.72 4.79 4.53 5.28 1.71/2017 5.28 1.71/2017 5.33 5.44 4.72 4.79 5.28 1.71/2017 5.09 5.54 5.02 5.32 4.96 1.72/2017 5.09 5.44 1.72/2017 5.09 5.54 4.72 5.09 5.44 1.72/2017 5.09 5.41 1.72/2017 5.09 5.25 4.72 5.09 4.87 4.83 5.41 1.72/2017 5.29 5.25 4.72 5.09 4.72 4.57 4.57 4.57 4.72 5.01 4.91 4.4 4.	6/24/2005	4.82	5.35		4.5	4.67	4.47	3.94	4.71	
	12/13/2005	4.66	4.67		4.52	4.68	4.47	3.94	4.63	
7/1/2/2014 5.43 5.44 5.46 5.33 3.88 5.63 5.63 7/15/2015 5.13 5.43 4.98 5.08 4.94 4.19 5.2 1.716/2016 5.06 5.81 4.98 5.08 4.94 4.19 5.2 1.716/2016 5.06 5.81 4.86 4.71 4.85 4.53 5.02 5.22 1.716/2017 5.22 5.37 4.86 4.72 4.79 4.53 5.28 4.711/19/2017 5.28 4.86 4.72 4.79 4.79 5.28 4.711/19/2017 5.28 4.86 4.72 4.72 4.79 5.28 4.711/19/2017 5.33 5.44 4.72 4.72 4.79 5.28 4.711/19/2017 5.99 5.54 5.02 5.32 4.96 4.72 4.	7/12/2006	5.49	6.94		3.59	4.97	3.68	5.56	4.76	
7/15/2015 5.13 5.43 4.98 5.08 4.94 4.19 5.2 1/16/2016 5.06 5.81 4.87 4.71 4.85 4.35 5.09 8/30/2016 5.2 5.21 4.92 4.79 4.53 5.22 1/18/2017 5.37 4.86 4.72 4.79 5.28 4.79 1/12/2017 5.33 5.44 5.46 4.72 4.79 5.28 4.72 5.28 7/17/2017 5.09 5.54 5.02 5.32 4.96 4.83 5.41 4.72 4.72 4.83 5.41 4.72 4.72 4.83 5.41 4.72 4.72 4.83 5.41 4.72 4.72 4.83 5.41 4.72 4.83 5.41 4.72 4.83 5.41 4.72 4.83 5.41 4.72 4.83 5.41 4.72 4.83 4.94 4.57 4.57 4.83 5.41 4.83 4.97 4.91 4.4 4.72 5.13 4.83 4.94 4.62 5.23 5.79 5.79 5.79	7/11/2014	5.55	5.66							
1/16/2016 5.06 5.81	7/12/2014				5.44	5.46	5.33	3.88	5.63	
8/30/2016	7/15/2015	5.13	5.43		4.98	5.08	4.94	4.19	5.2	
	1/16/2016	5.06	5.81		4.87	4.71	4.85	4.35	5.09	
1/18/2017	8/30/2016					5.415 (D)			5.22	
1/19/2017					4.92		4.79	4.53		
1/23/2017 5.33 5.44 5.09 5.54 5.02 5.32 4.96 5.09 5.			5.37							
2/28/2017 5.33 5.44 7/17/2017 5.09 7/18/2017 5.54 5.02 5.32 4.96 7/19/2017 5.29 5.25 4.72 5.09 9/21/2017 5.29 5.25 4.72 5.09 9/21/2017 5.26 4.72 5.09 1/8/2018 5.26 4.92 4.7 4.57 1/9/2018 5.27 5.32 4.91 4.4 4.4 3/27/2018 5.27 5.32 4.91 4.8 4.92 4.11 3/28/2018 5.17 5.44 4.87 4.8 4.94 4.62 5.23 1/9/2018 5.18 5.45 5.29 4.84 5.1 4.76 4.51 5.25 5.79 3/28/2019 5.17 5.42 5.08 4.88 5.13 4.94 4.62 5.23 5.79 3/28/2019 5.09 5.43							4.72	4.79	5.28	
7/17/2017 5.09 7/18/2017 5.54 5.02 5.32 4.96 7/19/2017 5.29 5.25 4.72 5.09 4.7 4.57 9/20/2017 5.29 5.25 4.72 5.09 4.7 4.57 1/8/2018 5.26 4.92 4.91 4.4 4.4 3/27/2018 5.27 5.32 4.91 4.92 4.11 3/28/2018 5.17 5.44 4.87 4.8 4.94 4.62 5.23 1/9/2018 5.17 5.44 4.87 4.8 4.94 4.62 5.23 3/10/2018 5.17 5.44 4.87 4.8 4.94 4.62 5.23 1/9/2018 5.18 5.45 5.29 4.84 5.1 4.76 4.51 5.25 5.79 1/9/2018 5.17 5.42 5.08 4.88 5.13 4.94 4.62 5.23 5.79 1/9/2019 5.09 5.43 5.29 4.84 5.13 4.94 4.72 4.96 5.15 5.62						5.46				
7/18/2017 5.54 5.02 5.32 4.96 7/19/2017 5.29 5.25 4.72 5.09			5.44							
7/19/2017 5.29 5.25 4.72 5.09 9/21/2017		5.09								
9/20/2017 5.29 5.25 4.72 5.09 9/21/2017			5.54		5.02	5.32	4.96			
9/21/2017 4.7 4.57 4.57 4.67 4.51 5.25 5.79 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.15 5.62 9.71 4.93 4.88 5.13 4.94 4.72 4.96 5.15 5.62 9.71 5.62 9.71 5.62 9.71 5.62 9.71 5.62 9.71 9.71 9.72 9.72 9.72 9.72 9.72 9.72 9.72								4.83	5.41	
1/8/2018 5.26 4.92 1/9/2018 5.27 5.32 4.91 4.4 3/27/2018 5.27 5.32 4.91 4.92 4.11 3/28/2018 5.17 5.44 4.87 4.8 4.94 4.62 5.23 1/0/2018 5.18 5.45 5.29 4.84 5.1 4.76 4.51 5.25 5.79 1/30/2019 5.17 5.42 5.08 4.88 5.13 4.94 4.72 4.96 5.15 3/27/2019 5.09 5.43 4.8 5.22 4.99 5.15 5.62 9/11/2019 5.1 5.25 5.57 4.99 5 4.92 4.54 5.12 5.1 3/10/2020 5.48 5.39 5.56 4.79 4.59 4.59 4.81 3/11/2020 5.27 5.05 5.05 5.05 5.05 5.05 5.05 5.05		5.29	5.25		4.72	5.09				
1/9/2018 5.27 5.32 4.91 4.92 4.11 3/28/2018 5.17 5.44 4.87 4.8 4.94 4.62 5.23 7/10/2018 5.18 5.45 5.29 4.84 5.1 4.76 4.51 5.25 5.79 1/30/2019 5.17 5.42 5.08 4.88 5.13 4.94 4.72 4.96 5.15 3/27/2019 5.09 5.43 4.8 5.22 4.99 4.56 5.15 5.62 9/11/2019 5.1 5.25 5.77 4.99 5 4.92 4.54 5.12 5.1 3/10/2020 5.48 5.39 5.56 4.79 4.59 4.59 4.81 3/11/2020 5.27 5.05 5.38 5.38 5.22 4.92 4.54 5.12 5.1							4.7	4.57		
3/27/2018 5.27 5.32 4.91 4.92 4.11 3/28/2018 5.17 5.44 4.87 4.8 4.94 4.62 5.23 1/08/2018 5.18 5.45 5.29 4.84 5.1 4.76 4.51 5.25 5.79 1/30/2019 5.17 5.42 5.08 4.88 5.13 4.94 4.72 4.96 5.15 3/27/2019 5.09 5.43		5.26								
3/28/2018 4.8 5.13 7/10/2018 5.17 5.44 4.87 4.8 4.94 4.62 5.23 10/8/2018 5.18 5.45 5.29 4.84 5.1 4.76 4.51 5.25 5.79 1/30/2019 5.17 5.42 5.08 4.88 5.13 4.94 4.72 4.96 5.15 3/27/2019 5.09 5.43						4.97				
7/10/2018 5.17 5.44 4.87 4.8 4.94 4.62 5.23 10/8/2018 5.18 5.45 5.29 4.84 5.1 4.76 4.51 5.25 5.79 1/30/2019 5.17 5.42 5.08 4.88 5.13 4.94 4.72 4.96 5.15 3/27/2019 5.09 5.43		5.27	5.32				4.92			
10/8/2018 5.18 5.45 5.29 4.84 5.1 4.76 4.51 5.25 5.79 1/30/2019 5.17 5.42 5.08 4.88 5.13 4.94 4.72 4.96 5.15 3/27/2019 5.09 5.43										
1/30/2019 5.17 5.42 5.08 4.88 5.13 4.94 4.72 4.96 5.15 3/27/2019 5.09 5.43 4.8 5.22 4.99 5.15 5.15 5.62 9/11/2019 5.1 5.25 5.25 5.27 5.12 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.2 5.1 5.2 5.1 5										
3/27/2019 5.09 5.43 3/28/2019 4.93 4.8 5.22 4.99 5.15 5.62 9/11/2019 5.1 5.25 9/12/2019 5.57 4.99 5 4.92 4.54 5.12 5.1 3/10/2020 5.48 5.39 5.56 4.79 4.59 4.81 3/11/2020 5.27 5.05										
3/28/2019 4.93 4.8 5.22 4.99 5.15 5.62 9/11/2019 5.1 5.25 9/12/2019 5.57 4.99 5 4.92 4.54 5.12 5.1 3/10/2020 5.48 5.39 5.56 4.79 4.59 4.81 3/11/2020 5.27 5.05				5.08	4.88	5.13			4.96	5.15
9/11/2019 5.1 5.25 9/12/2019 5.57 4.99 5 4.92 4.54 5.12 5.1 3/10/2020 5.48 5.39 5.56 4.79 4.59 4.81 3/11/2020 5.38 5.27 5.05		5.09		4.00	4.0	F 00			E 45	F 60
9/12/2019 5.57 4.99 5 4.92 4.54 5.12 5.1 3/10/2020 5.48 5.39 5.56 4.79 4.59 4.81 3/11/2020 5.38 5.27 5.05		E 4		4.93	4.8	5.22	4.99		5.15	5.02
3/10/2020 5.48 5.39 5.56 4.79 4.59 4.81 3/11/2020 5.38 5.27 5.05		D. I	5.25	E	4.00	E	4.02	4.54	E 10	E 1
3/11/2020 5.38 5.27 5.05		E 40	F 20			5			5.12	5.1
		5.48	5.39	5.50		E 20	4.09		E 27	E OE
41/2						J.J0			J.Z/	J.U5
	41212020				4./0					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
10/5/1999	5.23	6.08	6.02	5.33	6.25	6.13	5.84
11/12/1999	5.02	5.35	5.27	4.6	4.79	5.81	5.34
12/29/1999	4.75	5.19	5.18	4.8		5.43	5.01
2/17/2000	4.99	5.18	5.61	4.98	4.78	5.49	5.04
9/13/2000	4.81	5.13	5.31	4.75		5.05	5.29
11/10/2000	4.79	5.2	5.58	4.65		5.48	5.99
1/4/2001	4.79	5.14	5.37	4.83		4.99	5.31
12/11/2001	4.86	4.93	5.18	4.73		5.52	5.18
4/4/2002	5.39	5	5.07	5.05		5.5	5.31
12/6/2002	4.63	5.02	4.95	4.65 (D)		4.58 (D)	4.9 (D)
6/28/2003	4.19	4.92	4.84	4		4.32	4.82
12/13/2003	5.2	4.82	4.81	4.97		4.73	4.8
5/28/2004	4.57	4.6	4.96	4.51		4.5	5.18
12/10/2004	4.16	4.29	4.63	4.09		4.28	4.43
2/5/2005		4.43					4.6
6/24/2005	4.23	4.56	4.68	4.27	4.48	4.56	4.93
12/13/2005	4.24	4.34	4.47	4.54	4.05	4.49	4.36
7/12/2006	4.36	4.38	6.91	4.57		4.8	5.5
7/11/2014				4.64		4.83	5.54
7/12/2014	3.23	5.68	4.83				
7/15/2015	4.85	5.22	5.12	4.67		4.66	5.22
1/16/2016			5.58			5.05	4.9
1/17/2016		6.07					
8/31/2016	5.02	5.49		4.89			
9/1/2016			5.17			7.21	5
1/23/2017	5.22						
1/24/2017		5.25				8.32	
1/25/2017				4.73	4.5		
7/19/2017	5.23	5.54					5.27
7/20/2017			5.12	4.96	4.77	7.41	
9/21/2017	5.34	5.19	5.04	4.78	4.78	6.94	4.99
1/9/2018	5	4.97	5.13	4.79	4.65	7.39	5.25
3/28/2018	5.08		5.16	4.44		7.31	5.14
3/29/2018		5.15					
7/10/2018		5.37	5.17	4.88			5.13
7/11/2018	5.07					7.09	
10/9/2018	5.1	5.04	5.23	4.85		6.68	4.93
1/29/2019				4.7			
1/30/2019	4.81		4.91	4.52			4.52
1/31/2019		5.38				5.69	4.52
3/28/2019	4.99	5.38	5.08	4.68		5.46	4.85
9/12/2019	4.95	5.14	5.31	4.89		5.96	4.96
3/11/2020	5.21						5.23
3/31/2020		5.64		4.66	4.63	6.17	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
8/30/2016						_		<1	
8/31/2016				<1	6.3	7	21		
9/1/2016	<1	<1							
1/18/2017		<1							
1/19/2017				<1		6.3	11	<1	
1/23/2017					9.7				
2/28/2017	2.7	1.7							
7/17/2017	<1								
7/18/2017		<1		<1	7.1	4.7			
7/19/2017							12	<1	
9/20/2017	<1	<1		<1	8.8			<1	
9/21/2017						4.5	15		
1/8/2018	<1	<1							
1/9/2018				<1	9.8	3	25		
1/10/2018								<1	
3/27/2018	<1	<1		<1		3.8	31		
3/28/2018					11			<1	
7/10/2018	<1	<1		<1	3	3.4	19	<1	
10/8/2018	<1	<1	73		1.9	3.4	17		75
10/9/2018				<1				<1	
1/30/2019	1.2	<1	74	0.41 (J)	7.2	3.5	15	<1	85
3/27/2019	<1	<1					20		
3/28/2019			71	0.44 (J)	7.9	3		<1	85
9/11/2019	<1	<1							
9/12/2019			59	0.69 (J)	1.5	3.7	10	0.5 (J)	81
3/10/2020	1.5	2.3	57	3		7.2	15		
3/11/2020					7.3			0.97 (J)	110
4/2/2020				<1					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
8/31/2016	<1	<1		1.7			
9/1/2016			<1		0.78 (J)	110	
1/23/2017	<1						
1/24/2017		<1				67	
1/25/2017				1.8	11		
1/27/2017							1.2
2/2/2017			<1				
7/19/2017	<1	<1					
7/20/2017			<1	0.83 (J)	1.5	25	0.84 (J)
9/21/2017	<1	<1	<1	1.1	4.3	19	
9/22/2017							1.1
1/9/2018	<1	<1	<1	0.79 (J)	0.81 (J)		
1/10/2018						25	0.95 (J)
3/28/2018	<1		<1	0.79 (J)		26	
3/29/2018		<1					0.78 (J)
7/10/2018		<1	<1	0.76 (J)			
7/11/2018	<1					26	0.78 (J)
10/9/2018	<1	<1	<1	<1		10	0.79 (J)
1/30/2019	0.58 (J)		<1	0.9 (J)			
1/31/2019		0.57 (J)				4.8	0.86 (J)
3/28/2019	0.67 (J)	<1	<1	1.1		3	0.96 (J)
9/12/2019	0.78 (J)	0.43 (J)	0.49 (J)	1.1		4.9	1
3/11/2020	3.5						2.2
3/31/2020		1		2.5	1.9	11	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
8/30/2016								74 (D)	
8/31/2016				42 (D)	60 (D)	14 (D)	66 (D)		
9/1/2016	2200 (o)	180							
1/18/2017		74 (D)							
1/19/2017				52 (D)		34 (D)	48 (D)	86 (D)	
1/23/2017					48 (D)				
2/28/2017	74 (D)	84 (D)							
7/17/2017	50								
7/18/2017		62		32	36	26			
7/19/2017							48	68	
9/20/2017	26	44		16	56			70	
9/21/2017						24	76		
1/8/2018	16	24							
1/9/2018				4 (J)	12	16	18		
1/10/2018								64	
3/27/2018	40	36		30		<10	48		
3/28/2018					34			36	
7/10/2018	90	58		30	58	14	76	88	
10/8/2018	70	80	170		30	36	8		180
10/9/2018				56				72	
1/30/2019	82	68	140	41	53	40	67	130	180
3/27/2019	66	75					70		
3/28/2019			150	36	55	24		56	170
9/11/2019	53	74							
9/12/2019			89	<10	34	10	20	14	140
3/10/2020	67	68	130	49		39	67		
3/11/2020					43			76	180
4/2/2020				61					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
8/31/2016	18 (D)	42 (D)		36 (D)			
9/1/2016			44 (D)		56 (D)	500 (D)	
1/23/2017	22 (D)						
1/24/2017		28 (D)				160 (D)	
1/25/2017				58 (D)	100 (D)		
1/27/2017							58 (D)
2/2/2017			54 (D)				
7/19/2017	52	42					
7/20/2017			64	16	60	210	64
9/21/2017	38	46	96	24	160	280	
9/22/2017							66
1/9/2018	4 (J)	10	18	8	<10		
1/10/2018						94	54
3/28/2018	4 (J)		54	26		60	
3/29/2018		52					78
7/10/2018		38	56	26			
7/11/2018	32					290	78
10/9/2018	22	52	30	16		44	70
1/30/2019	24		33	37			
1/31/2019		45				180	84
3/28/2019	25	45	44	28		110	62
9/12/2019	29	28	73	<10		110	80
3/11/2020	37						67
3/31/2020		50		52	85	750	

	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
10/5/1999	0.02	0.019		<0.001	<0.001	<0.001	<0.001	0.087	
11/12/1999	0.027	0.023		<0.001	<0.001	<0.001	<0.001	0.05	
12/29/1999	0.055	0.012		<0.001	<0.001	<0.001	<0.001	0.045	
2/17/2000	0.042	0.014		<0.001	<0.001	<0.001	<0.001		
9/13/2000	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	0.028	
11/10/2000	0.014	<0.001		<0.001	<0.001	<0.001	<0.001	0.11	
1/4/2001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	0.32 (o)	
12/11/2001	<0.001	<0.001		<0.001	0.011 (o)	<0.001	<0.001	0.091	
4/4/2002	<0.001	<0.001		<0.001		<0.001	<0.001	0.012	
12/6/2002	<0.001			<0.001		<0.001	0.03 (o)	0.07	
6/28/2003	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	0.016	
12/13/2003	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	0.046	
5/28/2004	0.017	<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	
6/24/2005	<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	
7/12/2006	0.023	0.0071		<0.001	0.0061	<0.001	<0.001	0.071 (o)	
12/1/2006	0.0081	0.0075		<0.001		<0.001	<0.001	<0.001	
6/21/2007	0.009	<0.001		0.0038		<0.001	0.07 (o)	<0.001	
12/15/2007	0.0056	0.0027		<0.001		<0.001	<0.001	<0.001	
6/21/2008						<0.001		0.0026	
6/22/2008	0.013	<0.001		<0.001			0.0026		
12/6/2008				<0.001		<0.001	<0.001	<0.001	
12/7/2008	0.0027	<0.001							
7/10/2009				<0.001				<0.001	
7/11/2009	0.0032	0.0049				<0.001	<0.001		
12/22/2009							<0.001		
12/23/2009	0.0093	<0.001		<0.001	0.0064	<0.001		<0.001	
6/23/2010				<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	
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		<0.001	
1/20/2012	<0.001						<0.001		
7/12/2012				<0.001		<0.001	<0.001	<0.001	
7/13/2012	0.011	0.012							
1/21/2013	0.028	0.092 (o)		<0.001		<0.001	<0.001	<0.001	
7/19/2013								<0.001	
7/20/2013	<0.001	0.019		<0.001	<0.001	<0.001	<0.001		
1/16/2014								<0.001	
1/17/2014	0.019	0.0062		<0.001	<0.001	<0.001	<0.001		
7/12/2014	<0.005 (J)	<0.005 (J)		<0.001	<0.005 (J)	<0.001	<0.001	<0.001	
1/15/2015				<0.001	0.0016	<0.001		0.002 (J)	
1/16/2015	0.0012 (J)	0.0017 (J)					0.0011 (J)		
7/15/2015	<0.001	0.0019 (J)		<0.001	0.0028 (J)	<0.001	0.0016 (J)	0.0015 (J)	
1/16/2016	0.0015 (J)	0.0029 (J)		0.0011 (J)	0.0018	0.00082 (J)	<0.001	0.001 (J)	
6/22/2016	0.0056 (D)			<0.001		<0.001	0.0018 (J)	<0.001	
6/23/2016		0.0053 (J)			0.0023 (J)				
1/18/2017		0.0028							
1/19/2017				<0.001		0.0025	0.0033	0.0025	

1/23/2017	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg) 0.0035	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
2/28/2017	0.0019 (J)								
7/17/2017	<0.001								
7/18/2017		<0.001		<0.001	0.0014	<0.001			
7/19/2017							0.0045	0.0025	
1/8/2018	<0.001	<0.001							
1/9/2018				<0.001	<0.001	0.0072 (o)	0.0027		
1/10/2018								0.0015 (J)	
7/10/2018	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	
1/30/2019	<0.001	<0.001	<0.001	<0.001	0.0043	<0.001	0.0019 (J)	0.0043	<0.001
3/27/2019	<0.001	<0.001					<0.001		
3/28/2019			<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
9/11/2019	0.0014	0.0016							
9/12/2019			0.0021	0.002	0.0041	0.0017	0.004	0.0037	0.002
3/10/2020	<0.001	<0.001	<0.001	<0.001		<0.001	0.01		
3/11/2020					0.0028			0.0013	<0.001
4/2/2020				0.0013					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
10/5/1999	<0.001	0.015 (o)	0.019 (o)	<0.001	<0.001	<0.001	<0.001
11/12/1999	<0.001	<0.001	0.011 (o)	<0.001	<0.001	<0.001	<0.001
12/29/1999	<0.001	<0.001	0.021 (o)	<0.001		<0.001	<0.001
2/17/2000	<0.001	<0.001	0.02 (o)	<0.001	<0.001	<0.001	<0.001
9/13/2000	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
11/10/2000	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
1/4/2001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
12/11/2001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
4/4/2002	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
12/6/2002	<0.001	<0.001	<0.001	<0.001		0.0082	<0.001
6/28/2003	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
12/13/2003	<0.001	<0.001	<0.001	<0.001		0.017	<0.001
5/28/2004	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
12/10/2004	<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
12/13/2005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
7/12/2006	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
12/1/2006	<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
12/15/2007	<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
12/6/2008	<0.001	<0.001	<0.001	<0.001			
12/7/2008						<0.001	<0.001
7/11/2009	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
12/23/2009	<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	
6/24/2010							<0.001
1/8/2011	<0.001	<0.001	<0.001	<0.001		<0.001	
7/10/2011	<0.001	<0.001	<0.001	<0.001		<0.001	
7/11/2011							<0.001
1/19/2012			<0.001				
1/20/2012	<0.001	<0.001		<0.001		<0.001	<0.001
7/12/2012	<0.001	<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	<0.001
7/19/2013			<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	<0.001
7/11/2014	.0.004	.0.004	0.004	<0.001		<0.001	0.004
7/12/2014	<0.001	<0.001	<0.001				<0.001
1/15/2015	-0.004	<0.001	<0.001	10.001		-0.001	-0.001
1/16/2015	<0.001	-0.004	-0.004	<0.001		<0.001	<0.001
7/15/2015	<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
1/17/2016	<0.001	<0.001		<0.001	<0.001		
6/22/2016	<0.001	0.0019 (J)	<0.001	<0.001	<0.001	0.0021 (!)	-0.001
6/23/2016	0.0063		<0.001			0.0021 (J)	<0.001
1/23/2017	0.0063	0.0062				0.044 (a)	
1/24/2017 1/25/2017		0.0002		<0.001	<0.001	0.044 (o)	
1/25/2017				-U.UU1	-U.UU I		<0.001
112112011							10.001

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
2/2/2017			<0.001				
7/19/2017	<0.001	0.0015 (J)					
7/20/2017			<0.001	<0.001	0.0019 (J)	0.014	0.0021 (J)
1/9/2018	<0.001	<0.001	<0.001	<0.001	<0.001		
1/10/2018						0.014	<0.001
7/10/2018		<0.001	<0.001	<0.001			
7/11/2018	<0.001					0.011 (J)	<0.001
1/30/2019	<0.001		<0.001	<0.001			
1/31/2019		<0.001				<0.001	<0.001
3/28/2019	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
9/12/2019	0.0023	0.0018	0.0022	0.0021		0.0044	0.0043
3/11/2020	<0.001						<0.001
3/31/2020		<0.001		<0.001	0.0011	0.0016	

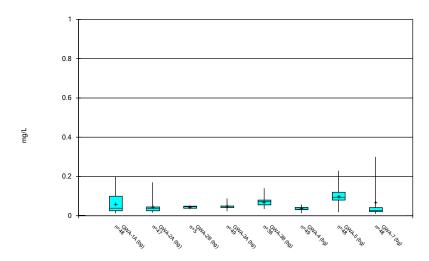
	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
10/5/1999	0.043	0.056		0.023 (o)	<0.005	0.039	<0.005	0.091	
11/12/1999	0.035	0.053		<0.005	<0.005	0.025	<0.005	0.057	
12/29/1999	0.058	0.045		<0.005	<0.005	0.023	<0.005	0.047	
2/17/2000	0.051	0.033		<0.005	<0.005	<0.005	<0.005	0.048	
9/13/2000	<0.005	0.032		<0.005	<0.005	0.035	0.021	0.062	
11/10/2000	<0.005	0.036		<0.005	<0.005	0.023	<0.005	0.11	
1/4/2001	<0.005	0.052		<0.005	<0.005	0.027	<0.005	0.39 (o)	
12/11/2001	<0.005	0.041		<0.005	<0.005	0.036	<0.005	0.096	
4/4/2002	<0.005	0.062		<0.005		0.038	<0.005	<0.005	
12/6/2002	<0.005	0.076		<0.005		0.033	0.06	0.084	
6/28/2003	<0.005	0.026		<0.005	<0.005	0.018	0.19 (o)	0.026	
12/13/2003	<0.005	0.011		<0.005	<0.005	0.013	0.067	0.054	
5/28/2004	0.034	0.016		<0.005	<0.005	<0.005	0.068	<0.005	
12/10/2004	0.021	<0.005		<0.005	<0.005	<0.005	0.039	<0.005	
6/24/2005	<0.005	0.011		<0.005	0.022 (o)	<0.005	0.033	<0.005	
12/13/2005	0.013	0.017		<0.005	0.013	0.011	0.039	<0.005	
7/12/2006	0.074	0.059		0.0047	0.018	0.0055	0.022	0.15 (o)	
12/1/2006	0.048	0.063		0.065 (o)		0.0052	0.018	0.047	
6/21/2007	0.067	0.018		0.008		0.0062	0.058	0.003	
12/15/2007	0.053	0.0099		0.0043		0.0055	0.0072	<0.005	
6/21/2008						0.011		0.0034	
6/22/2008	0.024	0.012		0.0062			0.011		
12/6/2008				0.051 (o)		0.008	0.011	0.041	
12/7/2008	0.0087	0.049							
7/10/2009				0.0043				0.0038	
7/11/2009	0.045	0.049				0.011	0.013		
12/22/2009							0.013		
12/23/2009	0.054	0.0099		0.0039	0.07 (o)	0.0051		<0.005	
6/23/2010				<0.005	0.01	0.0031	0.0084	<0.005	
6/24/2010	0.0065	0.009							
1/8/2011				0.0037		0.0035	0.0089	0.0031	
1/9/2011	0.022								
7/10/2011				0.0047		0.0081	0.0084	<0.005	
7/11/2011	0.0032								
1/19/2012				0.0045		0.017		0.0035	
1/20/2012	0.0089						0.0094		
7/12/2012				0.0033		0.01	0.0098	<0.005	
7/13/2012	0.012	0.057							
1/21/2013	0.024	0.15 (o)		0.0038		0.013	0.007	<0.005	
7/19/2013								<0.005	
7/20/2013	0.0068	0.03		0.004	0.0076	<0.005	0.0074		
1/16/2014								0.0033	
1/17/2014	0.02	0.016		0.005	0.008	0.0066	0.0092		
7/12/2014	0.0055	0.012		0.004	0.0062	0.0054	0.013	0.0028	
1/15/2015				0.0056	0.0092	0.0076		0.0025	
1/16/2015	0.0043	0.0091					0.0081		
7/15/2015	0.0026	0.0087		0.0034	0.0062	0.0053	0.009	0.0021 (J)	
1/16/2016	0.0035	0.009		0.0038	0.0053	0.0048	0.007	0.0017 (J)	
6/22/2016	0.00805 (JD)			0.00575 (JD)		0.0038 (J)	0.0091 (J)	0.0087 (J)	
6/23/2016		0.0179			0.0051 (J)				
1/18/2017		<0.005							
1/19/2017				<0.005		<0.005	0.0065 (J)	<0.005	

1/23/2017	GWA-1A (bg)	GWA-2A (bg)	GWA-2B (bg)	GWA-3A (bg)	GWA-3B (bg) <0.005	GWA-4 (bg)	GWA-5 (bg)	GWA-7 (bg)	GWA-7A (bg)
2/28/2017	<0.005				-0.000				
7/17/2017	<0.005								
7/18/2017		<0.005		<0.005	<0.005	<0.005			
7/19/2017							0.0099 (J)	<0.005	
1/8/2018	<0.005	<0.005					(-,		
1/9/2018				<0.005	<0.005	0.0072 (J)	0.014 (J)		
1/10/2018								<0.005	
7/10/2018	<0.005	<0.005		<0.005	<0.005	<0.005	0.0089 (J)	<0.005	
1/30/2019	<0.005	0.0051 (J)	0.013 (J)	0.0058 (J)	0.0041 (J)	0.006 (J)	0.0057 (J)	0.014 (J)	0.011 (J)
3/27/2019	<0.005	<0.005					0.01 (J)		
3/28/2019			0.014 (J)	<0.005	<0.005	<0.005		<0.005	0.0086 (J)
9/11/2019	0.0062	0.0057							
9/12/2019			0.0075	0.0081	0.01	0.0073	0.0074	0.0059	0.014
3/10/2020	<0.005	<0.005	0.0061	0.0079		0.0079	0.0071		
3/11/2020					0.0055			<0.005	0.0099
4/2/2020				0.011					

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
10/5/1999	<0.005	0.028	0.024 (o)	<0.005	<0.005	0.037	0.063 (o)
11/12/1999	<0.005	<0.005	<0.005	<0.005	<0.005	0.022	0.025
12/29/1999	<0.005	0.022	0.027 (o)	<0.005		0.036	0.024
2/17/2000	<0.005	0.021	0.024 (o)	<0.005	<0.005	<0.005	<0.005
9/13/2000	<0.005	<0.005	<0.005	0.036 (o)		0.027	0.061 (o)
11/10/2000	<0.005	<0.005	<0.005	<0.005		<0.005	0.061 (o)
1/4/2001	<0.005	<0.005	<0.005	<0.005		<0.005	0.05 (o)
12/11/2001	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005
4/4/2002	<0.005	0.069 (o)	<0.005	<0.005		0.028	<0.005
12/6/2002	0.011	0.012	0.015	0.012		0.028	0.013
6/28/2003	<0.005	0.011	0.014	<0.005		0.012	0.014
12/13/2003	<0.005	<0.005	<0.005	<0.005		0.026	<0.005
5/28/2004	<0.005	<0.005	<0.005	<0.005		0.018	<0.005
12/10/2004	<0.005	0.027	0.016	<0.005		0.029	<0.005
6/24/2005	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005
12/13/2005	0.015	0.011	0.029 (o)	<0.005	<0.005	0.017	<0.005
7/12/2006	0.0042	0.0064	0.0043	<0.005		0.013	0.0057
12/1/2006	0.0047	0.0077	0.013	0.098 (o)		0.03	0.0068
6/21/2007	0.0052	0.0082	0.005	0.0043		0.017	0.016
12/15/2007	0.0046	0.0063	0.0031	0.0057		0.013	0.012
6/21/2008	0.0067		0.0061	0.0064		0.016	
6/22/2008		0.0074					0.014
12/6/2008	0.0054	0.0066	0.0042	0.0052			
12/7/2008						0.05	0.044 (o)
7/11/2009	0.0038	0.0054	0.0031	0.0049		0.013	0.0062
12/23/2009	0.0029	0.0046	0.0037	0.005		0.01	0.007
6/23/2010	<0.005	0.0041	0.0034	0.0044		0.011	
6/24/2010							0.0049
1/8/2011	0.0032	0.019	0.0061	0.0036		0.012	
7/10/2011	0.004	0.005	0.0034	0.0046		0.0096	
7/11/2011							0.0052
1/19/2012			0.0057				
1/20/2012	0.0067	0.007		0.0045		0.014	0.0081
7/12/2012	0.0036	0.0045	0.0031	0.0041		0.01	
7/13/2012							0.004
1/21/2013	0.0031	0.0045	0.0033	0.0038		0.011	0.0093
7/19/2013			0.0027				
7/20/2013	<0.005	<0.005		0.0047		0.0089	0.0054
1/17/2014	0.0031	0.0075	0.0037	0.0051		0.0098	0.0054
7/11/2014				0.0066		0.014	
7/12/2014	<0.0025 (J)	0.0051	0.0032				0.0057
1/15/2015	(0)	0.0054	0.0032				
1/16/2015	0.002 (J)			0.0046		0.011	0.0084
7/15/2015	0.0015 (J)	0.0049	0.003	0.0036		0.012	0.0046
1/16/2016	0.0015 (J)		0.0032			0.014	0.0051
1/17/2016	- (-)	0.0051	-	0.004			
6/22/2016	<0.005	0.0087 (J)		0.0053 (J)	0.0013 (J)		
6/23/2016	-	/-/	0.0029 (J)	(-)	(-)	0.0116	0.0041 (J)
1/23/2017	<0.005						2.20 (0)
1/24/2017		0.0071 (J)				0.01 (J)	
1/25/2017				<0.005	<0.005	(0)	
1/27/2017							<0.005
							2.230

	GWC-1	GWC-2	GWC-3	GWC-4A	GWC-4B	GWC-5	GWC-6
2/2/2017			<0.005				
7/19/2017	<0.005	<0.005					
7/20/2017			<0.005	<0.005	<0.005	0.016 (J)	<0.005
1/9/2018	<0.005	0.0079 (J)	<0.005	<0.005	<0.005		
1/10/2018						0.012 (J)	<0.005
7/10/2018		0.0067 (J)	<0.005	<0.005			
7/11/2018	<0.005					0.015 (J)	<0.005
1/30/2019	<0.005		0.0033 (J)	0.0042 (J)			
1/31/2019		<0.005				0.033	<0.005
3/28/2019	<0.005	0.0069 (J)	<0.005	<0.005		0.032	0.0084 (J)
9/12/2019	0.0039 (J)	0.0089	0.0058	0.0093		0.033	0.011
3/11/2020	<0.005						0.0047 (J)
3/31/2020		0.0065		<0.005	<0.005	0.025	

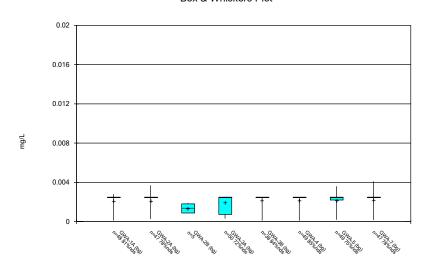
FIGURE B.



Constituent: Barium Analysis Run 6/15/2020 1:38 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

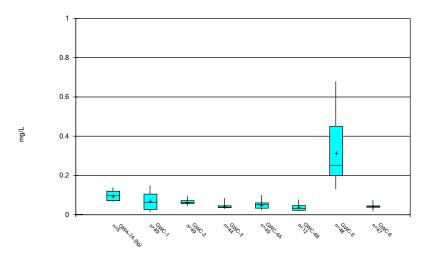
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 6/15/2020 1:38 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

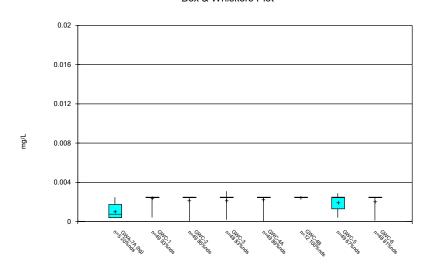
Box & Whiskers Plot

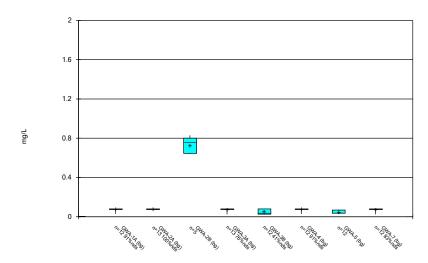


Constituent: Barium Analysis Run 6/15/2020 1:38 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

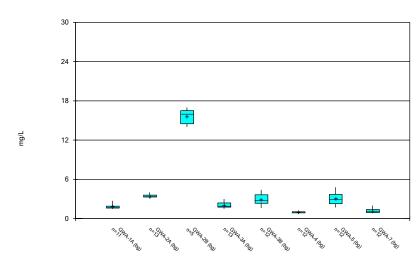




Constituent: Boron Analysis Run 6/15/2020 1:38 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

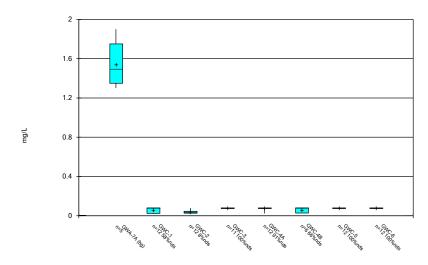
 $Sanitas^{\text{\tiny{IM}}} \text{ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG}$

Box & Whiskers Plot



Constituent: Calcium Analysis Run 6/15/2020 1:38 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

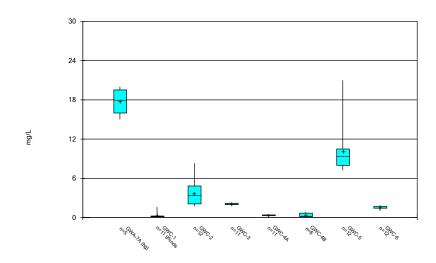
Box & Whiskers Plot

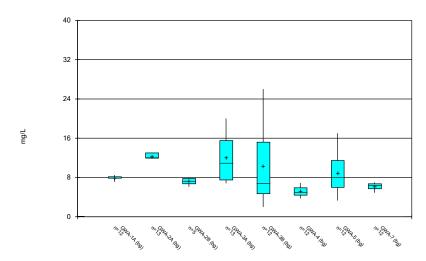


Constituent: Boron Analysis Run 6/15/2020 1:38 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

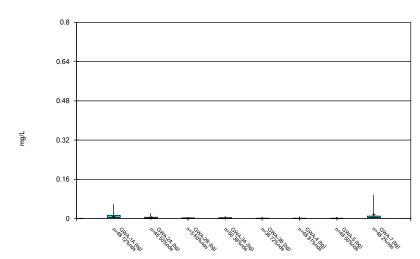




Constituent: Chloride Analysis Run 6/15/2020 1:38 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

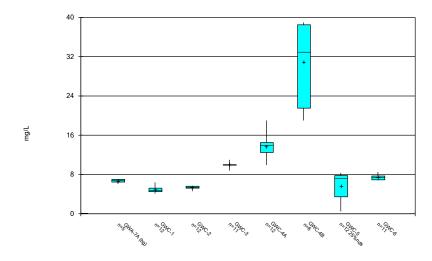
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chromium Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

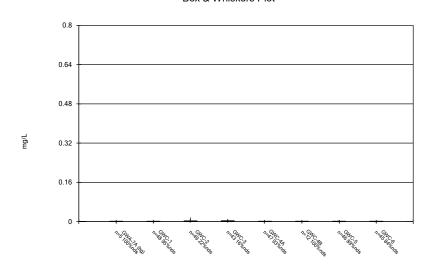
Box & Whiskers Plot

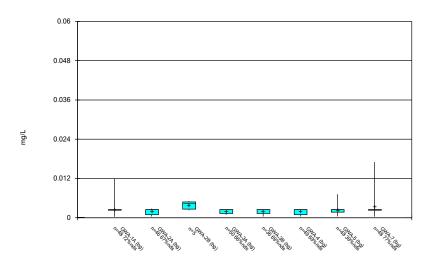


Constituent: Chloride Analysis Run 6/15/2020 1:38 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

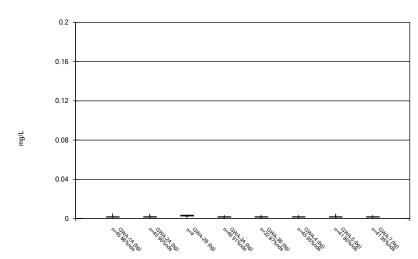




Constituent: Cobalt Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

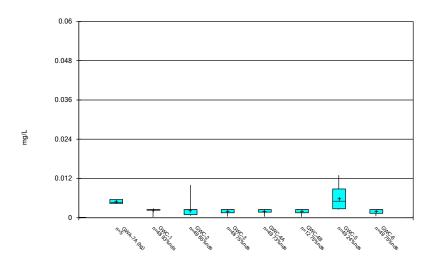
 $Sanitas^{\text{\tiny{IM}}} \ v.9.6.25g \ Sanitas \ software \ utilized \ by \ Groundwater \ Stats \ Consulting. \ UG$

Box & Whiskers Plot



Constituent: Copper Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

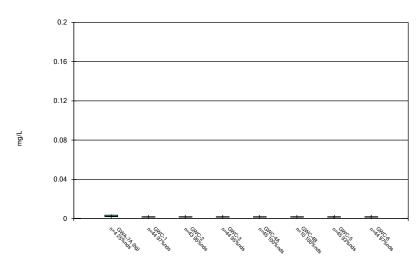
Box & Whiskers Plot

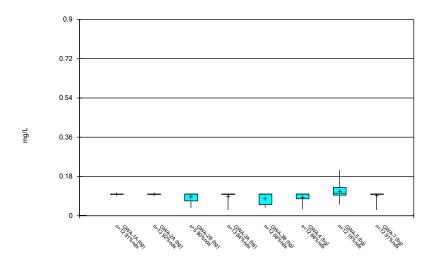


Constituent: Cobalt Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

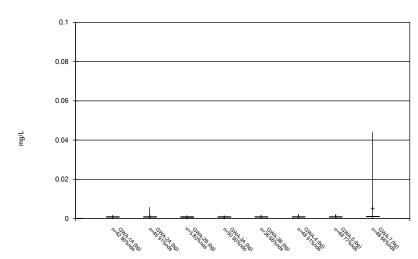




Constituent: Fluoride Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

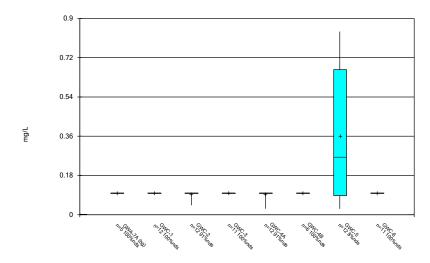
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Lead Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

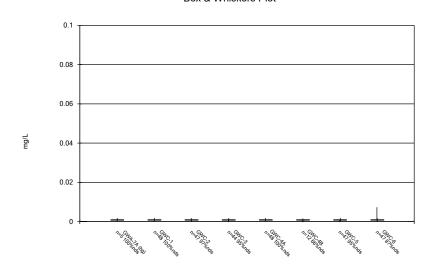
Box & Whiskers Plot

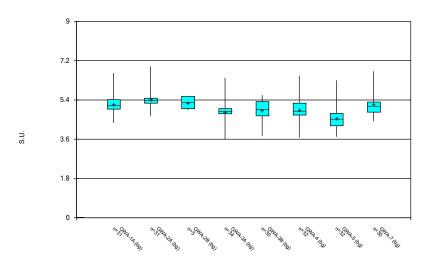


Constituent: Fluoride Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

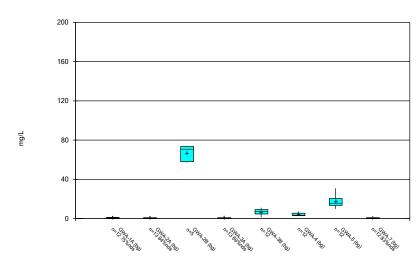




Constituent: pH Analysis Run 6/15/2020 1:39 PM View: Descriptive
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

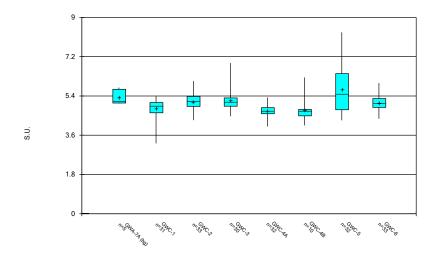
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Sulfate Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

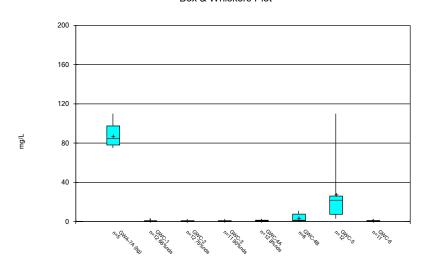
Box & Whiskers Plot



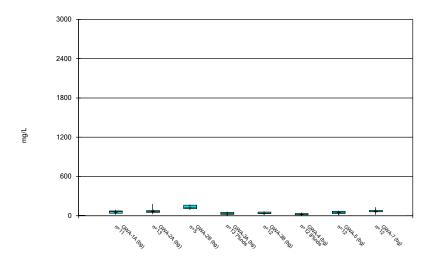
Constituent: pH Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



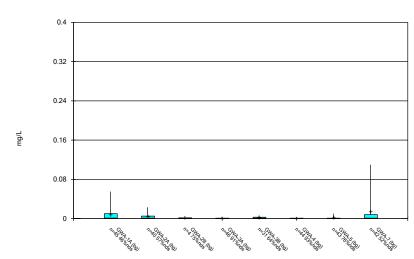




Constituent: Total Dissolved Solids Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

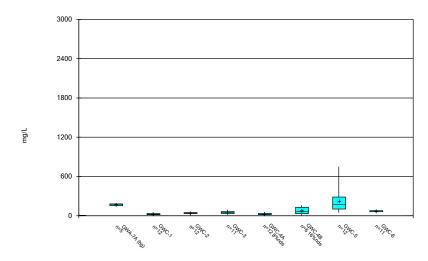
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Vanadium Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

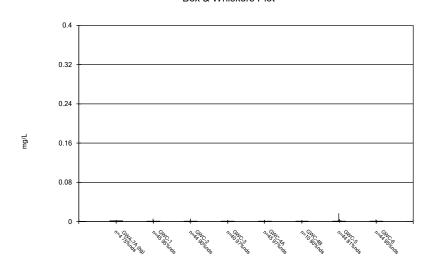
Box & Whiskers Plot

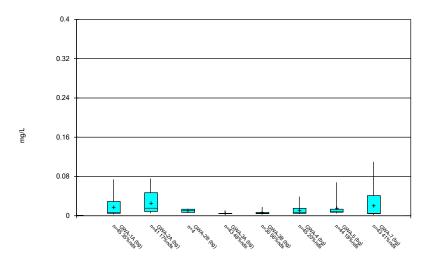


Constituent: Total Dissolved Solids Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot





Constituent: Zinc Analysis Run 6/15/2020 1:39 PM View: Descriptive Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Box & Whiskers Plot

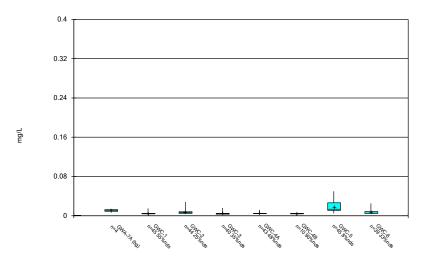


FIGURE C.

Outlier Summary Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 6/15/2020, 9:56 AM GWA-7A Barium (mg/L) (m 10/5/1999 0.11 (o) 11/12/1999 12/29/1999 0.093 (o) 2/17/2000 0.096 (o) 9/13/2000 11/10/2000 1/4/2001 0.93 (o) 0.016 (o) 12/11/2001 4/4/2002 12/6/2002 0.33 (o) 6/28/2003 12/13/2003 5/28/2004 12/10/2004 0.0058 (o) 6/24/2005 12/13/2005 7/12/2006 0.005 (o) 0.019 (o) 12/1/2006 <0.0013 (o) 6/21/2007 6/21/2008 12/6/2008 0.14 (o) 12/7/2008 0.12 (o) 7/11/2009 12/23/2009 1/21/2013 1/17/2014 0.0084 (o) 9/1/2016 0.86 (o) 1/23/2017 1/24/2017 9/21/2017 1/9/2018 7/10/2018

FIGURE D.

Intrawell Prediction Limits - Significant Results (Federal)

	Plant McIntosh	Client: So	outhern Comp	any Data	a: McIn	tosh	LF 3 CCR	Printed 6/	15/2020	, 10:18 AM			
<u>Constituent</u> <u>Well</u>	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg 1	N Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Chloride (mg/L) GWA-3.	A 16.21	n/a	4/2/2020	20	Yes	8	8.963	2.481	0	None	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L) GWA-2	A 1.7	n/a	3/10/2020	2.3	Yes	9	n/a	n/a	88.89	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
GWC-1 GWC-1	1	n/a	3/11/2020	3.5	Yes	8	n/a	n/a	100	n/a	n/a	0.02144	NP Intra (NDs) 1 of 2
Sulfate (mg/L) GWC-2	1	n/a	3/31/2020	1	Yes	8	n/a	n/a	100	n/a	n/a	0.02144	NP Intra (NDs) 1 of 2
GWC-4	A 2.327	n/a	3/31/2020	2.5	Yes	8	1.096	0.421	12.5	None	No	0.001075	Param Intra 1 of 2
Sulfate (mg/L) GWC-6	1.474	n/a	3/11/2020	2.2	Yes	7	0.92	0.1704	0	None	No	0.001075	Param Intra 1 of 2
otal Dissolved Solids (mg/L) GWC-5	648.3	n/a	3/31/2020	750	Yes	8	204.8	151.7	0	None	No	0.001075	Param Intra 1 of 2

Intrawell Prediction Limits - All Results (Federal)

Data: McIntosh LF 3 CCR Printed 6/15/2020, 10:18 AM Client: Southern Company Constituent <u>Well</u> Bg N Bg Mean Std. Dev. %NDs ND Adj. Upper Lim. Lower Lim. <u>Date</u> Sig. Method Chloride (mg/L) GWA-1A 8.888 n/a 3/10/2020 8.1 Nο 8 8.063 0.2825 0 None No 0.001075 Param Intra 1 of 2 Chloride (mg/L) GWA-2A 13 n/a 3/10/2020 13 Nο 9 n/a n/a 0 n/a n/a 0.01809 NP Intra (normality) 1 of 2 Chloride (mg/L) GWA-3A 16.21 n/a 4/2/2020 20 Yes 8 8.963 2.481 0 None No 0.001075 Param Intra 1 of 2 Chloride (ma/L) GWA-3B 35.36 n/a 3/11/2020 4.8 Nο 8 10 46 8 519 n None Nο 0.001075 Param Intra 1 of 2 Chloride (mg/L) GWA-4 7.418 n/a 3/10/2020 5 No 8 4.788 0.8999 0 None No 0.001075 Param Intra 1 of 2 Chloride (ma/L) GWA-5 24.57 n/a 3/10/2020 3.7 No 8 9.788 5.057 0 None No 0.001075 Param Intra 1 of 2 Chloride (mg/L) GWA-7 8.393 n/a 3/11/2020 5.8 No 8 6.425 0.6735 0 None No 0.001075 Param Intra 1 of 2 GWC-1 3/11/2020 8 0.6948 0 0.001075 Chloride (ma/L) 6.968 n/a 6.4 No 4.938 None No Param Intra 1 of 2 0 0.001075 Chloride (ma/L) GWC-2 5.892 n/a 3/31/2020 5.7 No 8 5.45 0.1512 None No Param Intra 1 of 2 Chloride (ma/L) GWC-4A 3/31/2020 14 8 1.923 0 0.001075 Param Intra 1 of 2 20.24 n/a No 14.63 None No Chloride (mg/L) GWC-4B 66.22 n/a 3/31/2020 39 No 5 29.4 7.733 0 None No 0.001075 Param Intra 1 of 2 GWC-5 3/31/2020 Chloride (ma/L) 13.7 8.2 No 8 4.85 3.027 37.5 Kaplan-Meier 0.001075 Param Intra 1 of 2 n/a No 0 0.001075 Chloride (mg/L) GWC-6 8.976 n/a 3/11/2020 7.6 No 7.343 0.5028 None No Param Intra 1 of 2 pH (S.U.) GWA-1A 6.034 3/10/2020 5.48 27 2.278 0.08656 0 0.0005373 Param Intra 1 of 2 4.406 No sart(x) None pH (S.U.) GWA-2A 3/10/2020 27 0 0.005004 NP Intra (normality) 1 of 2 6.94 4.67 5.39 No n/a n/a n/a n/a 6.42 4/2/2020 29 0 pH (S.U.) GWA-3A 3.59 4.75 0.004345 NP Intra (normality) 1 of 2 No n/a n/a n/a n/a 3/11/2020 26 4.877 0 0.0005373 pH (S.U.) GWA-3B 5.82 3.935 No Param Intra 1 of 2 5.38 0.4545 None No GWA-4 6.005 3.864 3/10/2020 4.59 28 4.935 0.521 0 0.0005373 Param Intra 1 of 2 pH (S.U.) No None No pH (S.U.) GWA-5 5.634 3.392 3/10/2020 4.81 No 28 4.513 0.5456 0 0.0005373 Param Intra 1 of 2 None No pH (S.U.) GWA-7 6.296 4.092 3/11/2020 5.27 5.194 0.5314 0 No 0.0005373 Param Intra 1 of 2 No None pH (S.U.) GWC-1 5.656 3.788 3/11/2020 5.21 No 27 23.17 4.275 0 0.0005373 Param Intra 1 of 2 None pH (S.U.) GWC-2 6.011 4.164 3/31/2020 29 5.087 0.4515 0 None 0.0005373 Param Intra 1 of 2 pH (S.U.) GWC-4A 5.287 3/31/2020 4.66 No 27 4.702 0.2834 0 None 0.0005373 Param Intra 1 of 2 pH (S.U.) GWC-4B 6.494 3.308 3/31/2020 4.63 9 2.184 0.1316 0 sqrt(x) 0.0005373 Param Intra 1 of 2 28 pH (S.U.) GWC-5 8.173 3.524 3/31/2020 No 2.368 0.2389 0 sqrt(x) 0.0005373 Param Intra 1 of 2 GWC-6 4.371 3/11/2020 28 0 0.0005373 Param Intra 1 of 2 pH (S.U.) 5.858 5.23 No 5.114 0.3619 No Sulfate (mg/L) GWA-1A 2.7 n/a 3/10/2020 1.5 No 87.5 0.02144 NP Intra (NDs) 1 of 2 GWA-2A 3/10/2020 88.89 0.01809 NP Intra (NDs) 1 of 2 Sulfate (mg/L) n/a 2.3 Yes n/a 4/2/2020 0.02144 NP Intra (NDs) 1 of 2 Sulfate (mg/L) GWA-3A 1ND No n/a 100 n/a n/a Sulfate (mg/L) GWA-3B 16.87 n/a 3/11/2020 7.3 No 7.2 3.307 0 No 0.001075 Param Intra 1 of 2 None 1.449 Sulfate (mg/L) GWA-4 8.746 3/10/2020 7.2 8 4.513 0 0.001075 Param Intra 1 of 2 n/a No None Sulfate (mg/L) GWA-5 38.54 n/a 3/10/2020 15 No 8 18.88 6.728 0 None No 0.001075 Param Intra 1 of 2 Sulfate (mg/L) GWA-7 n/a 3/11/2020 0.97J No 8 100 n/a n/a 0.02144 NP Intra (NDs) 1 of 2 n/a n/a Sulfate (mg/L) GWC-1 n/a 3/11/2020 3.5 Yes n/a n/a 100 n/a n/a 0.02144 NP Intra (NDs) 1 of 2 Sulfate (mg/L) GWC-2 n/a 3/31/2020 Yes R n/a n/a 100 n/a n/a 0 02144 NP Intra (NDs) 1 of 2 Sulfate (mg/L) GWC-4A 2.327 n/a 3/31/2020 2.5 Yes 8 1.096 0.421 12.5 None Nο 0.001075 Param Intra 1 of 2 3/31/2020 Sulfate (mg/L) GWC-4B 24.34 n/a 1.9 No 5 3.678 4.341 0 None No 0.001075 Param Intra 1 of 2 Sulfate (mg/L) GWC-5 161.2 n/a 3/31/2020 11 No 8 5.799 2.359 0 None sart(x) 0.001075 Param Intra 1 of 2 Sulfate (mg/L) GWC-6 1.474 n/a 3/11/2020 2.2 Yes 7 0.92 0.1704 0 None 0.001075 Param Intra 1 of 2 Total Dissolved Solids (mg/L) 3/10/2020 67 52.29 0.001075 Param Intra 1 of 2 GWA-1A 140 n/a No 7 26.99 0 None No 9 Total Dissolved Solids (mg/L) GWA-2A 197.4 3/10/2020 68 71.33 45.49 0 0.001075 Param Intra 1 of 2 n/a No None No Total Dissolved Solids (mg/L) 0 GWA-3A 83.61 n/a 4/2/2020 61 No 8 32.75 17.4 None No 0.001075 Param Intra 1 of 2 Total Dissolved Solids (mg/L) GWA-3B 90.6 3/11/2020 43 41.75 16.71 0 0.001075 Param Intra 1 of 2 No 8 No n/a None Total Dissolved Solids (mg/L) GWA-4 3/10/2020 0.001075 53.82 39 No 8 20.81 11.29 12.5 Param Intra 1 of 2 n/a None No 3/10/2020 Total Dissolved Solids (mg/L) GWA-5 121.7 n/a 67 No 8 48.5 25.04 0 None No 0.001075 Param Intra 1 of 2 Total Dissolved Solids (mg/L) GWA-7 116.6 3/11/2020 76 No 69.75 16.02 0 0.001075 Param Intra 1 of 2 n/a None No 16.42 Total Dissolved Solids (mg/L) GWC-1 72 3/11/2020 37 0 0.001075 No Param Intra 1 of 2 n/a None No Total Dissolved Solids (mg/L) GWC-2 79.6 3/31/2020 50 No 8 38.75 13.98 0 0.001075 Param Intra 1 of 2 n/a None No Total Dissolved Solids (mg/L) GWC-4A 71.14 3/31/2020 52 26.25 15.36 0 0.001075 Param Intra 1 of 2 No No n/a None Total Dissolved Solids (mg/L) GWC-4B 322 3/31/2020 85 No 5 76.2 51.63 20 Kaplan-Meier 0.001075 Param Intra 1 of 2 n/a

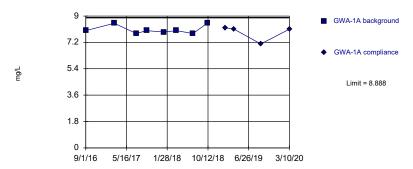
Page 2

Intrawell Prediction Limits - All Results (Federal)

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 6/15/2020, 10:18 AM

Constituent	Well	Upper Lim	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	<u> Bg Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Total Dissolved Solids (mg/L)	GWC-5	648.3	n/a	3/31/2020	750	Yes	8	204.8	151.7	0	None	No	0.001075	Param Intra 1 of 2
Total Dissolved Solids (mg/L)	GWC-6	96.83	n/a	3/11/2020	67	No	7	66.86	9.227	0	None	No	0.001075	Param Intra 1 of 2

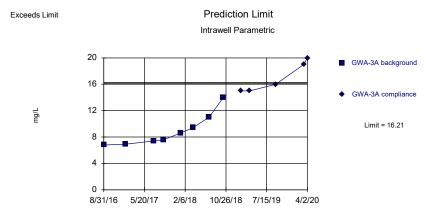
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=8.063, Std. Dev.=0.2825, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7856, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.01175

Constituent: Chloride Analysis Run 6/15/2020 10:08 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

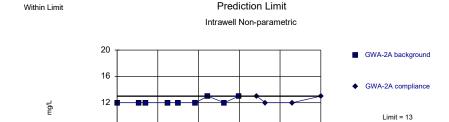
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary: Mean=8.963, Std. Dev.=2.481, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8523, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

9/1/16

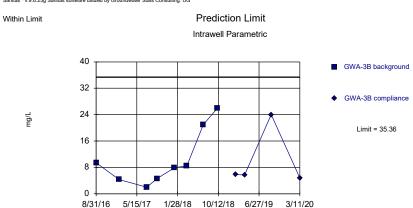


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 9 background values. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

5/16/17 1/28/18 10/12/18 6/26/19 3/10/20

Constituent: Chloride Analysis Run 6/15/2020 10:08 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

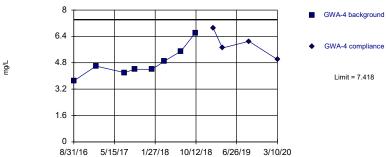
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary: Mean=10.46, Std. Dev.=8.519, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8418, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG





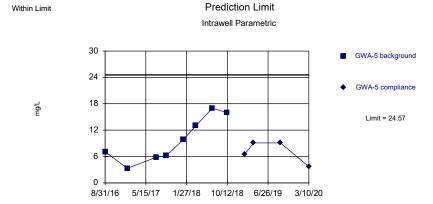
Background Data Summary: Mean=4.788, Std. Dev.=0.8999, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9048, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

> Constituent: Chloride Analysis Run 6/15/2020 10:08 AM View: PL's Federal Intrawell Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit Within Limit Intrawell Parametric 9 GWA-7 background GWA-7 compliance 5.4 Limit = 8.393 3.6 1.8 8/30/16 5/14/17 1/27/18 10/12/18 6/27/19 3/11/20

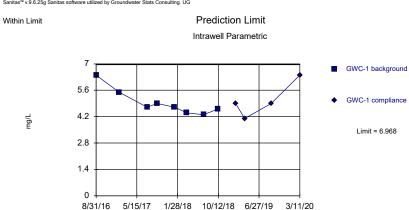
Background Data Summary: Mean=6.425, Std. Dev.=0.6735, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7709, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =



Background Data Summary: Mean=9.788, Std. Dev.=5.057, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9239, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

> Constituent: Chloride Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

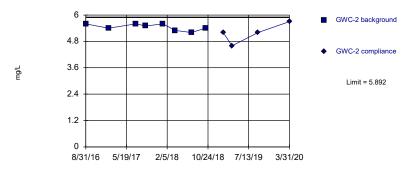
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary: Mean=4.938, Std. Dev.=0.6948, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8267, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

Within Limit Prediction Limit





Background Data Summary: Mean=5.45, Std. Dev.=0.1512, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8905, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.01175

Constituent: Chloride Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

5/20/17

2/5/18

9/1/16

Within Limit

Prediction Limit
Intrawell Parametric

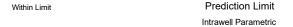
GWC-4B background

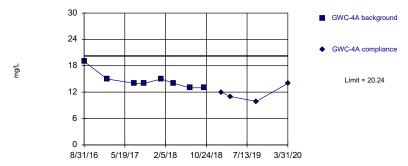
GWC-4B compliance

Limit = 66.22

Background Data Summary: Mean=29.4, Std. Dev.=7.733, n=5. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9457, critical = 0.686. Kappa = 4.761 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



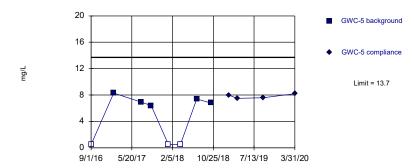


Background Data Summary: Mean=14.63, Std. Dev.=1.923, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7613, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075

Constituent: Chloride Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Parametric



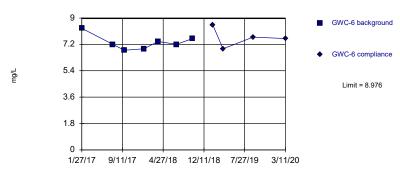
Background Data Summary (after Kaplan-Meier Adjustment): Mean=4.85, Std. Dev.=3.027, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7581, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

10/25/18 7/13/19 3/31/20

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits





Background Data Summary: Mean=7.343, Std. Dev.=0.5028, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9102, critical = 0.73. Kappa = 3.249 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

> Constituent: Chloride Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

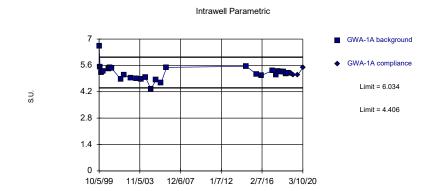
10/5/99

Prediction Limit Within Limits Intrawell Non-parametric GWA-2A background GWA-2A compliance Limit = 6.94 4.2 Limit = 4.67 2.8 1.4 11/5/03 12/6/07 1/7/12

Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 27 background values. Well-constituent pair annual alpha = 0.009996. Individual comparison alpha = 0.005004 (1 of 2).

2/7/16

3/10/20

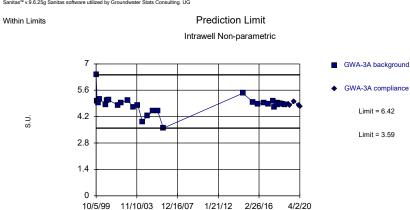


Prediction Limit

Background Data Summary (based on square root transformation): Mean=2.278, Std. Dev.=0.08656, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8991, critical = 0.894. Kappa = 2.064 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

> Constituent: pH Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

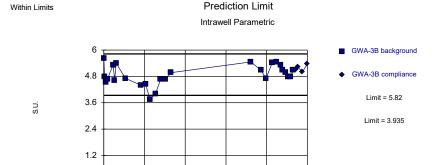


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 29 background values. Well-constituent pair annual alpha = 0.00868. Individual comparison alpha = 0.004345 (1 of 2).

4/2/20

0 10/5/99 Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits



Background Data Summary: Mean=4.877, Std. Dev.=0.4545, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.955, critical = 0.891. Kappa = 2.074 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

1/7/12

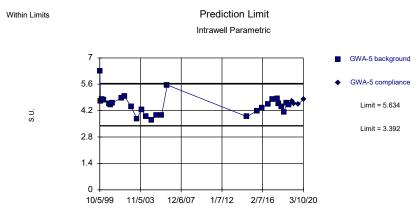
2/8/16

3/11/20

11/5/03 12/7/07

Constituent: pH Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary: Mean=4.513, Std. Dev.=0.5456, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9, critical = 0.896. Kappa = 2.055 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

Intrawell Parametric ■ GWA-4 background GWA-4 compliance Limit = 6.005 S.U. Limit = 3.864 2.8 1.4 10/5/99 11/5/03 12/6/07 1/7/12 2/7/16 3/10/20

Prediction Limit

Background Data Summary: Mean=4.935, Std. Dev.=0.521, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9497, critical = 0.896. Kappa = 2.055 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

> Constituent: pH Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

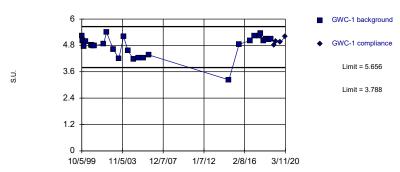
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit Within Limits Intrawell Parametric ■ GWA-7 background GWA-7 compliance Limit = 6.296 4.2 Limit = 4.092 2.8 1.4 10/5/99 11/5/03 12/7/07 1/7/12 2/8/16 3/11/20

Background Data Summary: Mean=5.194, Std. Dev.=0.5314, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9174, critical = 0.891. Kappa = 2.074 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

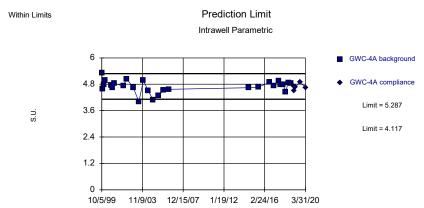




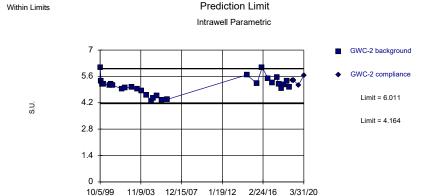
Background Data Summary (based on square transformation): Mean=23.17, Std. Dev.=4.275, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9154, critical = 0.894. Kappa = 2.064 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



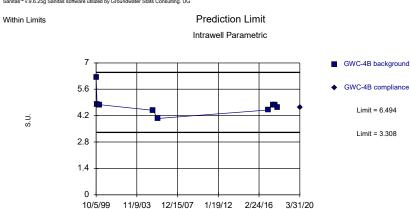
Background Data Summary: Mean=4.702, Std. Dev.=0.2834, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9555, critical = 0.894. Kappa = 2.064 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.



Background Data Summary: Mean=5.087, Std. Dev.=0.4515, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9507, critical = 0.898. Kappa = 2.045 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.01175

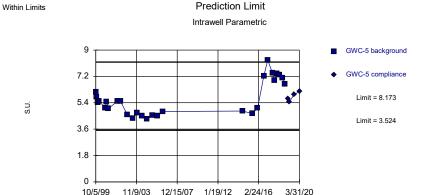
Constituent: pH Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary (based on square root transformation): Mean=2.184, Std. Dev.=0.1316, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7676, critical = 0.764. Kappa = 2.772 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

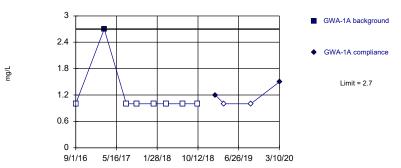


Background Data Summary (based on square root transformation): Mean=2.368, Std. Dev.=0.2389, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8999, critical = 0.896. Kappa = 2.055 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

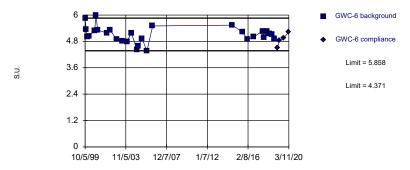
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Within Limits Prediction Limit
Intrawell Parametric

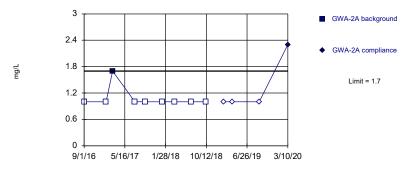


Background Data Summary: Mean=5.114, Std. Dev.=0.3619, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9688, critical = 0.896. Kappa = 2.055 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075

Constituent: pH Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Exceeds Limit Prediction Limit
Intrawell Non-parametric

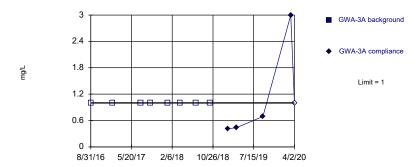


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

Within Limit



Intrawell Non-parametric



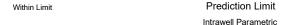
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

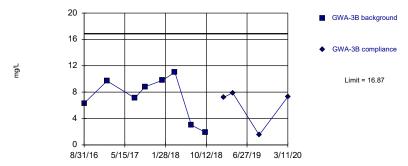
> Constituent: Sulfate Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit Within Limit Intrawell Parametric GWA-4 background 7.2 GWA-4 compliance 5.4 Limit = 8.746 3.6 1.8 8/31/16 5/15/17 1/27/18 10/12/18 6/26/19 3/10/20

Background Data Summary: Mean=4.513, Std. Dev.=1.449, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8844, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

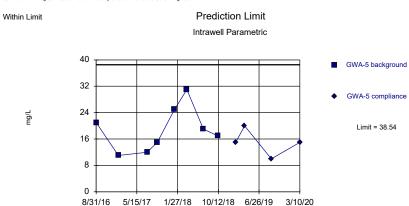




Background Data Summary: Mean=7.2, Std. Dev.=3.307, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.91, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

> Constituent: Sulfate Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

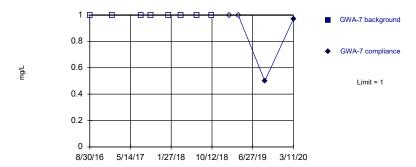


Background Data Summary: Mean=18.88, Std. Dev.=6.728, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9527, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

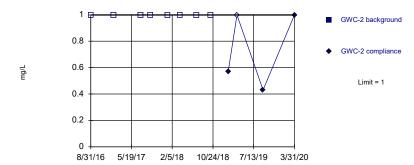
Constituent: Sulfate Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit Prediction Limit

Intrawell Non-parametric

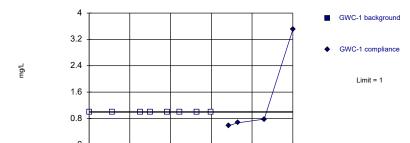


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit
Intrawell Non-parametric



8/31/16 5/15/17 1/28/18 10/12/18 6/27/19 3/11/20

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

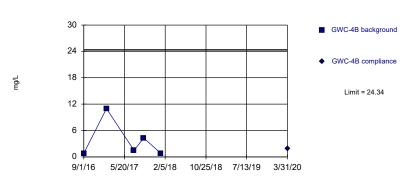
Hollow symbols indicate censored values.

Exceeds Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=1.096, Std. Dev.=0.421, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7756, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Within Limit Prediction Limit
Intrawell Parametric



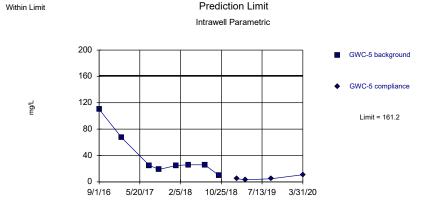
Background Data Summary: Mean=3.678, Std. Dev.=4.341, n=5. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7733, critical = 0.686. Kappa = 4.761 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.01175

Constituent: Sulfate Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Background Data Summary: Mean=0.92, Std. Dev.=0.1704, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8341, critical = 0.73. Kappa = 3.249 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

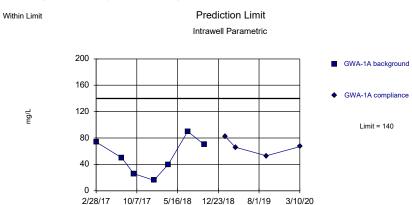
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary (based on square root transformation): Mean=5.799, Std. Dev.=2.359, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8242, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

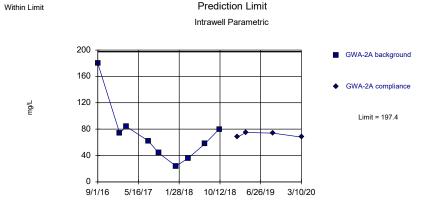
Constituent: Sulfate Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary: Mean=52.29, Std. Dev.=26.99, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9628, critical = 0.73. Kappa = 3.249 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

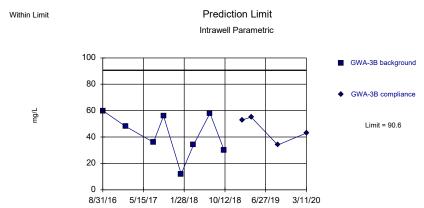
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary: Mean=71.33, Std. Dev.=45.49, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8137, critical = 0.764. Kappa = 2.772 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075

Constituent: Total Dissolved Solids Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

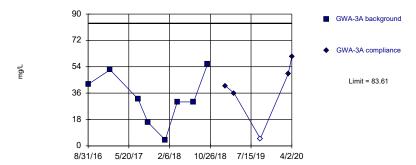


Background Data Summary: Mean=41.75, Std. Dev.=16.71, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9201, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Within Limit

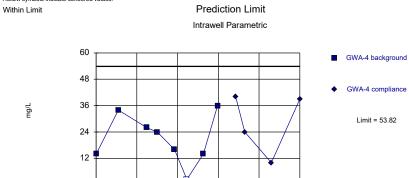
Prediction Limit Intrawell Parametric



Background Data Summary: Mean=32.75, Std. Dev.=17.4, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9582, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001078

Constituent: Total Dissolved Solids Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

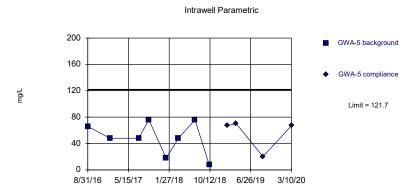
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Background Data Summary: Mean=20.81, Std. Dev.=11.29, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9511, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

8/31/16 5/15/17 1/27/18 10/12/18 6/26/19 3/10/20

Within Limit Prediction Limit Within Limit Within Limit



Background Data Summary: Mean=48.5, Std. Dev.=25.04, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8939, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.01175

Constituent: Total Dissolved Solids Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit Prediction Limit Intrawell Parametric

80
64
64
48
32
16
8/31/16
8/31/16
8/31/16
8/31/16
8/31/16
8/31/18
10/12/18
6/27/19
3/11/20

Background Data Summary: Mean=24, Std. Dev.=16.42, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9454, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Frediction Limit
Intrawell Parametric

GWA-7 background

GWA-7 compliance

Limit = 116.6

Background Data Summary: Mean=69.75, Std. Dev.=16.02, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8729, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075

8/30/16 5/14/17 1/27/18 10/12/18 6/27/19 3/11/20

Constituent: Total Dissolved Solids Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit

Prediction Limit
Intrawell Parametric

GWC-2 background

GWC-2 compliance

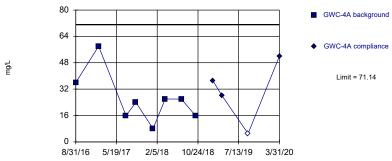
Limit = 79.6

Background Data Summary: Mean=38.75, Std. Dev.=13.98, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8657, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Prediction Limit Within Limit

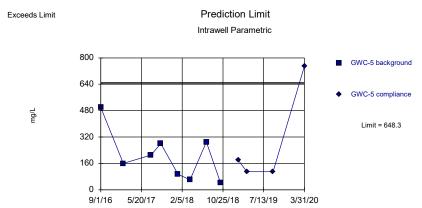




Background Data Summary: Mean=26.25, Std. Dev.=15.36, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8949, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

Constituent: Total Dissolved Solids Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

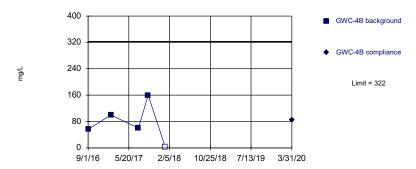


Background Data Summary: Mean=204.8, Std. Dev.=151.7, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9146, critical = 0.749. Kappa = 2.923 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Prediction Limit Within Limit

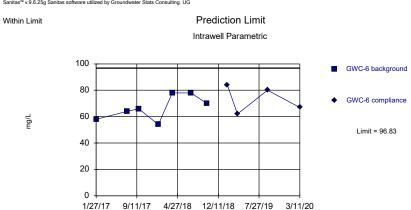




Background Data Summary (after Kaplan-Meier Adjustment): Mean=76.2, Std. Dev.=51.63, n=5, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.971, critical = 0.686. Kappa = 4.761 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 6/15/2020 10:09 AM View: PL's Federal Intrawell Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary: Mean=66.86, Std. Dev.=9.227, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9356, critical = 0.73. Kappa = 3.249 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha =

	GWA-1A	GWA-1A
9/1/2016	8	
2/28/2017	8.5	
7/17/2017	7.8	
9/20/2017	8	
1/8/2018	7.9	
3/27/2018	8	
7/10/2018	7.8	
10/8/2018	8.5	
1/30/2019		8.2
3/27/2019		8.1
9/11/2019		7.1
3/10/2020		8.1

	GWA-2A	GWA-2A
9/1/2016	12	
1/18/2017	12	
2/28/2017	12	
7/18/2017	12	
9/20/2017	12	
1/8/2018	12	
3/27/2018	13	
7/10/2018	12	
10/8/2018	13	
1/30/2019		13
3/27/2019		12
9/11/2019		12
3/10/2020		13

	GWA-3A	GWA-3A
8/31/2016	6.8	
1/19/2017	6.9	
7/18/2017	7.4	
9/20/2017	7.6	
1/9/2018	8.6	
3/27/2018	9.4	
7/10/2018	11	
10/9/2018	14	
1/30/2019		15
3/28/2019		15
9/12/2019		16
3/10/2020		19
4/2/2020		20

	GWA-3B	GWA-3B
8/31/2016	9.4	
1/23/2017	4.3	
7/18/2017	2	
9/20/2017	4.6	
1/9/2018	7.9	
3/28/2018	8.5	
7/10/2018	21	
10/8/2018	26	
1/30/2019		5.8
3/28/2019		5.7
9/12/2019		24
3/11/2020		4.8

	GWA-4	GWA-4
8/31/2016	3.7	
1/19/2017	4.6	
7/18/2017	4.2	
9/21/2017	4.4	
1/9/2018	4.4	
3/27/2018	4.9	
7/10/2018	5.5	
10/8/2018	6.6	
1/30/2019		6.9
3/28/2019		5.7
9/12/2019		6.1
3/10/2020		5

	GWA-5	GWA-5
8/31/2016	7.1	
1/19/2017	3.3	
7/19/2017	5.8	
9/21/2017	6.2	
1/9/2018	9.9	
3/27/2018	13	
7/10/2018	17	
10/8/2018	16	
1/30/2019		6.5
3/27/2019		9.1
9/12/2019		9.1
3/10/2020		3.7

	GWA-7	GWA-7
8/30/2016	6.9	
1/19/2017	7	
7/19/2017	6.1	
9/20/2017	6.7	
1/10/2018	6.5	
3/28/2018	6.6	
7/10/2018	6.7	
10/9/2018	4.9	
1/30/2019		6.5
3/28/2019		5.6
9/12/2019		5.3
3/11/2020		5.8

	GWC-1	GWC-1
8/31/2016	6.4	
1/23/2017	5.5	
7/19/2017	4.7	
9/21/2017	4.9	
1/9/2018	4.7	
3/28/2018	4.4	
7/11/2018	4.3	
10/9/2018	4.6	
1/30/2019		4.9
3/28/2019		4.1
9/12/2019		4.9
3/11/2020		6.4

	GWC-2	GWC-2
8/31/2016	5.6	
1/24/2017	5.4	
7/19/2017	5.6	
9/21/2017	5.5	
1/9/2018	5.6	
3/29/2018	5.3	
7/10/2018	5.2	
10/9/2018	5.4	
1/31/2019		5.2
3/28/2019		4.6
9/12/2019		5.2
3/31/2020		5.7

	GWC-4A	GWC-4A
8/31/2016	19	
1/25/2017	15	
7/20/2017	14	
9/21/2017	14	
1/9/2018	15	
3/28/2018	14	
7/10/2018	13	
10/9/2018	13	
1/30/2019		12
3/28/2019		11
9/12/2019		9.9
3/31/2020		14

	GWC-4B	GWC-4B
9/1/2016	24	
1/25/2017	34	
7/20/2017	32	
9/21/2017	38	
1/9/2018	19	
3/31/2020		39

	GWC-5	GWC-5
9/1/2016	<1	
1/24/2017	8.3	
7/20/2017	6.9	
9/21/2017	6.4	
1/10/2018	<1	
3/28/2018	<1	
7/11/2018	7.4	
10/9/2018	6.8	
1/31/2019		8
3/28/2019		7.5
9/12/2019		7.6
3/31/2020		8.2

	GWC-6	GWC-6
1/27/2017	8.3	
7/20/2017	7.2	
9/22/2017	6.8	
1/10/2018	6.9	
3/29/2018	7.4	
7/11/2018	7.2	
10/9/2018	7.6	
1/31/2019		8.5
3/28/2019		6.9
9/12/2019		7.7
3/11/2020		7.6

	GWA-1A	GWA-1A
10/5/1999	6.63	
11/12/1999	5.51	
12/29/1999	5.23	
2/17/2000	5.29	
9/13/2000	5.41	
11/10/2000	5.47	
1/4/2001	5.44	
12/11/2001	4.86	
4/4/2002	5.1	
12/6/2002	4.917 (D)	
6/28/2003	4.91	
12/13/2003	4.87	
5/28/2004	4.98	
12/10/2004	4.35	
6/24/2005	4.82	
12/13/2005	4.66	
7/12/2006	5.49	
7/11/2014	5.55	
7/15/2015	5.13	
1/16/2016	5.06	
2/28/2017	5.33	
7/17/2017	5.09	
9/20/2017	5.29	
1/8/2018	5.26	
3/27/2018	5.27	
7/10/2018	5.17	
10/8/2018	5.18	
1/30/2019		5.17
3/27/2019		5.09
9/11/2019		5.1
3/10/2020		5.48

	GWA-2A	GWA-2A
10/5/1999	5.83	
11/12/1999	5.81	
12/29/1999	5.09	
2/17/2000	5.47	
9/13/2000	5.26	
11/10/2000	5.11	
1/4/2001	5.37	
12/11/2001	5.06	
4/4/2002	5.15	
12/6/2002	5.32 (D)	
6/28/2003	5.56	
12/13/2003	5.48	
5/28/2004	5.07	
12/10/2004	5.2	
6/24/2005	5.35	
12/13/2005	4.67	
7/12/2006	6.94	
7/11/2014	5.66	
7/15/2015	5.43	
1/16/2016	5.81	
1/18/2017	5.37	
2/28/2017	5.44	
7/18/2017	5.54	
9/20/2017	5.25	
3/27/2018	5.32	
7/10/2018	5.44	
10/8/2018	5.45	
1/30/2019		5.42
3/27/2019		5.43
9/11/2019		5.25
3/10/2020		5.39

	GWA-3A	GWA-3A
10/5/1999	6.42	
11/12/1999	5.03	
12/29/1999	4.92	
2/17/2000	5.13	
9/13/2000	4.85	
11/10/2000	5.05	
1/4/2001	5.08	
12/11/2001	4.81	
4/4/2002	4.92	
12/6/2002	5.07 (D)	
6/28/2003	4.69	
12/13/2003	4.81	
5/28/2004	3.93	
12/10/2004	4.25	
6/24/2005	4.5	
12/13/2005	4.52	
7/12/2006	3.59	
7/12/2014	5.44	
7/15/2015	4.98	
1/16/2016	4.87	
8/31/2016	4.92	
1/19/2017	4.86	
7/18/2017	5.02	
9/20/2017	4.72	
1/8/2018	4.92	
1/9/2018	4.83	
3/27/2018	4.91	
7/10/2018	4.87	
10/8/2018	4.84	
1/30/2019		4.88
3/28/2019		4.8
9/12/2019		4.99
3/10/2020		4.79
4/2/2020		4.75

	GWA-3B	GWA-3B
10/5/1999	5.62	
11/12/1999	4.78	
12/29/1999	4.53	
2/17/2000	4.68	
9/13/2000	5.33	
11/10/2000	4.63	
1/4/2001	5.39	
12/11/2001	4.71	
6/28/2003	4.4	
12/13/2003	4.46	
5/28/2004	3.74	
12/10/2004	4.01	
6/24/2005	4.67	
12/13/2005	4.68	
7/12/2006	4.97	
7/12/2014	5.46	
7/15/2015	5.08	
1/16/2016	4.71	
8/30/2016	5.415 (D)	
1/23/2017	5.46	
7/18/2017	5.32	
9/20/2017	5.09	
1/9/2018	4.97	
3/28/2018	4.8	
7/10/2018	4.8	
10/8/2018	5.1	
1/30/2019		5.13
3/28/2019		5.22
9/12/2019		5
3/11/2020		5.38

	GWA-4	GWA-4
10/5/1999	6.51	
11/12/1999	5.46	
12/29/1999	5.13	
2/17/2000	5.22	
9/13/2000	4.86	
11/10/2000	5.29	
1/4/2001	5.53	
12/11/2001	5.37	
4/4/2002	5.32	
12/6/2002	5.3 (D)	
6/28/2003	4.73	
12/13/2003	4.53	
5/28/2004	4.22	
12/10/2004	4.26	
6/24/2005	4.47	
12/13/2005	4.47	
7/12/2006	3.68	
7/12/2014	5.33	
7/15/2015	4.94	
1/16/2016	4.85	
8/31/2016	4.79	
1/19/2017	4.72	
7/18/2017	4.96	
9/21/2017	4.7	
1/9/2018	4.91	
3/27/2018	4.92	
7/10/2018	4.94	
10/8/2018	4.76	
1/30/2019		4.94
3/28/2019		4.99
9/12/2019		4.92
3/10/2020		4.59

	GWA-5	GWA-5
10/5/1999	6.3	
11/12/1999	4.72	
12/29/1999	4.8	
2/17/2000	4.78	
9/13/2000	4.58	
11/10/2000	4.5	
1/4/2001	4.61	
12/11/2001	4.87	
4/4/2002	4.96	
12/6/2002	4.4 (D)	
6/28/2003	3.77	
12/13/2003	4.25	
5/28/2004	3.9	
12/10/2004	3.71	
6/24/2005	3.94	
12/13/2005	3.94	
7/12/2006	5.56	
7/12/2014	3.88	
7/15/2015	4.19	
1/16/2016	4.35	
8/31/2016	4.53	
1/19/2017	4.79	
7/19/2017	4.83	
9/21/2017	4.57	
1/9/2018	4.4	
3/27/2018	4.11	
7/10/2018	4.62	
10/8/2018	4.51	
1/30/2019		4.72
3/27/2019		4.56
9/12/2019		4.54
3/10/2020		4.81

	GWA-7	GWA-7
10/5/1999	6.71	
11/12/1999	5.6	
12/29/1999	5.24	
2/17/2000	5.33	
9/13/2000	6.04	
11/10/2000	4.98	
1/4/2001	6.21	
12/11/2001	4.63	
4/4/2002	4.74	
12/6/2002	5.13 (D)	
6/28/2003	4.92	
12/13/2003	5.11	
5/28/2004	4.42	
12/10/2004	4.44	
6/24/2005	4.71	
12/13/2005	4.63	
7/12/2006	4.76	
7/12/2014	5.63	
7/15/2015	5.2	
1/16/2016	5.09	
8/30/2016	5.22	
1/19/2017	5.28	
7/19/2017	5.41	
3/28/2018	5.13	
7/10/2018	5.23	
10/8/2018	5.25	
1/30/2019		4.96
3/28/2019		5.15
9/12/2019		5.12
3/11/2020		5.27

	GWC-1	GWC-1
10/5/1999	5.23	
11/12/1999	5.02	
12/29/1999	4.75	
2/17/2000	4.99	
9/13/2000	4.81	
11/10/2000	4.79	
1/4/2001	4.79	
12/11/2001	4.86	
4/4/2002	5.39	
12/6/2002	4.63	
6/28/2003	4.19	
12/13/2003	5.2	
5/28/2004	4.57	
12/10/2004	4.16	
6/24/2005	4.23	
12/13/2005	4.24	
7/12/2006	4.36	
7/12/2014	3.23	
7/15/2015	4.85	
8/31/2016	5.02	
1/23/2017	5.22	
7/19/2017	5.23	
9/21/2017	5.34	
1/9/2018	5	
3/28/2018	5.08	
7/11/2018	5.07	
10/9/2018	5.1	
1/30/2019		4.81
3/28/2019		4.99
9/12/2019		4.95
3/11/2020		5.21

	GWC-2	GWC-2	
10/5/1999	6.08		
11/12/1999	5.35		
12/29/1999	5.19		
2/17/2000	5.18		
9/13/2000	5.13		
11/10/2000	5.2		
1/4/2001	5.14		
12/11/2001	4.93		
4/4/2002	5		
12/6/2002	5.02		
6/28/2003	4.92		
12/13/2003	4.82		
5/28/2004	4.6		
12/10/2004	4.29		
2/5/2005	4.43		
6/24/2005	4.56		
12/13/2005	4.34		
7/12/2006	4.38		
7/12/2014	5.68		
7/15/2015	5.22		
1/17/2016	6.07		
8/31/2016	5.49		
1/24/2017	5.25		
7/19/2017	5.54		
9/21/2017	5.19		
1/9/2018	4.97		
3/29/2018	5.15		
7/10/2018	5.37		
10/9/2018	5.04		
1/31/2019		5.38	
3/28/2019		5.38	
9/12/2019		5.14	
3/31/2020		5.64	

	GWC-4A	GWC-4A
10/5/1999	5.33	
11/12/1999	4.6	
12/29/1999	4.8	
2/17/2000	4.98	
9/13/2000	4.75	
11/10/2000	4.65	
1/4/2001	4.83	
12/11/2001	4.73	
4/4/2002	5.05	
12/6/2002	4.65 (D)	
6/28/2003	4	
12/13/2003	4.97	
5/28/2004	4.51	
12/10/2004	4.09	
6/24/2005	4.27	
12/13/2005	4.54	
7/12/2006	4.57	
7/11/2014	4.64	
7/15/2015	4.67	
8/31/2016	4.89	
1/25/2017	4.73	
7/20/2017	4.96	
9/21/2017	4.78	
1/9/2018	4.79	
3/28/2018	4.44	
7/10/2018	4.88	
10/9/2018	4.85	
1/29/2019		4.7
1/30/2019		4.52
3/28/2019		4.68
9/12/2019		4.89
3/31/2020		4.66

		GWC-4B	GWC-4B
1	0/5/1999	6.25	
1	1/12/1999	4.79	
2	/17/2000	4.78	
6	/24/2005	4.48	
1	2/13/2005	4.05	
1	/25/2017	4.5	
7	/20/2017	4.77	
9	/21/2017	4.78	
1	/9/2018	4.65	
3	/31/2020		4.63

	GWC-5	GWC-5
10/5/1999	6.13	
11/12/1999	5.81	
12/29/1999	5.43	
2/17/2000	5.49	
9/13/2000	5.05	
11/10/2000	5.48	
1/4/2001	4.99	
12/11/2001	5.52	
4/4/2002	5.5	
12/6/2002	4.58 (D)	
6/28/2003	4.32	
12/13/2003	4.73	
5/28/2004	4.5	
12/10/2004	4.28	
6/24/2005	4.56	
12/13/2005	4.49	
7/12/2006	4.8	
7/11/2014	4.83	
7/15/2015	4.66	
1/16/2016	5.05	
9/1/2016	7.21	
1/24/2017	8.32	
7/20/2017	7.41	
9/21/2017	6.94	
1/9/2018	7.39	
3/28/2018	7.31	
7/11/2018	7.09	
10/9/2018	6.68	
1/31/2019		5.69
3/28/2019		5.46
9/12/2019		5.96
3/31/2020		6.17

	GWC-6	GWC-6
10/5/1999	5.84	
11/12/1999	5.34	
12/29/1999	5.01	
2/17/2000	5.04	
9/13/2000	5.29	
11/10/2000	5.99	
1/4/2001	5.31	
12/11/2001	5.18	
4/4/2002	5.31	
12/6/2002	4.9 (D)	
6/28/2003	4.82	
12/13/2003	4.8	
5/28/2004	5.18	
12/10/2004	4.43	
2/5/2005	4.6	
6/24/2005	4.93	
12/13/2005	4.36	
7/12/2006	5.5	
7/11/2014	5.54	
7/15/2015	5.22	
1/16/2016	4.9	
9/1/2016	5	
7/19/2017	5.27	
9/21/2017	4.99	
1/9/2018	5.25	
3/28/2018	5.14	
7/10/2018	5.13	
10/9/2018	4.93	
1/30/2019		4.52
1/31/2019		4.52
3/28/2019		4.85
9/12/2019		4.96

	GWA-1A	GWA-1A
9/1/2016	<1	
2/28/2017	2.7	
7/17/2017	<1	
9/20/2017	<1	
1/8/2018	<1	
3/27/2018	<1	
7/10/2018	<1	
10/8/2018	<1	
1/30/2019		1.2
3/27/2019		<1
9/11/2019		<1
3/10/2020		1.5

	GWA-2A	GWA-2A
9/1/2016	<1	
1/18/2017	<1	
2/28/2017	1.7	
7/18/2017	<1	
9/20/2017	<1	
1/8/2018	<1	
3/27/2018	<1	
7/10/2018	<1	
10/8/2018	<1	
1/30/2019		<1
3/27/2019		<1
9/11/2019		<1
3/10/2020		2.3

	GWA-3A	GWA-3A
8/31/2016	<1	
	·	
1/19/2017	<1	
7/18/2017	<1	
9/20/2017	<1	
1/9/2018	<1	
3/27/2018	<1	
7/10/2018	<1	
10/9/2018	<1	
1/30/2019		0.41 (J)
3/28/2019		0.44 (J)
9/12/2019		0.69 (J)
3/10/2020		3
4/2/2020		<1

	GWA-3B	GWA-3B
8/31/2016	6.3	
1/23/2017	9.7	
7/18/2017	7.1	
9/20/2017	8.8	
1/9/2018	9.8	
3/28/2018	11	
7/10/2018	3	
10/8/2018	1.9	
1/30/2019		7.2
3/28/2019		7.9
9/12/2019		1.5
3/11/2020		7.3

	GWA-4	GWA-4
8/31/2016	7	
1/19/2017	6.3	
7/18/2017	4.7	
9/21/2017	4.5	
1/9/2018	3	
3/27/2018	3.8	
7/10/2018	3.4	
10/8/2018	3.4	
1/30/2019		3.5
3/28/2019		3
9/12/2019		3.7
3/10/2020		7.2

	GWA-5	GWA-5
8/31/2016	21	
1/19/2017	11	
7/19/2017	12	
9/21/2017	15	
1/9/2018	25	
3/27/2018	31	
7/10/2018	19	
10/8/2018	17	
1/30/2019		15
3/27/2019		20
9/12/2019		10
3/10/2020		15

	GWA-7	GWA-7
8/30/2016	<1	
1/19/2017	<1	
7/19/2017	<1	
9/20/2017	<1	
1/10/2018	<1	
3/28/2018	<1	
7/10/2018	<1	
10/9/2018	<1	
1/30/2019		<1
3/28/2019		<1
9/12/2019		0.5 (J)
3/11/2020		0.97 (J)

	GWC-1	GWC-1
8/31/2016	<1	
1/23/2017	<1	
7/19/2017	<1	
9/21/2017	<1	
1/9/2018	<1	
3/28/2018	<1	
7/11/2018	<1	
10/9/2018	<1	
1/30/2019		0.58 (J)
3/28/2019		0.67 (J)
9/12/2019		0.78 (J)
3/11/2020		3.5

	GWC-2	GWC-2
8/31/2016	<1	
1/24/2017	<1	
7/19/2017	<1	
9/21/2017	<1	
1/9/2018	<1	
3/29/2018	<1	
7/10/2018	<1	
10/9/2018	<1	
1/31/2019		0.57 (J)
3/28/2019		<1
9/12/2019		0.43 (J)
3/31/2020		1

	GWC-4A	GWC-4A
8/31/2016	1.7	
1/25/2017	1.8	
7/20/2017	0.83 (J)	
9/21/2017	1.1	
1/9/2018	0.79 (J)	
3/28/2018	0.79 (J)	
7/10/2018	0.76 (J)	
10/9/2018	<1	
1/30/2019		0.9 (J)
3/28/2019		1.1
9/12/2019		1.1
3/31/2020		2.5

	GWC-4B	GWC-4B
9/1/2016	0.78 (J)	
1/25/2017	11	
7/20/2017	1.5	
9/21/2017	4.3	
1/9/2018	0.81 (J)	
3/31/2020		1.9

	GWC-5	GWC-5
9/1/2016	110	
1/24/2017	67	
7/20/2017	25	
9/21/2017	19	
1/10/2018	25	
3/28/2018	26	
7/11/2018	26	
10/9/2018	10	
1/31/2019		4.8
3/28/2019		3
9/12/2019		4.9
3/31/2020		11

	GWC-6	GWC-6
1/27/2017	1.2	
7/20/2017	0.84 (J)	
9/22/2017	1.1	
1/10/2018	0.95 (J)	
3/29/2018	0.78 (J)	
7/11/2018	0.78 (J)	
10/9/2018	0.79 (J)	
1/31/2019		0.86 (J)
3/28/2019		0.96 (J)
9/12/2019		1
3/11/2020		2.2

	GWA-1A	GWA-1A
9/1/2016	2200 (o)	
2/28/2017	74 (D)	
7/17/2017	50	
9/20/2017	26	
1/8/2018	16	
3/27/2018	40	
7/10/2018	90	
10/8/2018	70	
1/30/2019		82
3/27/2019		66
9/11/2019		53
3/10/2020		67

	GWA-2A	GWA-2A
9/1/2016	180	
1/18/2017	74 (D)	
2/28/2017	84 (D)	
7/18/2017	62	
9/20/2017	44	
1/8/2018	24	
3/27/2018	36	
7/10/2018	58	
10/8/2018	80	
1/30/2019		68
3/27/2019		75
9/11/2019		74
3/10/2020		68

	GWA-3A	GWA-3A
8/31/2016	42 (D)	
1/19/2017	52 (D)	
7/18/2017	32	
9/20/2017	16	
1/9/2018	4 (J)	
3/27/2018	30	
7/10/2018	30	
10/9/2018	56	
1/30/2019		41
3/28/2019		36
9/12/2019		<10
3/10/2020		49
4/2/2020		61

	GWA-3B	GWA-3B
8/31/2016	60 (D)	
1/23/2017	48 (D)	
7/18/2017	36	
9/20/2017	56	
1/9/2018	12	
3/28/2018	34	
7/10/2018	58	
10/8/2018	30	
1/30/2019		53
3/28/2019		55
9/12/2019		34
3/11/2020		43

	GWA-4	GWA-4
8/31/2016	14 (D)	
1/19/2017	34 (D)	
7/18/2017	26	
9/21/2017	24	
1/9/2018	16	
3/27/2018	<5	
7/10/2018	14	
10/8/2018	36	
1/30/2019		40
3/28/2019		24
9/12/2019		10
3/10/2020		39

	GWA-5	GWA-5
8/31/2016	66 (D)	
1/19/2017	48 (D)	
7/19/2017	48	
9/21/2017	76	
1/9/2018	18	
3/27/2018	48	
7/10/2018	76	
10/8/2018	8	
1/30/2019		67
3/27/2019		70
9/12/2019		20
3/10/2020		67

	GWA-7	GWA-7
8/30/2016	74 (D)	
1/19/2017	86 (D)	
7/19/2017	68	
9/20/2017	70	
1/10/2018	64	
3/28/2018	36	
7/10/2018	88	
10/9/2018	72	
1/30/2019		130
3/28/2019		56
9/12/2019		14
3/11/2020		76

	GWC-1	GWC-1
8/31/2016	18 (D)	
1/23/2017	22 (D)	
7/19/2017	52	
9/21/2017	38	
1/9/2018	4 (J)	
3/28/2018	4 (J)	
7/11/2018	32	
10/9/2018	22	
1/30/2019		24
3/28/2019		25
9/12/2019		29
3/11/2020		37

	GWC-2	GWC-2
8/31/2016	42 (D)	
1/24/2017	28 (D)	
7/19/2017	42	
9/21/2017	46	
1/9/2018	10	
3/29/2018	52	
7/10/2018	38	
10/9/2018	52	
1/31/2019		45
3/28/2019		45
9/12/2019		28
3/31/2020		50

	GWC-4A	GWC-4A
8/31/2016	36 (D)	
1/25/2017	58 (D)	
7/20/2017	16	
9/21/2017	24	
1/9/2018	8	
3/28/2018	26	
7/10/2018	26	
10/9/2018	16	
1/30/2019		37
3/28/2019		28
9/12/2019		<10
3/31/2020		52

	GWC-4B	GWC-4B
9/1/2016	56 (D)	
1/25/2017	100 (D)	
7/20/2017	60	
9/21/2017	160	
1/9/2018	<5	
3/31/2020		85

	GWC-5	GWC-5
9/1/2016	500 (D)	
1/24/2017	160 (D)	
7/20/2017	210	
9/21/2017	280	
1/10/2018	94	
3/28/2018	60	
7/11/2018	290	
10/9/2018	44	
1/31/2019		180
3/28/2019		110
9/12/2019		110
3/31/2020		750

	GWC-6	GWC-6
1/27/2017	58 (D)	
7/20/2017	64	
9/22/2017	66	
1/10/2018	54	
3/29/2018	78	
7/11/2018	78	
10/9/2018	70	
1/31/2019		84
3/28/2019		62
9/12/2019		80
3/11/2020		67

FIGURE E.

Interwell Prediction Limits - All Results (Federal - No Significant)

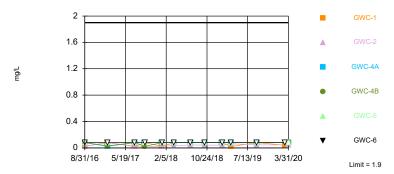
	ı	Plant McIntosh	Client: S	outhern Comp	pany Dat	a: McIn	tosh	LF 3 CCR	Printed 6/	15/2020	, 10:25 AM			
Constituent	Well	Upper Lim	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg 1	N Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Boron (mg/L)	GWC-1	1.9	n/a	3/11/2020	0.04J	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Boron (mg/L)	GWC-2	1.9	n/a	3/31/2020	0.046J	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Boron (mg/L)	GWC-4A	1.9	n/a	3/31/2020	0.08ND	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Boron (mg/L)	GWC-4B	1.9	n/a	3/31/2020	0.08ND	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Boron (mg/L)	GWC-5	1.9	n/a	3/31/2020	0.08ND	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Boron (mg/L)	GWC-6	1.9	n/a	3/11/2020	0.08ND	No	96	n/a	n/a	62.5	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Calcium (mg/L)	GWC-1	20	n/a	3/11/2020	1.6	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Calcium (mg/L)	GWC-2	20	n/a	3/31/2020	8.3	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Calcium (mg/L)	GWC-4A	20	n/a	3/31/2020	0.48J	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Calcium (mg/L)	GWC-4B	20	n/a	3/31/2020	0.26J	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Calcium (mg/L)	GWC-5	20	n/a	3/31/2020	12	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Calcium (mg/L)	GWC-6	20	n/a	3/11/2020	1.7	No	95	n/a	n/a	0	n/a	n/a	0.000215	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-1	0.21	n/a	3/11/2020	0.1ND	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-2	0.21	n/a	3/31/2020	0.043J	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-4A	0.21	n/a	3/31/2020	0.028J	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-4B	0.21	n/a	3/31/2020	0.1ND	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-5	0.21	n/a	3/31/2020	0.16	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-6	0.21	n/a	3/11/2020	0.1ND	No	96	n/a	n/a	73.96	n/a	n/a	0.0002106	NP (NDs) 1 of 2

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit Prediction Limit

Interwell Non-parametric



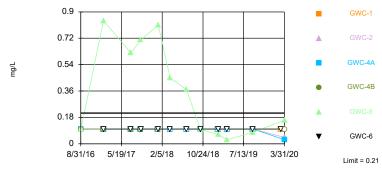
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 96 background values. 62.5% NDs. Annual per-constituent alpha = 0.002944. Individual comparison alpha = 0.0002106 (1 of 2). Comparing 6 points to limit. Assumes 1 future value.

Constituent: Boron Analysis Run 6/15/2020 10:21 AM View: PL's Federal Interwell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interwell Non-parametric



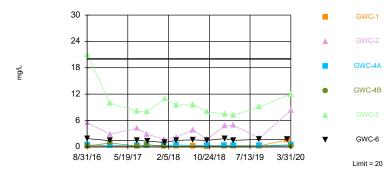
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 96 background values. 73.96% NDs. Annual per-constituent alpha = 0.002944. Individual comparison alpha = 0.0002106 (1 of 2). Comparing 6 points to limit. Assumes 1 future value.

Constituent: Fluoride Analysis Run 6/15/2020 10:21 AM View: PL's Federal Interwell
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by 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 95 background values. Annual per-constituent alpha = 0.003006. Individual comparison alpha = 0.00215 (1 of 2). Comparing 6 points to limit. Assumes 1 future value.

	GWA-7 (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWC-4A	GWC-2	GWC-1	GWA-5 (bg)	GWA-2A (bg)
8/30/2016	0.024 (J)								
8/31/2016		<0.08	0.029 (J)	<0.08	<0.08	0.023 (J)	0.023 (J)	0.073	
9/1/2016									<0.08
1/18/2017									<0.08
1/19/2017	<0.08	<0.08		0.027 (J)				0.036 (J)	
1/23/2017			<0.08				<0.08		
1/24/2017						<0.08			
1/25/2017					0.023 (J)				
1/27/2017									
2/28/2017									<0.08
7/17/2017									
7/18/2017		<0.08	0.045 (J)	<0.08					<0.08
7/19/2017	<0.08					0.026 (J)	0.021 (J)	0.07	
7/20/2017					<0.08				
9/20/2017	<0.08	<0.08	<0.08						<0.08
9/21/2017				<0.08	<0.08	0.025 (J)	<0.08	0.07	
9/22/2017									
1/8/2018									<0.08
1/9/2018		<0.08	0.026 (J)	<0.08	<0.08	0.023 (J)	0.025 (J)	0.042 (J)	
1/10/2018	<0.08								
3/27/2018		<0.08		<0.08				0.037 (J)	<0.08
3/28/2018	<0.08		0.021 (J)		<0.08		<0.08		
3/29/2018						0.035 (J)			
7/10/2018	<0.08	<0.08	<0.08	<0.08	<0.08	0.044 (J)		0.042 (J)	<0.08
7/11/2018							<0.08		
10/8/2018			0.024 (J)	<0.08				0.044 (J)	<0.08
10/9/2018	<0.08	<0.08			<0.08	0.043 (J)	<0.08		
1/30/2019	<0.08	<0.08	0.041 (J)	<0.08	<0.08		<0.08	0.03 (J)	<0.08
1/31/2019						0.04 (J)			
3/27/2019								0.036 (J)	<0.08
3/28/2019	<0.08	0.024 (J)	0.027 (J)	<0.08	<0.08	0.062	0.021 (J)		
9/11/2019									<0.08
9/12/2019	<0.08	<0.08	<0.08	<0.08	<0.08	0.045 (J)	<0.08	0.048 (J)	
3/10/2020		0.059 (J)		<0.08				0.066 (J)	<0.08
3/11/2020	0.055 (J)		<0.08				0.04 (J)		
3/31/2020					<0.08	0.046 (J)			
4/2/2020		0.084							

	GW	/A-1A (bg)	GWC-4B	GWC-5	GWC-6	GWA-2B (bg)	GWA-7A (bg)
8/30/201							
8/31/201	16						
9/1/2016	0.0	29 (J)	<0.08	<0.08	<0.08		
1/18/201	17						
1/19/201	17						
1/23/201	17						
1/24/201	17			<0.08			
1/25/201	17		0.03 (J)				
1/27/201	17				<0.08		
2/28/201	17 <0.	08					
7/17/201	17 <0.	08					
7/18/201	17						
7/19/201	17						
7/20/201			<0.08	<0.08	<0.08		
9/20/201	· 7 < 0.	08					
9/21/201	17		0.024 (J)	<0.08			
9/22/201	17				<0.08		
1/8/2018	3 <0.	08					
1/9/2018			<0.08				
1/10/201	8			<0.08	<0.08		
3/27/201	8 <0.	08					
3/28/201	8			<0.08			
3/29/201	8				<0.08		
7/10/201	8 <0.	08					
7/11/201				<0.08	<0.08		
10/8/201		08				0.76	1.3
10/9/201				<0.08	<0.08		
1/30/201		08				0.77	1.5
1/31/201				<0.08	<0.08		
3/27/201		08					
3/28/201				<0.08	<0.08	0.83	1.4
9/11/201	9 <0.	08					
9/12/201	9			<0.08	<0.08		1.6
3/10/202		08				0.64	
3/11/202	20				<0.08		1.9
3/31/202	20		<0.08	<0.08			
4/2/2020)						

	GWA-7 (bg)	GWA-3A (bg)	GWA-3B (bg)	GWA-4 (bg)	GWA-5 (bg)	GWC-1	GWC-2	GWC-4A	GWA-2A (bg)
8/30/2016	1.4								
8/31/2016		1.5	2.7	0.88	3.7	0.22 (J)	5.5	0.42	
9/1/2016									4
1/18/2017									3.3
1/19/2017	1.3	1.8		1.1	2				
1/23/2017			3.7			1.3 (o)			
1/24/2017							2.9		
1/25/2017								0.37	
1/27/2017									
2/28/2017									3.8
7/17/2017									
7/18/2017		1.7	2.8	0.86					3.1
7/19/2017	0.95				2.6	0.19 (J)	4.2		
7/20/2017								0.29	
9/20/2017	0.97	1.7	2.7						3.2
9/21/2017				0.9	2.7	0.3	2.9	0.3	
9/22/2017									
1/8/2018									3.4
1/9/2018		1.9	2.5	1	4.1	0.16 (J)	1.7	0.38	
1/10/2018	1.2								
3/27/2018		1.9		0.89	4.8				3.5
3/28/2018	1.2		2.2			0.14 (J)		0.44	
3/29/2018							2.2		
7/10/2018	1.4	1.9	1.6	0.99	3.7		3.9	2 (0)	3.4
7/11/2018						0.18 (J)			
10/8/2018			1.6	1.1	3.2				3.7
10/9/2018	0.91	2.2				0.13 (J)	1.7	0.34	
1/30/2019	2	2.4	3.6	1	1.7	0.24 (J)		0.34	3.5
1/31/2019							4.8		
3/27/2019					3.1				3.4
3/28/2019	1.5	2.4	4.4	0.98		0.15 (J)	4.9	0.3	
9/11/2019									3.3
9/12/2019	0.83	2.3	3.2	0.84	1.9	<0.5 (D)	2	0.3 (J)	0.4
3/10/2020 3/11/2020	0.00	2.8	4.4	1.1	2.9	1.6			3.4
	0.88		4.4			1.6	0.2	0.49 (1)	
3/31/2020 4/2/2020		2					8.3	0.48 (J)	
4/2/2020		3							

·	GWC-4B	GWC-5	GWC-6	GWA-1A (bg)	GWA-7A (bg)	GWA-2B (bg)	
8/30/2016							
8/31/2016							
9/1/2016	0.16 (J)	21	1.9	26 (o)			
1/18/2017							
1/19/2017							
1/23/2017							
1/24/2017		10					
1/25/2017	0.89						
1/27/2017			1.4				
2/28/2017				2.7			
7/17/2017				1.7			
7/18/2017							
7/19/2017							
7/20/2017	0.17 (J)	8.1	1.5				
9/20/2017				1.5			
9/21/2017	0.49	8					
9/22/2017			1.3				
1/8/2018				1.7			
1/9/2018	0.17 (J)						
1/10/2018		11	1				
3/27/2018				1.7			
3/28/2018		9.5					
3/29/2018			1.5				
7/10/2018				1.7			
7/11/2018		9.6	1.6				
10/8/2018				1.6	17	17	
10/9/2018		8	1.5				
1/30/2019				1.9	15	16	
1/31/2019		7.5	1.9				
3/27/2019				1.6			
3/28/2019		7.2	1.5		18	16	
9/11/2019				1.6			
9/12/2019		9.1	1.7		19	15	
3/10/2020				2		14	
3/11/2020			1.7		20		
3/31/2020	0.26 (J)	12					
4/2/2020							

	GWA-7 (bg)	GWC-4A	GWC-2	GWC-1	GWA-5 (bg)	GWA-4 (bg)	GWA-3B (bg)	GWA-3A (bg)	GWA-1A (bg)
8/30/2016	<0.1								
8/31/2016		<0.1	<0.1	<0.1	0.13 (J)	<0.1	<0.1	<0.1	
9/1/2016									<0.1
1/18/2017									
1/19/2017	<0.1				<0.1	0.089 (J)		<0.1	
1/23/2017				<0.1			<0.1		
1/24/2017			<0.1						
1/25/2017		<0.1							
1/27/2017									
2/28/2017									0.098 (J)
7/17/2017									<0.1
7/18/2017						<0.1	<0.1	<0.1	
7/19/2017	<0.1		<0.1	<0.1	<0.1				
7/20/2017		<0.1							
9/20/2017	<0.1						0.086 (J)	<0.1	<0.1
9/21/2017		<0.1	<0.1	<0.1	0.13 (J)	<0.1			
9/22/2017									
1/8/2018									<0.1
1/9/2018		<0.1	<0.1	<0.1	0.13 (J)	<0.1	<0.1	<0.1	
1/10/2018	<0.1								
3/27/2018					0.21	<0.1		<0.1	<0.1
3/28/2018	<0.1	<0.1		<0.1			<0.1		
3/29/2018			<0.1						
7/10/2018	<0.1	<0.1	<0.1		0.17 (J)	<0.1	<0.1	<0.1	<0.1
7/11/2018				<0.1					
10/8/2018					0.11 (J)	<0.1	<0.1		<0.1
10/9/2018	<0.1	<0.1	<0.1	<0.1				<0.1	
1/30/2019	<0.1	<0.1		<0.1	0.089 (J)	0.029 (J)	0.052 (J)	<0.1	<0.1
1/31/2019			<0.1						
3/27/2019					0.1 (J)				<0.1
3/28/2019	<0.1	<0.1	<0.1	<0.1		<0.1	0.038 (J)	<0.1	
9/11/2019									<0.1
9/12/2019	0.026 (J)	<0.1	<0.1	<0.1	0.052 (J)	0.035 (J)	0.05 (J)	<0.1	
3/10/2020	-0.4			-0.4	0.051 (J)	0.066 (J)	0.007 (1)	0.026 (J)	<0.1
3/11/2020	<0.1	0.000 (1)	0.042 (1)	<0.1			0.037 (J)		
3/31/2020		0.028 (J)	0.043 (J)					0.054 (1)	
4/2/2020								0.051 (J)	

	GWC-5	GWC-4B	GWA-2A (bg)	GWC-6	GWA-2B (bg)	GWA-7A (bg)
8/30/2016						
8/31/2016						
9/1/2016	<0.1	<0.1	<0.1			
1/18/2017			<0.1			
1/19/2017						
1/23/2017						
1/24/2017	0.84					
1/25/2017		<0.1				
1/27/2017				<0.1		
2/28/2017			0.098 (J)			
7/17/2017						
7/18/2017			<0.1			
7/19/2017						
7/20/2017	0.62	<0.1		<0.1		
9/20/2017			<0.1			
9/21/2017	0.71	<0.1				
9/22/2017				<0.1		
1/8/2018			<0.1			
1/9/2018		<0.1				
1/10/2018	0.81			<0.1		
3/27/2018			<0.1			
3/28/2018	0.45					
3/29/2018				<0.1		
7/10/2018			<0.1			
7/11/2018	0.37			<0.1		
10/8/2018			<0.1		<0.1	<0.1
10/9/2018	0.098 (J)			<0.1		
1/30/2019			<0.1		<0.1	<0.1
1/31/2019	0.063 (J)			<0.1		
3/27/2019			<0.1			
3/28/2019	0.027 (J)			<0.1	<0.1	<0.1
9/11/2019			<0.1			
9/12/2019	0.078 (J)			<0.1	0.036 (J)	<0.1
3/10/2020			<0.1		<0.1	
3/11/2020				<0.1		<0.1
3/31/2020	0.16	<0.1				
4/2/2020						

FIGURE F.

Trend Test Summary - Significant Results (Federal)

 Plant McIntosh
 Client: Southern Company
 Data: McIntosh LF 3 CR
 Printed 6/15/2020, 10:32 AM

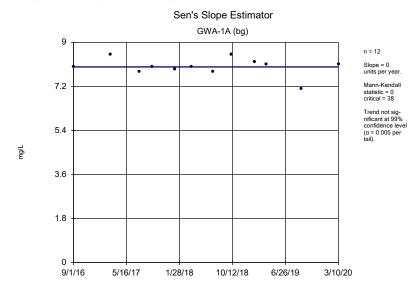
 Constituent
 Well
 Slope
 Calc.
 Critical
 Sig.
 N
 %NDs
 Normality
 Xform
 Alpha
 Method

 Chloride (mg/L)
 GWA-3A (bg)
 4.108
 77
 43
 Yes
 13
 0
 n/a
 n/a
 0.01
 NP

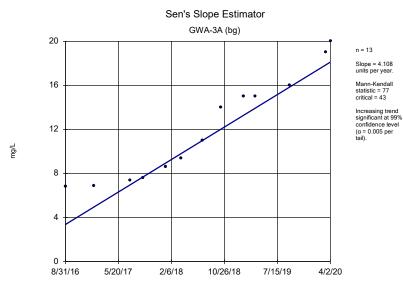
 Chloride (mg/L)
 GWA-4 (bg)
 0.809
 41
 38
 Yes
 12
 0
 n/a
 n/a
 0.01
 NP

Trend Test Summary - All Results (Federal)

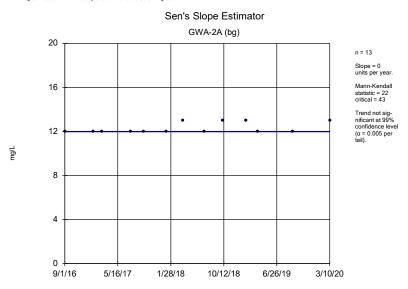
	Plant McIntosh Client: S	Client: Southern Company		Data: McIntosh LF 3 CCR			/2020, 10):32 AM			
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Chloride (mg/L)	GWA-1A (bg)	0	0	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2A (bg)	0	22	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-3A (bg)	4.108	77	43	Yes	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-3B (bg)	0.9691	14	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-4 (bg)	0.809	41	38	Yes	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-5 (bg)	1.123	11	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-7 (bg)	-0.3608	-34	-38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-7A (bg)	0.0351	1	12	No	5	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-1A (bg)	0	6	38	No	12	75	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2A (bg)	0	5	43	No	13	84.62	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-3A (bg)	0	-8	-43	No	13	69.23	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-3B (bg)	-0.7969	-10	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-4 (bg)	-0.8258	-20	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-5 (bg)	-0.3835	-5	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-7 (bg)	0	-19	-38	No	12	83.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-7A (bg)	21.91	5	12	No	5	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-1	0	-10	-38	No	12	66.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-2	0	-15	-38	No	12	75	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-4A	0.02285	4	38	No	12	8.333	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-6	0.02992	8	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-1A (bg)	6.417	7	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-2A (bg)	-2.719	-8	-43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-3A (bg)	3.092	11	43	No	13	7.692	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-3B (bg)	-2.073	-11	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-4 (bg)	1.532	6	38	No	12	8.333	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-5 (bg)	0	1	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-7 (bg)	-6.693	-8	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-7A (bg)	-10.67	-3	-12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWC-5	-26.48	-7	-38	No	12	0	n/a	n/a	0.01	NP



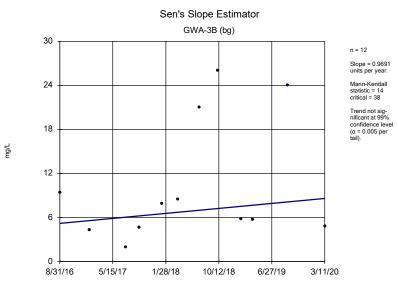
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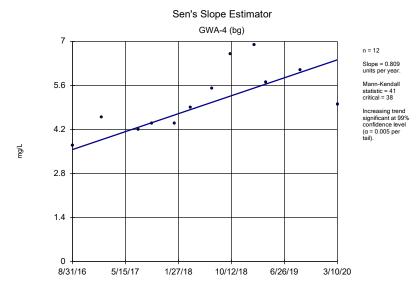
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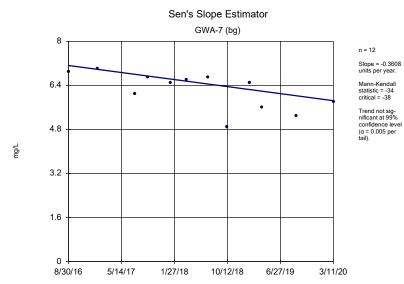
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Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



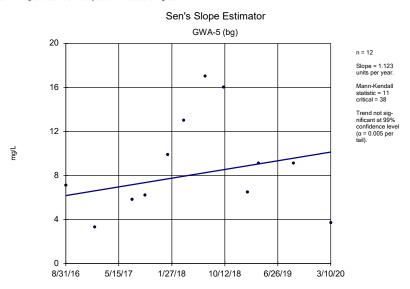
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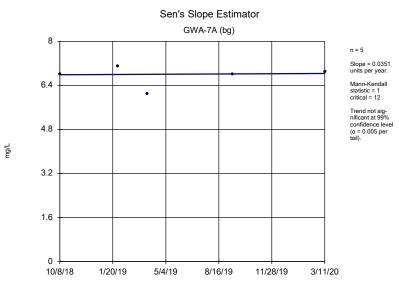
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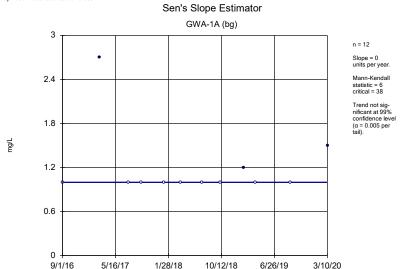


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Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



Constituent: Chloride Analysis Run 6/15/2020 10:30 AM View: Trend Tests - Federal Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

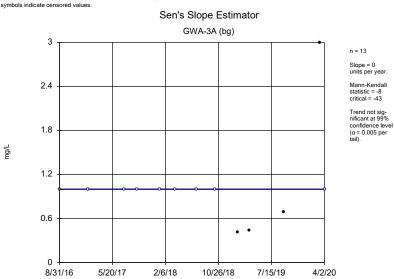
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Constituent: Sulfate Analysis Run 6/15/2020 10:30 AM View: Trend Tests - Federal Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

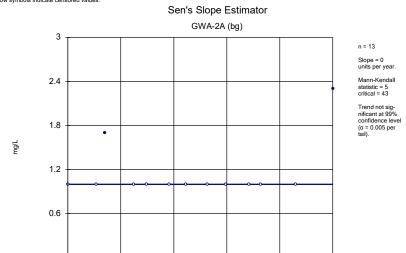
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Hollow symbols indicate censored values.



Constituent: Sulfate Analysis Run 6/15/2020 10:30 AM View: Trend Tests - Federal Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

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1/28/18

10/12/18

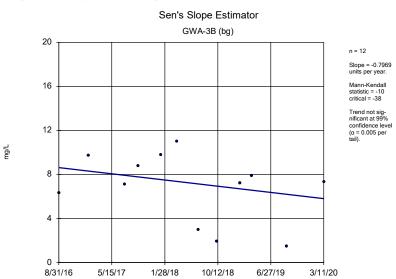
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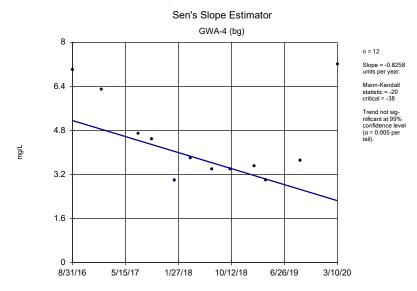
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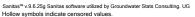
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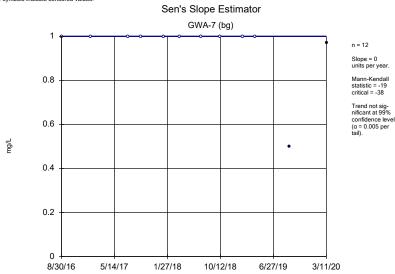


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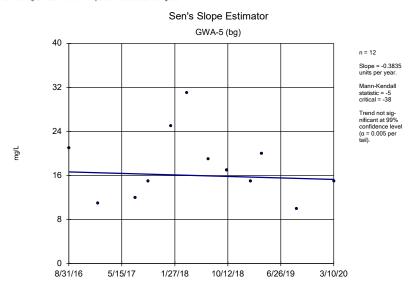


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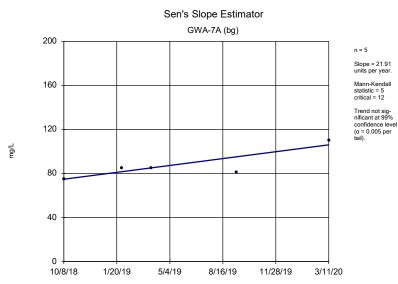




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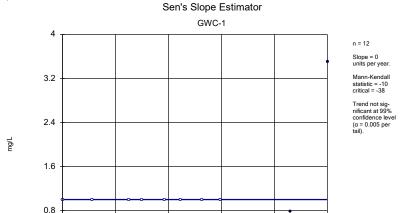


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Constituent: Sulfate Analysis Run 6/15/2020 10:30 AM View: Trend Tests - Federal
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

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Constituent: Sulfate Analysis Run 6/15/2020 10:30 AM View: Trend Tests - Federal Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

10/12/18

6/27/19

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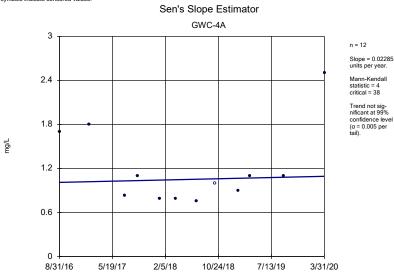
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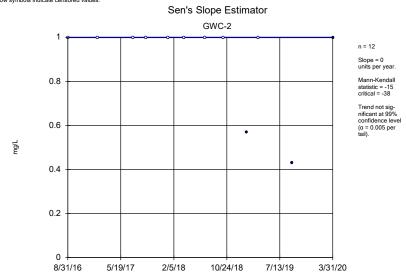
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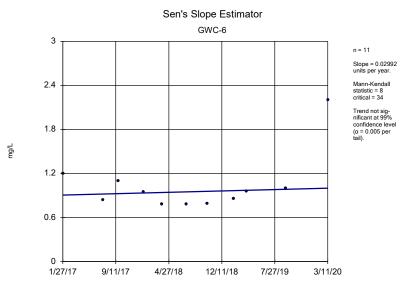


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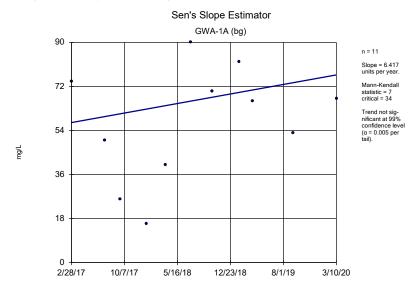
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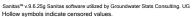
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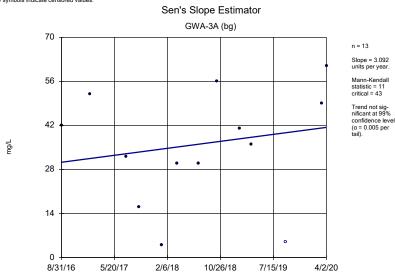


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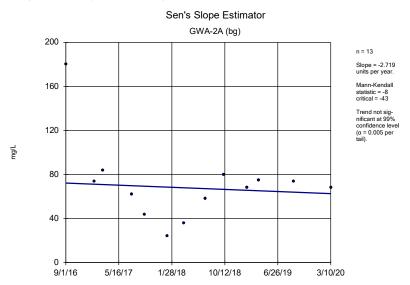


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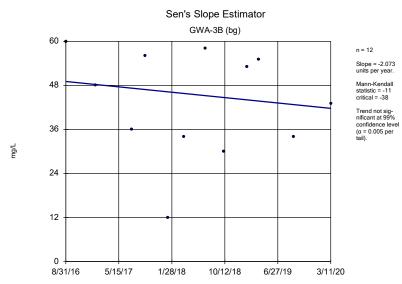




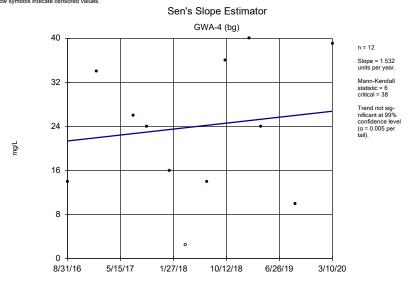
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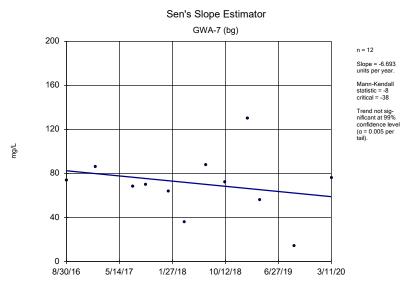


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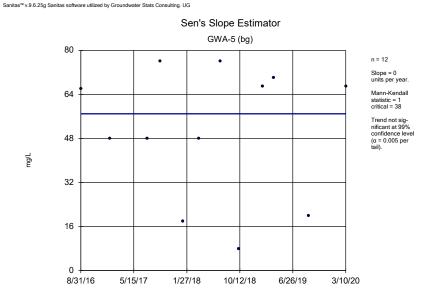


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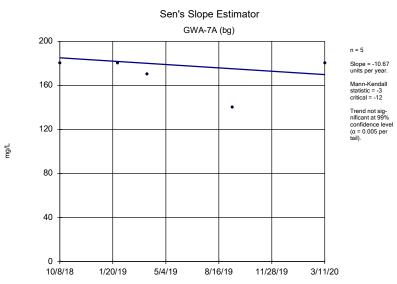




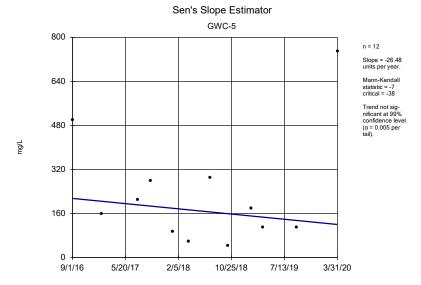
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Constituent: Total Dissolved Solids Analysis Run 6/15/2020 10:30 AM View: Trend Tests - Federal Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



Constituent: Total Dissolved Solids Analysis Run 6/15/2020 10:30 AM View: Trend Tests - Federal Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



Constituent: Total Dissolved Solids Analysis Run 6/15/2020 10:30 AM View: Trend Tests - Federal Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

FIGURE G.

Intrawell Prediction Limits - Significant Results (State) Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 6/15/2020, 10:58 AM

	Pla	Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR						Printed 6/15/2020, 10:58 AM						
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	<u> Bg Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Barium (mg/L)	GWA-3A	0.0585	n/a	4/2/2020	0.088	Yes	44	0.04428	0.007109	0	None	No	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWA-4	0.05527	n/a	3/10/2020	0.058	Yes	45	0.03687	0.009212	0	None	No	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWC-5	0.6372	n/a	3/31/2020	0.67	Yes	44	-1.326	0.4377	0	None	In(x)	0.0009403	Param Intra 1 of 2
Chromium (mg/L)	GWC-2	0.004717	n/a	3/31/2020	0.005	Yes	41	0.04977	0.009395	24.39	Kaplan-Meier	sqrt(x)	0.0009403	Param Intra 1 of 2
Lead (mg/L)	GWA-5	0.0013	n/a	3/10/2020	0.0022	Yes	44	n/a	n/a	84.09	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-5	0.0082	n/a	3/10/2020	0.01	Yes	39	n/a	n/a	82.05	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2

Intrawell Prediction Limits - All Results (State) Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 6/15/2020, 10:58 AM

	F	Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR					Printed 6/15/2020, 10:58 AM						
Constituent	Well	Upper Lim. Lower	Lim. Date	Observ.	Sig.	Bg	N Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Barium (mg/L)	GWA-1A	0.2 n/a	3/10/2020	0.018	No	44	n/a	n/a	0	n/a	n/a	0.0009963	NP Intra (normality) 1 of 2
Barium (mg/L)	GWA-2A	0.17 n/a	3/10/2020	0.044	No	43	n/a	n/a	0	n/a	n/a	0.001037	NP Intra (normality) 1 of 2
Barium (mg/L)	GWA-3A	0.0585 n/a	4/2/2020	0.088	Yes	44	0.04428	0.007109	0	None	No	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWA-3B	0.1148 n/a	3/11/2020	0.035	No	32	0.073	0.02027	0	None	No	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWA-4	0.05527 n/a	3/10/2020	0.058	Yes	45	0.03687	0.009212	0	None	No	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWA-5	0.1839 n/a	3/10/2020	0.081	No	44	0.09875	0.04255	0	None	No	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWA-7	0.3 n/a	3/11/2020	0.014	No	44	n/a	n/a	0	n/a	n/a	0.0009963	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-1	0.1207 n/a	3/11/2020	0.027	No	28	0.2055	0.06778	0	None	sqrt(x)	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWC-2	0.08854 n/a	3/31/2020	0.077	No	45	0.0647	0.01194	0	None	No	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWC-4A	0.0866 n/a	3/31/2020	0.036	No	45	0.05131	0.01767	0	None	No	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWC-4B	0.08148 n/a	3/31/2020	0.052	No	11	0.03638	0.01738	0	None	No	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWC-5	0.6372 n/a	3/31/2020	0.67	Yes	44	-1.326	0.4377	0	None	In(x)	0.0009403	Param Intra 1 of 2
Barium (mg/L)	GWC-6	0.075 n/a	3/11/2020	0.048	No	43	n/a	n/a	0	n/a	n/a	0.001037	NP Intra (normality) 1 of 2
Beryllium (mg/L)	GWA-1A	0.0028 n/a	3/10/2020	0.00018J	No	44	n/a	n/a	86.36	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-2A	0.0037 n/a	3/10/2020	0.00035J	No	43	n/a	n/a	83.72	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-3A	0.0025 n/a	4/2/2020	0.00062J	No	45	n/a	n/a	80	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-3B	0.0025 n/a	3/11/2020	0.0025NE) No	34	n/a	n/a	88.24	n/a	n/a	0.001599	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-4	0.0023 n/a	3/10/2020	0.00029J	No	45	n/a	n/a	88.89	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-5	0.0036 n/a	3/10/2020	0.00028J	No	45	n/a	n/a	80	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-7	0.0041 n/a	3/11/2020	0.0025NE) No	43	n/a	n/a	81.4	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-1	0.0025 n/a	3/11/2020	0.0025NE) No	45	n/a	n/a	95.56	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-2	0.0025 n/a	3/31/2020	0.0025NE) No	45	n/a	n/a	86.67	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-4A	0.0025 n/a	3/31/2020	0.0025NE) No	45	n/a	n/a	93.33	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-4B	0.0025 n/a	3/31/2020	0.0025NE) No	11	n/a	n/a	100	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-5	0.0029 n/a	3/31/2020	0.0006J	No	45	n/a	n/a	73.33	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-6	0.0025 n/a	3/11/2020	0.0003J	No	44	n/a	n/a	86.36	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-1A	0.02598 n/a	3/10/2020	0.0041	No	39	0.08981	0.0353	12.82	None	sqrt(x)	0.0009403	Param Intra 1 of 2
Chromium (mg/L)	GWA-2A	0.023 n/a	3/10/2020	0.0028	No	42	n/a	n/a	52.38	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-3A	0.0059 n/a	4/2/2020	0.0031	No	45	n/a	n/a	37.78	n/a	n/a	0.0009557	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWA-3B	0.0041 n/a	3/11/2020	0.0017J	No	32	n/a	n/a	75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-4	0.0087 n/a	3/10/2020	0.002ND	No	44	n/a	n/a	81.82	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-5	0.0067 n/a	3/10/2020	0.0031	No	44	n/a	n/a	52.27	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-7	0.01056 n/a	3/11/2020	0.0053	No	28	0.0062	0.002083	3.571	None	No	0.0009403	Param Intra 1 of 2
Chromium (mg/L)	GWC-1	0.002 n/a	3/11/2020	0.002ND	No	44	n/a	n/a	97.73	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-2	0.004717 n/a	3/31/2020	0.005	Yes	41	0.04977	0.009395	24.39	Kaplan-Meier	sqrt(x)	0.0009403	Param Intra 1 of 2
Chromium (mg/L)	GWC-4A	0.0029 n/a	3/31/2020	0.002ND	No	43	n/a	n/a	95.35	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-4B	0.002 n/a	3/31/2020	0.002ND	No	11	n/a	n/a	100	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-5	0.0025 n/a	3/31/2020	0.002ND	No	42	n/a	n/a	90.48	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-6	0.0025 n/a	3/11/2020	0.002ND	No	41	n/a	n/a	87.8	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-1A	0.012 n/a	3/10/2020	0.00028J	No	44	n/a	n/a	77.27	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-2A	0.0028 n/a	3/10/2020	0.00044J	No	42	n/a	n/a	71.43	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-3A	0.0025 n/a	4/2/2020	0.0017J	No	45	n/a	n/a	73.33	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-3B	0.0025 n/a	3/11/2020	0.00038J	No	32	n/a	n/a	75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-4	0.0025 n/a	3/10/2020	0.0009	No	45	n/a	n/a	75.56	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-5	0.0072 n/a	3/10/2020	0.00099	No	44	n/a	n/a	43.18	n/a	n/a	0.0009963	NP Intra (normality) 1 of 2
Cobalt (mg/L)	GWA-7	0.017 n/a	3/11/2020	0.00033J	No	44	n/a	n/a	81.82	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-1	0.0025 n/a	3/11/2020	0.00026J	No	44	n/a	n/a	100	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-2	0.01 n/a	3/31/2020	0.00061J	No	45	n/a	n/a	71.11	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-4A	0.0025 n/a	3/31/2020	0.00033J	No	45	n/a	n/a	77.78	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-4B	0.0025 n/a	3/31/2020	0.00028J	No	11	n/a	n/a	81.82	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2

Intrawell Prediction Limits - All Results (State) Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 6/15/2020, 10:58 AM

	Pi	ant McIntosh	Client: So	outhern Comp	oany Data	a: McIn	itosh l	_F 3 CCR	Printed 6/	15/2020), 10:58 AM			
Constituent	Well	Upper Lim. L	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	<u> Bg Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Cobalt (mg/L)	GWC-5	0.012 r	n/a	3/31/2020	0.012	No	45	n/a	n/a	26.67	n/a	n/a	0.0009557	NP Intra (normality) 1 of 2
Cobalt (mg/L)	GWC-6	0.0025 r	n/a	3/11/2020	0.00073	No	45	n/a	n/a	82.22	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-1A	0.0055 r	n/a	3/10/2020	0.002ND	No	41	n/a	n/a	85.37	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-2A	0.005 r	n/a	3/10/2020	0.002ND	No	36	n/a	n/a	94.44	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-3A	0.0025 r	n/a	4/2/2020	0.0019J	No	41	n/a	n/a	97.56	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-3B	0.0025 r	n/a	3/11/2020	0.00067J	No	28	n/a	n/a	96.43	n/a	n/a	0.002337	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-5	0.005 r	n/a	3/10/2020	0.0019J	No	37	n/a	n/a	83.78	n/a	n/a	0.001361	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-7	0.002 r	n/a	3/11/2020	0.002ND	No	37	n/a	n/a	100	n/a	n/a	0.001361	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-1	0.002 r	n/a	3/11/2020	0.002ND	No	40	n/a	n/a	100	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-2	0.002 r	n/a	3/31/2020	0.002ND	No	39	n/a	n/a	97.44	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-4A	0.002 r	n/a	3/31/2020	0.002ND	No	41	n/a	n/a	100	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-4B	0.002 r	n/a	3/31/2020	0.002ND	No	9	n/a	n/a	100	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-5	0.0026 r	n/a	3/31/2020	0.002ND	No	41	n/a	n/a	95.12	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-6	0.002 r	n/a	3/11/2020	0.002ND	No	40	n/a	n/a	100	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-1A	0.00125 r	n/a	3/10/2020	0.00015J	No	38	n/a	n/a	94.74	n/a	n/a	0.001294	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-2A	0.0058 r	n/a	3/10/2020	0.001ND	No	42	n/a	n/a	92.86	n/a	n/a	0.001077	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-3A	0.001 r	n/a	4/2/2020	0.00062J	No	45	n/a	n/a	97.78	n/a	n/a	0.0009557	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-3B	0.0016 r	n/a	3/11/2020	0.0011	No	32	n/a	n/a	75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-4	0.0023 r	n/a	3/10/2020	0.00031J	No	44	n/a	n/a	95.45	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-5	0.0013 r	n/a	3/10/2020	0.0022	Yes	44	n/a	n/a	84.09	n/a	n/a	0.0009963	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-7	0.0013 r	n/a	3/11/2020	0.00015J	No	28	n/a	n/a	89.29	n/a	n/a	0.002337	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-2	0.001 r	n/a	3/31/2020	0.001ND	No	43	n/a	n/a	97.67	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-4B	0.0013 r	n/a	3/31/2020	0.00018J	No	11	n/a	n/a	72.73	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-5	0.001 r	n/a	3/31/2020	0.001ND	No	43	n/a	n/a	97.67	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-6	0.0073 r	n/a	3/11/2020	0.001ND	No	43	n/a	n/a	90.7	n/a	n/a	0.001037	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-1A	0.055 r	n/a	3/10/2020	0.001ND	No	41	n/a	n/a	43.9	n/a	n/a	0.001118	NP Intra (normality) 1 of 2
Vanadium (mg/L)	GWA-2A	0.023 r	n/a	3/10/2020	0.001ND	No	36	n/a	n/a	55.56	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-3A	0.0038 r	n/a	4/2/2020	0.0013	No	41	n/a	n/a	95.12	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-3B	0.0064 r	n/a	3/11/2020	0.0028	No	27	n/a	n/a	70.37	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-4	0.0025 r	n/a	3/10/2020	0.001ND	No	40	n/a	n/a	95	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-5	0.0082 r	n/a	3/10/2020	0.01	Yes	39	n/a	n/a	82.05	n/a	n/a	0.001226	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-7	0.11 r	n/a	3/11/2020	0.0013	No	38	n/a	n/a	55.26	n/a	n/a	0.001294	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-1	0.0063 r	n/a	3/11/2020	0.001ND	No	41	n/a	n/a	97.56		n/a		NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-2		n/a	3/31/2020		No	40	n/a	n/a	92.5	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-4A		n/a	3/31/2020	0.001ND	No	41	n/a	n/a	100	n/a	n/a	0.001118	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-4B		n/a	3/31/2020	0.0011	No	9	n/a	n/a	88.89		n/a	0.01809	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-5		n/a	3/31/2020	0.0016	No	40	n/a	n/a	85	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-6		n/a	3/11/2020	0.001ND	No	40	n/a	n/a	97.5	n/a	n/a	0.001159	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWA-1A		n/a	3/10/2020	0.005ND	No	41	n/a	n/a	31.71		n/a	0.001118	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWA-2A		n/a	3/10/2020	0.005ND	No	37	n/a	n/a	13.51		n/a	0.001361	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWA-3A		n/a	4/2/2020	0.011	No	38	n/a	n/a	52.63		n/a	0.001294	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWA-3B		n/a	3/11/2020	0.0055	No	26	n/a	n/a	61.54		n/a	0.002667	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWA-3B		n/a	3/10/2020	0.0033	No	41	0.1018	0.04245	19.51	Kaplan-Meier			Param Intra 1 of 2
Zinc (mg/L)	GWA-4		n/a	3/10/2020	0.0079	No	40	n/a	n/a	20	n/a	n/a	0.0009403	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWA-3		n/a	3/11/2020	0.007 I	No	39	n/a	n/a	41.03		n/a	0.001139	NP Intra (normality) 1 of 2
	GWA-7 GWC-1			3/11/2020	0.005ND	No	41						0.001226	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-1		n/a	3/31/2020		No		n/a	n/a	53.66		n/a	0.001118	NP Intra (NDs) 1 of 2 NP Intra (normality) 1 of 2
Zinc (mg/L)			n/a		0.0065		40	n/a	n/a	25 48 72	n/a	n/a		,
Zinc (mg/L)	GWC-4A		n/a	3/31/2020	0.005ND	No	39	n/a	n/a	48.72		n/a	0.001226	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-4B		n/a	3/31/2020	0.005ND	No	9	n/a	n/a	88.89		n/a	0.01809	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-5	0.03887 r	n/a	3/31/2020	0.025	No	41	-4.113	0.43	9.756	None	ln(x)	0.0009403	Param Intra 1 of 2

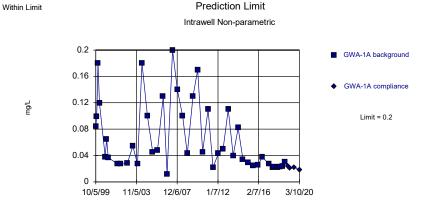
Page 3

Intrawell Prediction Limits - All Results (State)

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 6/15/2020, 10:58 AM

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

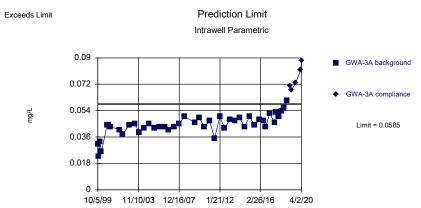
 Zinc (mg/L)
 GWC-6
 0.025 n/a
 3/11/2020
 0.0047J
 No
 35 n/a
 n/a
 1/a
 1/a
 0.001497
 NP Intra (normality) 1 of 2



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Constituent: Barium Analysis Run 6/15/2020 10:34 AM View: PL's State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary: Mean=0.04428, Std. Dev.=0.007109, n=44. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9398, critical = 0.924. Kappa = 2.001 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Prediction Limit Within Limit Intrawell Non-parametric 0.2 ■ GWA-2A background 0.16 ♦ GWA-2A compliance 0.12 Limit = 0.17 0.08 0.04 11/5/03 12/6/07 1/7/12 2/7/16 3/10/20 10/5/99

Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 43 background values. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

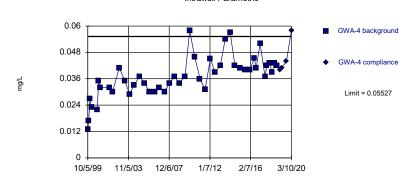
Constituent: Barium Analysis Run 6/15/2020 10:34 AM View: PL's State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit Within Limit Intrawell Parametric 0.2 ■ GWA-3B background 0.16 ♦ GWA-3B compliance 0.12 Limit = 0.1148 0.08 0.04 11/5/03 10/5/99 12/7/07 1/7/12 2/8/16 3/11/20

Background Data Summary: Mean=0.073, Std. Dev.=0.02027, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.941, critical = 0.904. Kappa = 2.061 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.





Constituent: Barium Analysis Run 6/15/2020 10:34 AM View: PL's State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit Within Limit Intrawell Non-parametric 0.3 GWA-7 background 0.24 GWA-7 compliance 0.18 Limit = 0.3 0.12 0.06 0 1/7/12 10/5/99 11/5/03 12/7/07 2/8/16 3/11/20

Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

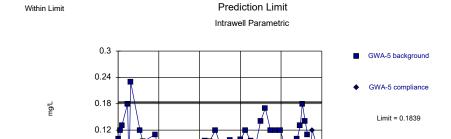
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

0.06

10/5/99

11/5/03

12/6/07



Background Data Summary: Mean=0.09875, Std. Dev.=0.04255, n=44. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9542, critical = 0.924. Kappa = 2.001 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.000403.

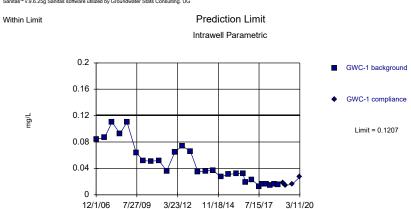
2/7/16

3/10/20

1/7/12

Constituent: Barium Analysis Run 6/15/2020 10:34 AM View: PL's State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

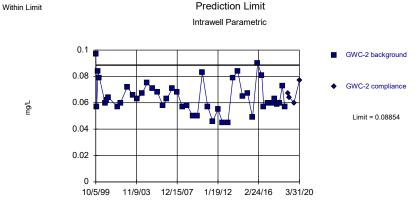
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary (based on square root transformation): Mean=0.2055, Std. Dev.=0.06778, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9301, critical = 0.896. Kappa = 2.094 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.



Within Limit



Background Data Summary: Mean=0.0647, Std. Dev.=0.01194, n=45. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.952, critical = 0.926. Kappa = 1.997 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

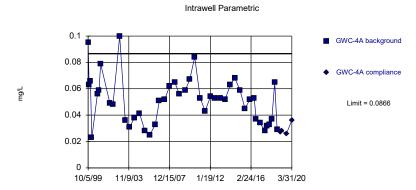
Constituent: Barium Analysis Run 6/15/2020 10:34 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit Intrawell Parametric

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Background Data Summary: Mean=0.03638, Std. Dev.=0.01738, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8301, critical = 0.792. Kappa = 2.595 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

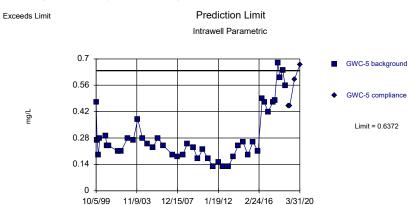


Prediction Limit

Background Data Summary: Mean=0.05131, Std. Dev.=0.01767, n=45. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9466, critical = 0.926. Kappa = 1.997 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Constituent: Barium Analysis Run 6/15/2020 10:34 AM View: PL's State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



Background Data Summary (based on natural log transformation): Mean=-1.326, Std. Dev.=0.4377, n=44. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9296, critical = 0.924. Kappa = 2.001 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.009403.

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit

Intrawell Non-parametric 0.08 GWC-6 background 0.064 GWC-6 compliance 0.048 Iimit = 0.0750.032 0.016 0 10/5/99 11/5/03 12/7/07 1/7/12 2/8/16 3/11/20

Prediction Limit

Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 43 background values. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

> Constituent: Barium Analysis Run 6/15/2020 10:34 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

> > Prediction Limit

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

11/5/03

10/5/99

12/6/07

Hollow symbols indicate censored values.

Within Limit

Intrawell Non-parametric 0.005 GWA-2A background 0.004 ♦ GWA-2A compliance 0.003 Limit = 0.0037 0.002 0.001

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 83.72% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

1/7/12

2/7/16

3/10/20

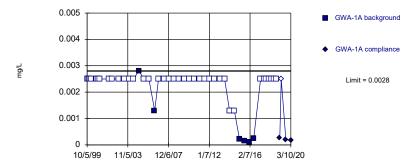
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit





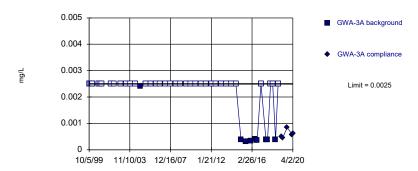
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 86.36% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

> Constituent: Beryllium Analysis Run 6/15/2020 10:34 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric

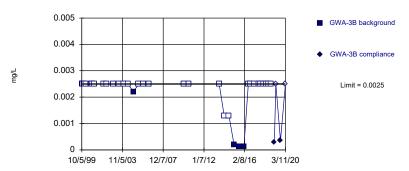


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 80% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

Hollow symbols indicate censored values.

Within Limit Prediction Limit

Intrawell Non-parametric



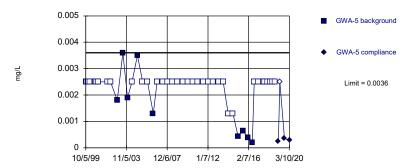
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 34 background values. 88.24% NDs. Well-constituent pair annual alpha = 0.003195. Individual comparison alpha = 0.001599 (1.0 f.2)

Constituent: Beryllium Analysis Run 6/15/2020 10:34 AM View: PL's State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric



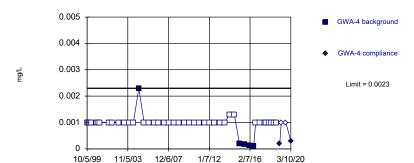
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 80% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



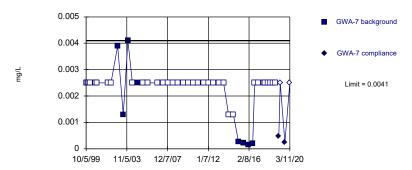
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

Constituent: Beryllium Analysis Run 6/15/2020 10:34 AM View: PL's State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

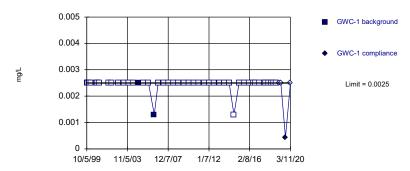


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 81.4% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit Within Limit





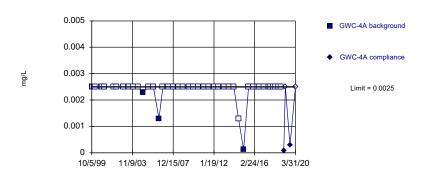
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 95.56% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha

> Constituent: Beryllium Analysis Run 6/15/2020 10:34 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

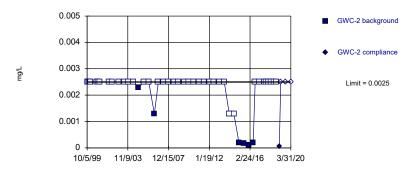
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit





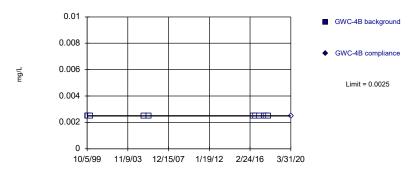
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

> Constituent: Beryllium Analysis Run 6/15/2020 10:34 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

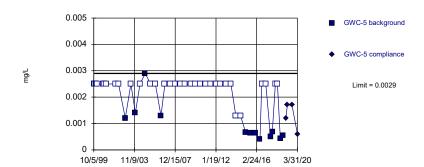
Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



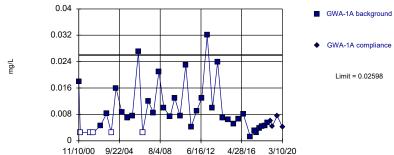
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 73.33% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha

> Constituent: Beryllium Analysis Run 6/15/2020 10:34 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Parametric

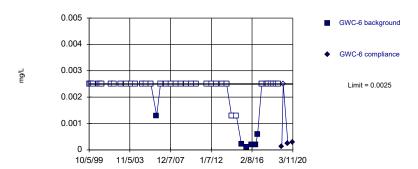


Background Data Summary (based on square root transformation): Mean=0.08981, Std. Dev.=0.0353, n=39, 12.82% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.928, critical = 0.917. Kappa = 2.021 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values. Within Limit

Prediction Limit Intrawell Non-parametric



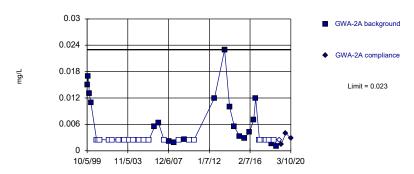
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 86.36% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

> Constituent: Beryllium Analysis Run 6/15/2020 10:34 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

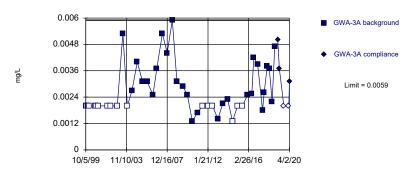
Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 52.38% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

Prediction Limit Within Limit

Intrawell Non-parametric



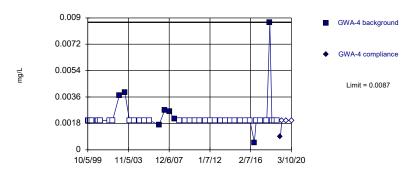
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 45 background values. 37.78% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

> Constituent: Chromium Analysis Run 6/15/2020 10:34 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



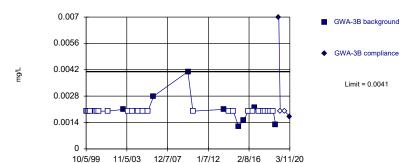
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



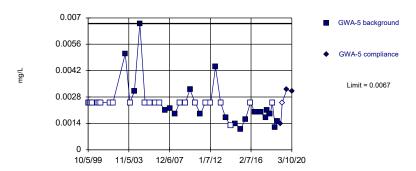
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

> Constituent: Chromium Analysis Run 6/15/2020 10:34 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 52.27% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Prediction Limit Within Limit

Intrawell Parametric



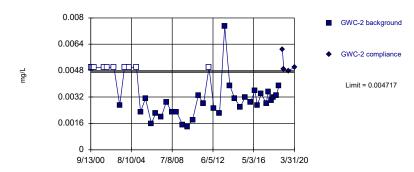
Background Data Summary: Mean=0.0062, Std. Dev.=0.002083, n=28, 3.571% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9581, critical = 0.896. Kappa = 2.094 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

> Constituent: Chromium Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.





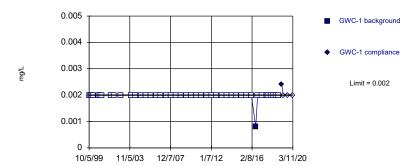
Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.04977, Std. Dev.=0.009395, n=41, 24.39% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9458, critical = 0.92. Kappa = 2.013 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



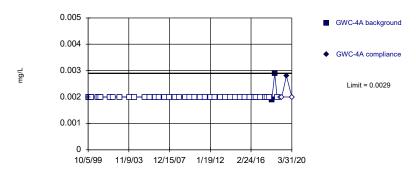
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 97.73% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

> Constituent: Chromium Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric

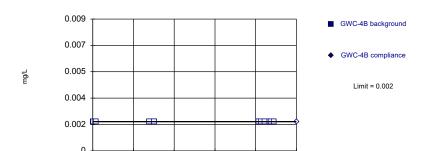


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 95.35% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

10/5/99

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



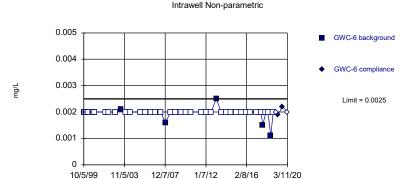
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

11/9/03 12/15/07 1/19/12 2/24/16 3/31/20

Constituent: Chromium Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Prediction Limit Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 87.8% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

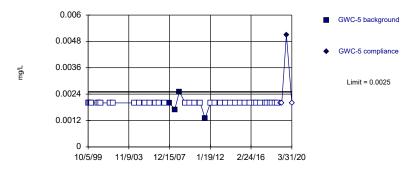
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit





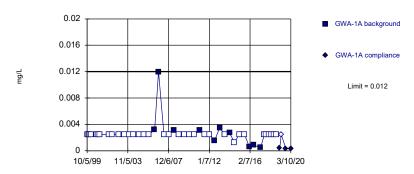
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 90.48% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

> Constituent: Chromium Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric

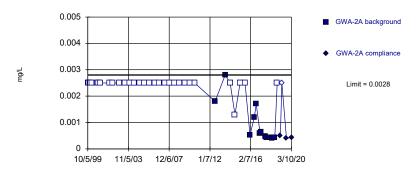


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 77.27% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Hollow symbols indicate censored values.

Prediction Limit Within Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 71.43% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha

> Constituent: Cobalt Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

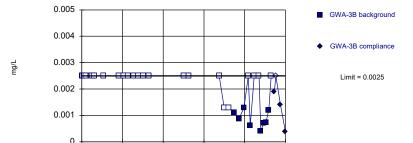
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

10/5/99

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric

11/5/03 12/7/07



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

1/7/12

2/8/16

3/11/20

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit





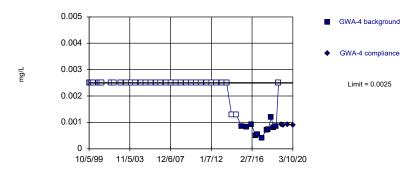
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 73.33% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

> Constituent: Cobalt Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric

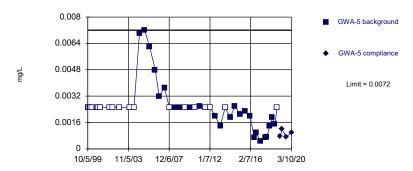


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 75.56% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

Hollow symbols indicate censored values.

Prediction Limit Within Limit

Intrawell Non-parametric



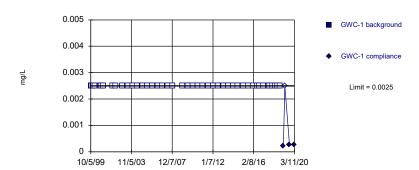
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 43.18% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

> Constituent: Cobalt Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 44) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

10/5/99

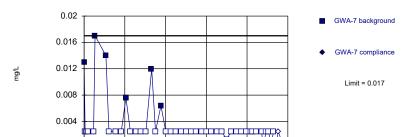
11/5/03

12/7/07

Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha

1/7/12

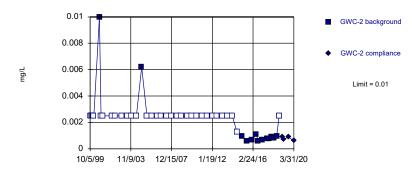
2/8/16 3/11/20

Constituent: Cobalt Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric

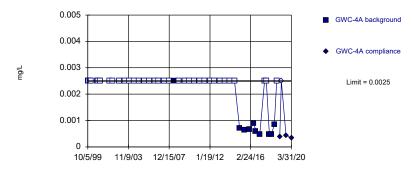


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 71.11% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit Within Limit





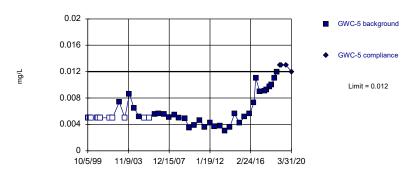
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha

> Constituent: Cobalt Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



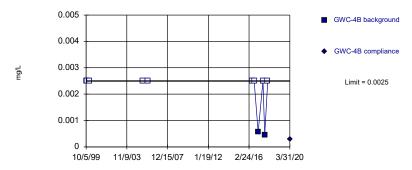
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 45 background values. 26.67% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit





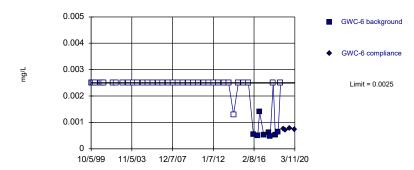
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

> Constituent: Cobalt Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric

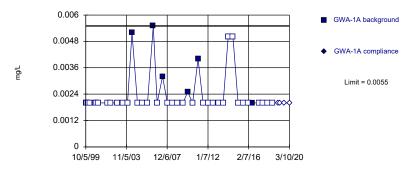


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 82.22% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

Hollow symbols indicate censored values.

Prediction Limit Within Limit

Intrawell Non-parametric



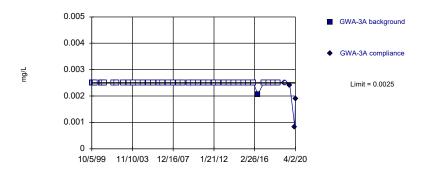
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 85.37% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha

> Constituent: Copper Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 97.56% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

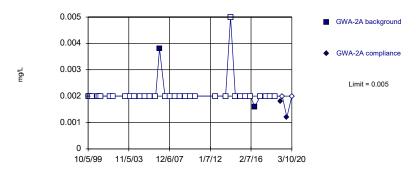
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



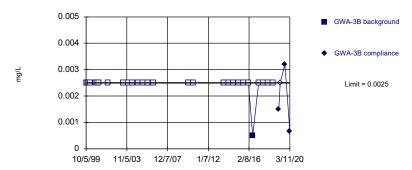
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 36 background values. 94.44% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

> Constituent: Copper Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric

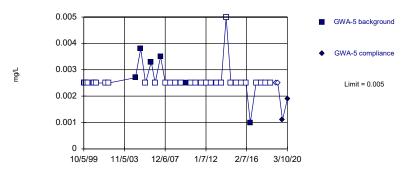


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 28 background values. 96.43% NDs. Well-constituent pair annual alpha = 0.004669. Individual comparison alpha = 0.002337 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit Within Limit

Intrawell Non-parametric



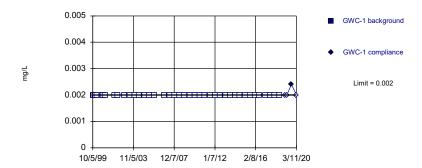
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 37 background values. 83.78% NDs. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha

> Constituent: Copper Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 40) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

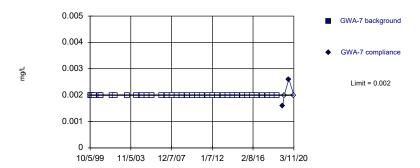
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



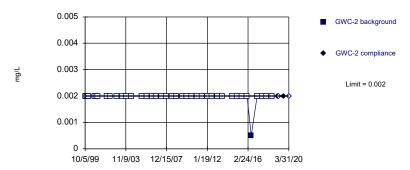
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 37) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

> Constituent: Copper Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

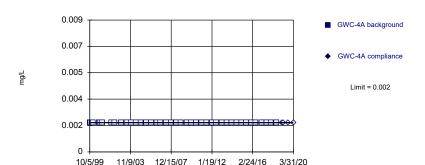
Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 97.44% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



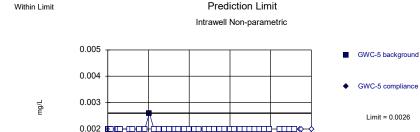
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 41) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

> Constituent: Copper Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

0.001



10/5/99 11/9/03 12/15/07 1/19/12 2/24/16 3/31/20

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 95.12% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

> Constituent: Copper Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

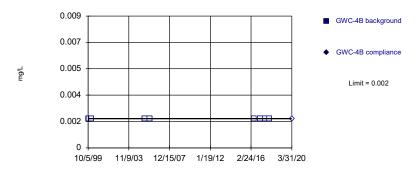
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



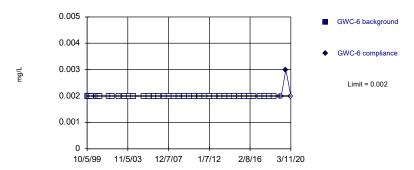
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

> Constituent: Copper Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric

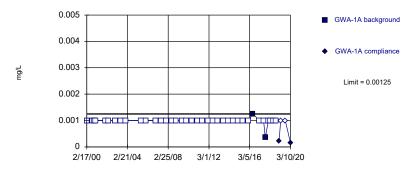


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 40) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit Within Limit





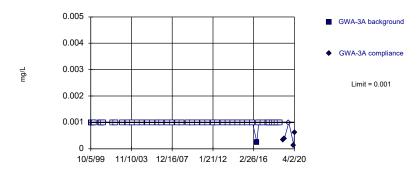
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 38 background values. 94.74% NDs. Well-constituent pair annual alpha = 0.002586. Individual comparison alpha

> Constituent: Lead Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



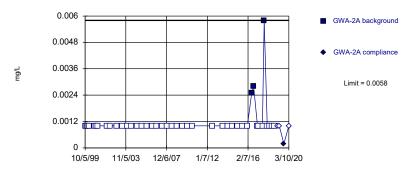
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 97.78% NDs. Well-constituent pair annual alpha = 0.001911. Individual comparison alpha = 0.0009557 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit





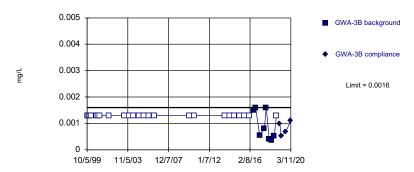
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 42 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.002154. Individual comparison alpha = 0.001077 (1 of 2).

> Constituent: Lead Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric

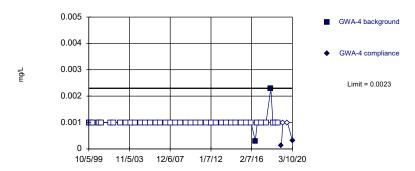


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit Prediction Limit





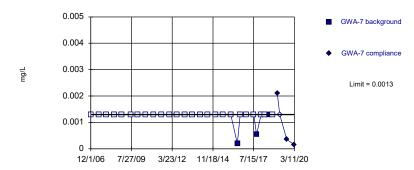
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 95.45% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Constituent: Lead Analysis Run 6/15/2020 10:35 AM View: PL's State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

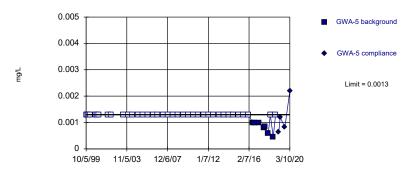


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 28 background values. 89.29% NDs. Well-constituent pair annual alpha = 0.004669. Individual comparison alpha = 0.002337 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit Prediction Limit
Intrawell Non-parametric



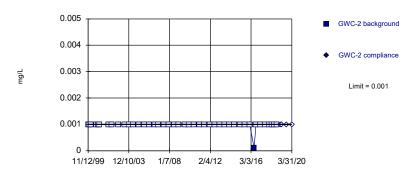
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 4 background values. 84.09% NDs. Well-constituent pair annual alpha = 0.001992. Individual comparison alpha = 0.0009963 (1 of 2).

Constituent: Lead Analysis Run 6/15/2020 10:35 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

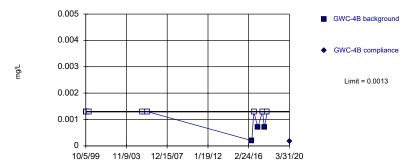


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 97.67% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Prediction Limit Within Limit

Intrawell Non-parametric



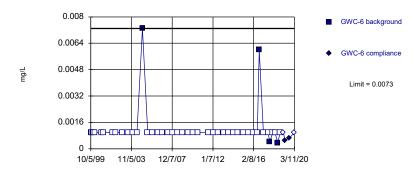
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha =

> Constituent: Lead Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 90.7% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

Constituent: Lead Analysis Run 6/15/2020 10:36 AM View: PL's State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

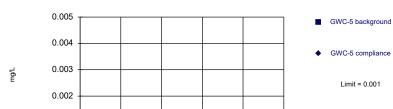
0.001

10/5/99

Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 43 background values. 97.67% NDs. Well-constituent pair annual alpha = 0.002073. Individual comparison alpha = 0.001037 (1 of 2).

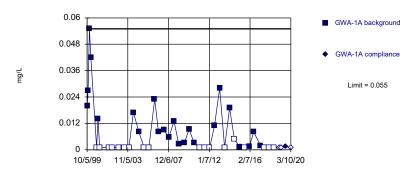
11/9/03 12/15/07 1/19/12 2/24/16 3/31/20

Constituent: Lead Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Prediction Limit Within Limit

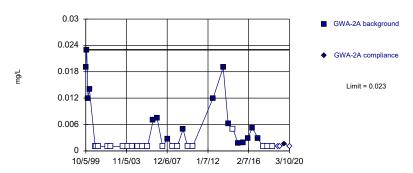
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. 43.9% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit Prediction Limit
Intrawell Non-parametric



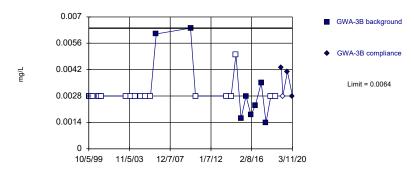
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 36 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

Constituent: Vanadium Analysis Run 6/15/2020 10:36 AM View: PL's State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

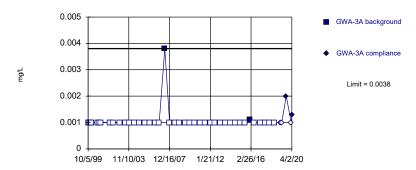


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 70.37% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

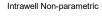


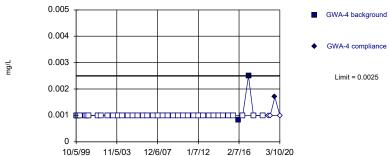
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 95.12% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Constituent: Vanadium Analysis Run 6/15/2020 10:36 AM View: PL's State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit





Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 95% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

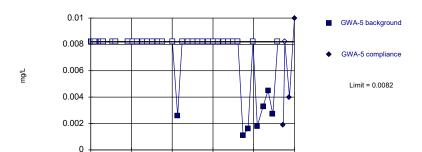
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

10/5/99

11/5/03 12/6/07

Hollow symbols indicate censored values.

Prediction Limit Exceeds Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 39 background values. 82.05% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha

1/7/12

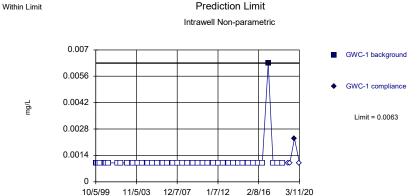
2/7/16

3/10/20

Constituent: Vanadium Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.



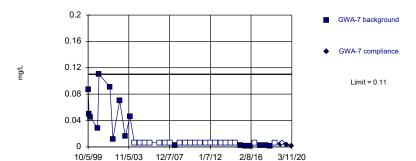
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 97.56% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



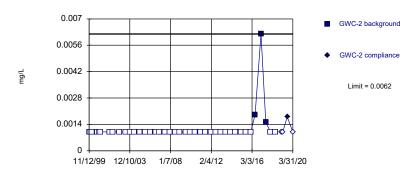
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 38 background values. 55.26% NDs. Well-constituent pair annual alpha = 0.002586. Individual comparison alpha

> Constituent: Vanadium Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric

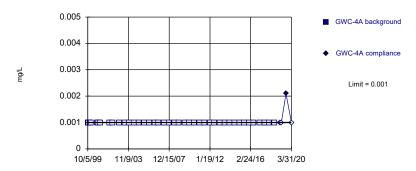


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 92.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Hollow symbols indicate censored values.

Prediction Limit Within Limit





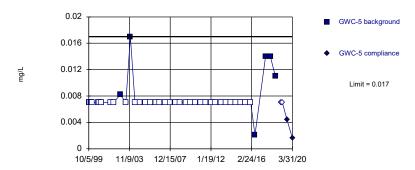
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 41) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

> Constituent: Vanadium Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 85% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

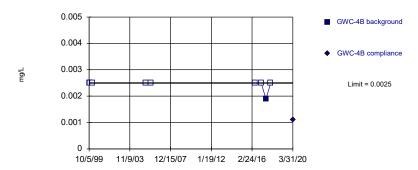
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



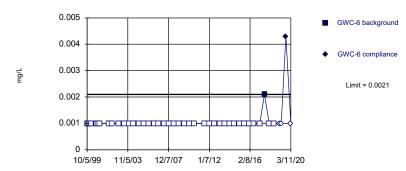
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

> Constituent: Vanadium Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



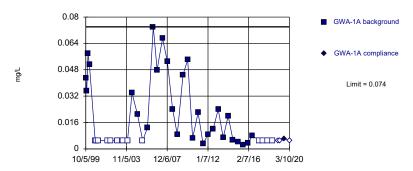
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 40 background values. 97.5% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit Prediction Limit

Intrawell Non-parametric



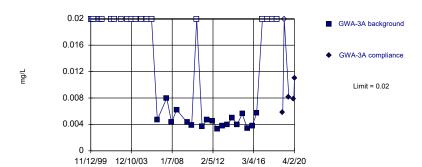
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. 31.71% NDs. Well-constituent pair annual alpha = 0.0021235. Individual comparison alpha = 0.001118 (1 of 2).

Constituent: Zinc Analysis Run 6/15/2020 10:36 AM View: PL's State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

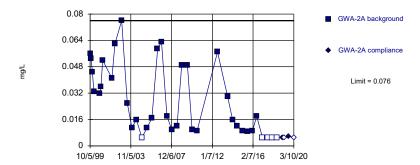


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 38 background values. 52.63% NDs. Well-constituent pair annual alpha = 0.002586. Individual comparison alpha = 0.001294 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

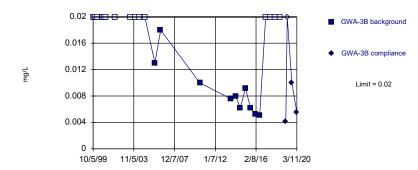


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 37 background values. 13.51% NDs. Well-constituent pair annual alpha = 0.002721. Individual comparison alpha = 0.001361 (1 of 2).

Constituent: Zinc Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

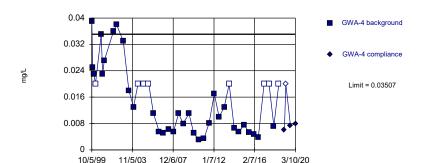


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 61.54% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Parametric



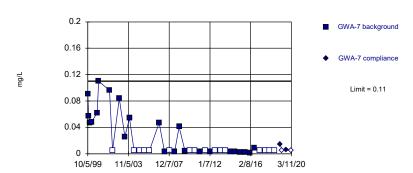
Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.1018, Std. Dev.=0.04245, n=41, 19.51% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9227, critical = 0.92. Kappa = 2.013 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

> Constituent: Zinc Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

> > Intrawell Non-parametric

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Prediction Limit Within Limit



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 39 background values. 41.03% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

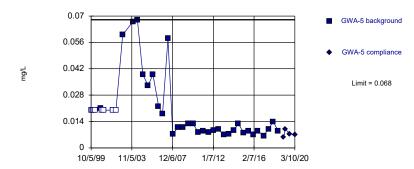
> Constituent: Zinc Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



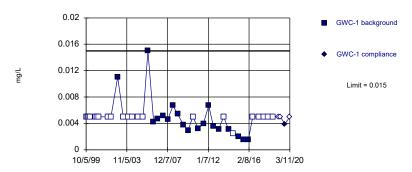
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 20% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

> Constituent: Zinc Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric

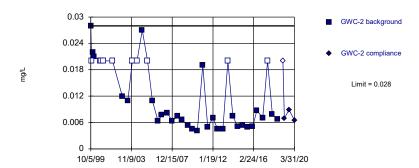


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 53.66% NDs. Well-constituent pair annual alpha = 0.002235. Individual comparison alpha = 0.001118 (1 of 2).

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



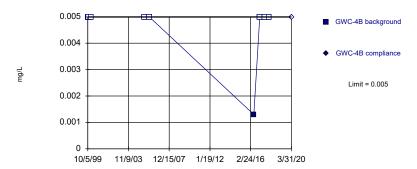
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 25% NDs. Well-constituent pair annual alpha = 0.002316. Individual comparison alpha = 0.001159 (1 of 2).

> Constituent: Zinc Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

Constituent: Zinc Analysis Run 6/15/2020 10:36 AM View: PL's State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

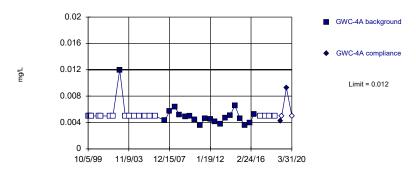
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric

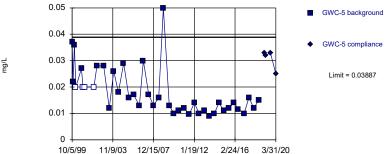


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 39 background values. 48.72% NDs. Well-constituent pair annual alpha = 0.002451. Individual comparison alpha = 0.001226 (1 of 2).

> Constituent: Zinc Analysis Run 6/15/2020 10:36 AM View: PL's State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Parametric 0.05



Background Data Summary (based on natural log transformation): Mean=-4.113, Std. Dev.=0.43, n=41, 9.756% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9313, critical = 0.92. Kappa = 2.013 (c=8, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.0009403.

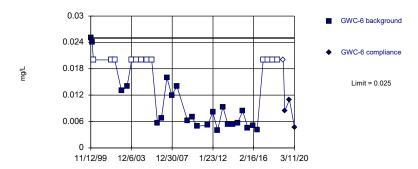
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 35 background values. 34.29% NDs. Well-constituent pair annual alpha = 0.002991. Individual comparison alpha = 0.001497 (1 of 2).



	GWA-1A	GWA-1A
10/5/1999	0.084	
11/12/1999	0.099	
12/29/1999	0.18	
2/17/2000	0.12	
9/13/2000	0.038	
11/10/2000	0.065	
1/4/2001	0.037	
12/11/2001	0.027	
4/4/2002	0.027	
12/6/2002	0.028	
6/28/2003	0.054	
12/13/2003	0.027	
5/28/2004	0.18	
12/10/2004	0.1	
6/24/2005	0.045	
12/13/2005	0.048	
7/12/2006	0.13	
12/1/2006	0.012	
6/21/2007	0.2	
12/15/2007	0.14	
6/22/2008	0.1	
12/7/2008	0.043	
7/11/2009	0.13	
12/23/2009	0.17	
6/24/2010	0.045	
1/9/2011	0.11	
7/11/2011	0.022	
1/20/2012	0.043	
7/13/2012	0.05	
1/21/2013	0.11	
7/20/2013	0.04	
1/17/2014	0.082	
7/12/2014	0.034	
1/16/2015	0.029	
7/15/2015	0.025	
1/16/2016	0.026	
6/22/2016	0.0374 (D)	
9/1/2016	0.86 (o)	
2/28/2017	0.027	
7/17/2017	0.022	
9/20/2017	0.023	
1/8/2018	0.022	
3/27/2018	0.023	
7/10/2018	0.024	
10/8/2018	0.03	
1/30/2019		0.024
3/27/2019		0.021
9/11/2019		0.022
3/10/2020		0.018

	GWA-2A	GWA-2A
10/5/1999	0.042	
11/12/1999	0.051	
12/29/1999	0.032	
2/17/2000	0.027	
9/13/2000	0.016	
11/10/2000	0.021	
1/4/2001	0.022	
12/11/2001	0.019	
4/4/2002	0.024	
12/6/2002	0.026	
6/28/2003	0.021	
12/13/2003	0.018	
5/28/2004	0.023	
12/10/2004	0.031	
6/24/2005	0.023	
12/13/2005	0.025	
7/12/2006	0.15	
12/1/2006	0.12	
6/21/2007	0.021	
12/15/2007	0.028	
6/22/2008	0.026	
12/7/2008	0.11	
7/11/2009	0.12	
12/23/2009	0.024	
6/24/2010	0.035	
7/13/2012	0.054	
1/21/2013	0.17	
7/20/2013	0.067	
1/17/2014	0.054	
7/12/2014	0.045	
1/16/2015	0.043	
7/15/2015	0.037	
1/16/2016	0.041	
6/23/2016	0.0606	
9/1/2016	0.057	
1/18/2017	0.042	
2/28/2017	0.041	
7/18/2017	0.035	
9/20/2017	0.039	
1/8/2018	0.038	
3/27/2018	0.041	
7/10/2018	0.042	
10/8/2018	0.04	
1/30/2019		0.042
3/27/2019		0.039
9/11/2019		0.04
3/10/2020		0.044

	GWA-3A	GWA-3A
10/5/1999	0.031	
11/12/1999	0.023	
12/29/1999	0.033	
2/17/2000	0.026	
9/13/2000	0.044	
11/10/2000	0.044	
1/4/2001	0.043	
12/11/2001	0.041	
4/4/2002	0.038	
12/6/2002	0.044	
6/28/2003	0.045	
12/13/2003	0.039	
5/28/2004	0.042	
12/10/2004	0.045	
6/24/2005	0.042	
12/13/2005	0.043	
7/12/2006	0.043	
12/1/2006	0.041	
6/21/2007	0.043	
12/15/2007	0.045	
6/22/2008	0.05	
12/6/2008	0.14 (o)	
7/10/2009	0.046	
12/23/2009	0.049	
6/23/2010	0.043	
1/8/2011	0.047	
7/10/2011	0.035	
1/19/2012	0.05	
7/12/2012	0.042	
1/21/2013	0.048	
7/20/2013	0.047	
1/17/2014	0.049	
7/12/2014	0.043	
1/15/2015	0.05	
7/15/2015	0.044	
1/16/2016	0.048	
6/22/2016	0.0471 (D)	
8/31/2016	0.043	
1/19/2017	0.052	
7/18/2017	0.046	
9/20/2017	0.053	
1/9/2018	0.05	
3/27/2018	0.054	
7/10/2018	0.056	
10/9/2018	0.061	
1/30/2019		0.071
3/28/2019		0.068
9/12/2019		0.073
3/10/2020		0.082
4/2/2020		0.088

	GWA-3B	GWA-3B
10/5/1999	0.077	
11/12/1999	0.065	
12/29/1999	0.079	
2/17/2000	0.089	
9/13/2000	0.069	
11/10/2000	0.071	
1/4/2001	0.073	
12/11/2001	0.081	
6/28/2003	0.072	
12/13/2003	0.099	
5/28/2004	0.091	
12/10/2004	0.1	
6/24/2005	0.083	
12/13/2005	0.082	
7/12/2006	0.075	
12/23/2009	0.14	
6/23/2010	0.077	
7/20/2013	0.045	
1/17/2014	0.092	
7/12/2014	0.064	
1/15/2015	0.072	
7/15/2015	0.059	
1/16/2016	0.079	
6/23/2016	0.034	
8/31/2016	0.044	
1/23/2017	0.044	
7/18/2017	0.052	
9/20/2017	0.051	
1/9/2018	0.058	
3/28/2018	0.073	
7/10/2018	0.078	
10/8/2018	0.068	
1/30/2019		0.053
3/28/2019		0.042
9/12/2019		0.076
3/11/2020		0.035

			Plant McIntosh	Client: Southern C
	GWA-4	GWA-4		
10/5/1999	0.013			
11/12/1999	0.017			
12/29/1999	0.027			
2/17/2000	0.023			
9/13/2000	0.022			
11/10/2000	0.035			
1/4/2001	0.032			
12/11/2001	0.032			
4/4/2002	0.03			
12/6/2002	0.041			
6/28/2003	0.035			
12/13/2003	0.029			
5/28/2004	0.033			
12/10/2004	0.037			
6/24/2005	0.034			
12/13/2005	0.03			
7/12/2006	0.03			
12/1/2006	0.032			
6/21/2007	0.03			
12/15/2007	0.034			
6/21/2008	0.037			
12/6/2008	0.034			
7/11/2009	0.037			
12/23/2009	0.058			
6/23/2010	0.046			
1/8/2011	0.036			
7/10/2011	0.031			
1/19/2012	0.045			
7/12/2012	0.039			
1/21/2013	0.042			
7/20/2013	0.054			
1/17/2014	0.057			
7/12/2014	0.042			
1/15/2015	0.041			
7/15/2015	0.04			
1/16/2016	0.04			
6/22/2016	0.0453			
8/31/2016	0.041			
1/19/2017	0.052			
7/18/2017	0.037			
9/21/2017	0.042			
1/9/2018	0.043			
3/27/2018	0.039			
7/10/2018	0.043			
10/8/2018	0.042			
1/30/2019		0.04		
3/28/2019		0.041		
9/12/2019		0.044		
3/10/2020		0.058		

	GWA-5	GWA-5
10/5/1999	0.1	
11/12/1999	0.086	
12/29/1999	0.12	
2/17/2000	0.13	
9/13/2000	0.18	
11/10/2000	0.018	
1/4/2001	0.23	
12/11/2001	0.12	
4/4/2002	0.094	
12/6/2002	0.33 (o)	
6/28/2003	0.11	
12/13/2003	0.057	
5/28/2004	0.035	
12/10/2004	0.04	
6/24/2005	0.037	
12/13/2005	0.039	
7/12/2006	0.042	
12/1/2006	0.044	
6/21/2007	0.058	
12/15/2007	0.073	
6/22/2008	0.096	
12/6/2008	0.094	
7/11/2009	0.12	
12/22/2009	0.089	
6/23/2010	0.081	
1/8/2011	0.097	
7/10/2011	0.084	
1/20/2012	0.099	
7/12/2012	0.12	
1/21/2013	0.095	
7/20/2013	0.086	
1/17/2014	0.14	
7/12/2014	0.17	
1/16/2015	0.12	
7/15/2015	0.12	
1/16/2016	0.12	
6/22/2016	0.0839	
8/31/2016	0.093	
1/19/2017	0.079	
7/19/2017	0.085	
9/21/2017	0.1	
1/9/2018	0.13	
3/27/2018	0.18	
7/10/2018	0.14	
10/8/2018	0.11	
1/30/2019		0.079
3/27/2019		0.12
9/12/2019		0.086
3/10/2020		0.081

	GWA-7	GWA-7
10/5/1999	0.26	
11/12/1999	0.16	
12/29/1999	0.13	
2/17/2000	0.12	
9/13/2000	0.01	
11/10/2000	0.27	
1/4/2001	0.93 (o)	
12/11/2001	0.27	
4/4/2002	0.043	
12/6/2002	0.26	
6/28/2003	0.093	
12/13/2003	0.28	
5/28/2004	0.04	
12/10/2004	0.035	
6/24/2005	0.031	
12/13/2005	0.027	
7/12/2006	0.3	
12/1/2006	0.011	
6/21/2007	0.024	
12/15/2007	0.026	
6/21/2008	0.032	
12/6/2008	0.11	
7/10/2009	0.031	
12/23/2009	0.028	
6/23/2010	0.028	
1/8/2011	0.024	
7/10/2011	0.022	
1/19/2012	0.028	
7/12/2012	0.026	
1/21/2013	0.031	
7/19/2013	0.026	
1/16/2014	0.028	
7/12/2014	0.023	
1/15/2015	0.024	
7/15/2015	0.023	
1/16/2016	0.024	
6/22/2016	0.02	
8/30/2016	0.02	
1/19/2017	0.023	
7/19/2017	0.013	
9/20/2017	0.021	
1/10/2018	0.018	
3/28/2018	0.019	
7/10/2018	0.026	
10/9/2018	0.014	0.026
1/30/2019 3/28/2019		0.036
		0.014
9/12/2019 3/11/2020		0.015
3/11/2020		0.014

	GWC-1	GWC-1
10/5/1999	0.096	
11/12/1999	0.085	
12/29/1999	0.1	
2/17/2000	0.072	
9/13/2000	0.15	
11/10/2000	0.15	
1/4/2001	0.15	
12/11/2001	0.14	
4/4/2002	0.14	
12/6/2002	0.14	
6/28/2003	0.12	
12/13/2003	0.12	
5/28/2004	0.12	
12/10/2004	0.13	
6/24/2005	0.1	
12/13/2005	0.096	
7/12/2006	0.083	
12/1/2006	0.084	
6/21/2007	0.087	
12/15/2007	0.11	
6/21/2008	0.093	
12/6/2008	0.11	
7/11/2009	0.064	
12/23/2009	0.052	
6/23/2010	0.051	
1/8/2011	0.052	
7/10/2011	0.036	
1/20/2012	0.065	
7/12/2012	0.074	
1/21/2013	0.066	
7/20/2013	0.035	
1/17/2014	0.036	
7/12/2014	0.037	
1/16/2015	0.027	
7/15/2015	0.031	
1/16/2016	0.032	
6/22/2016	0.0323	
8/31/2016	0.019	
1/23/2017	0.023	
7/19/2017	0.013	
9/21/2017	0.016	
1/9/2018	0.016	
3/28/2018	0.014	
7/11/2018	0.016	
10/9/2018	0.015	0.040
1/30/2019		0.018
3/28/2019		0.014
9/12/2019		0.016
3/11/2020		0.027

	GWC-2	GWC-2
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	
6/22/2008	0.057	
12/6/2008	0.058	
7/11/2009	0.05	
12/23/2009	0.05	
6/23/2010	0.083	
1/8/2011	0.057	
7/10/2011	0.046	
1/20/2012	0.055	
7/12/2012	0.045	
1/21/2013	0.045	
7/20/2013	0.079	
1/17/2014	0.084	
7/12/2014	0.065	
1/15/2015	0.067	
7/15/2015	0.049	
1/17/2016	0.09	
6/22/2016	0.0806	
8/31/2016	0.057	
1/24/2017	0.06	
7/19/2017	0.06	
9/21/2017	0.063	
1/9/2018	0.059	
3/29/2018	0.06	
7/10/2018	0.073	
10/9/2018	0.057	
1/31/2019		0.067
3/28/2019		0.064
9/12/2019		0.06
3/31/2020		0.077

			Plar
	GWC-4A	GWC-4A	
10/5/1999	0.095		
11/12/1999	0.063		
12/29/1999	0.066		
2/17/2000	0.023		
9/13/2000	0.056		
11/10/2000	0.059		
1/4/2001	0.079		
12/11/2001	0.049		
4/4/2002	0.048		
12/6/2002	0.1		
6/28/2003	0.036		
12/13/2003	0.031		
5/28/2004	0.038		
12/10/2004	0.041		
6/24/2005	0.028		
12/13/2005	0.025		
7/12/2006	0.033		
12/1/2006	0.051		
6/21/2007	0.052		
12/15/2007	0.062		
6/21/2008	0.065		
12/6/2008	0.056		
7/11/2009	0.059		
12/23/2009	0.067		
6/23/2010	0.084		
1/8/2011	0.053		
7/10/2011	0.033		
1/20/2012	0.054		
7/12/2012	0.053		
1/21/2013	0.053		
7/20/2013	0.052		
1/17/2014	0.063		
7/11/2014	0.068		
1/16/2015	0.059		
7/15/2015	0.045		
1/17/2016	0.052		
6/22/2016	0.0528		
8/31/2016	0.037		
1/25/2017	0.034		
7/20/2017	0.028		
9/21/2017	0.032		
1/9/2018	0.033		
3/28/2018	0.037		
7/10/2018	0.065		
10/9/2018	0.029		
1/30/2019		0.027	
3/28/2019		0.028	
9/12/2019		0.026	
3/31/2020		0.036	

	GWC-4B	GWC-4B
10/5/1999	0.021	
11/12/1999	0.021	
2/17/2000	0.032	
6/24/2005	0.031	
12/13/2005	0.035	
6/22/2016	0.0392	
9/1/2016	0.023	
1/25/2017	0.077	
7/20/2017	0.04	
9/21/2017	0.058	
1/9/2018	0.023	
3/31/2020		0.052

		GWC-5	GWC-5
10	0/5/1999	0.47	
1	1/12/1999	0.27	
12	2/29/1999	0.19	
2/	17/2000	0.28	
9/	13/2000	0.29	
1	1/10/2000	0.24	
1/	4/2001	0.24	
12	2/11/2001	0.21	
4/	4/2002	0.21	
12	2/6/2002	0.28	
6/	28/2003	0.27	
12	2/13/2003	0.38	
5/	28/2004	0.28	
12	2/10/2004	0.25	
6/	24/2005	0.23	
12	2/13/2005	0.28	
7/	12/2006	0.24	
12	2/1/2006	0.019 (o)	
6/	21/2007	0.19	
12	2/15/2007	0.18	
6/	21/2008	0.19	
12	2/7/2008	0.25	
7/	11/2009	0.23	
12	2/23/2009	0.17	
6/	23/2010	0.22	
1/	8/2011	0.17	
7/	10/2011	0.13	
1/	20/2012	0.15	
7/	12/2012	0.13	
1/	21/2013	0.13	
7/	20/2013	0.18	
1/	17/2014	0.24	
7/	11/2014	0.26	
1/	16/2015	0.19	
7/	15/2015	0.26	
1/	16/2016	0.21	
6/	23/2016	0.491	
9/	1/2016	0.47	
1/	24/2017	0.42	
7/	20/2017	0.47	
9/	21/2017	0.48	
1/	10/2018	0.68	
3/	28/2018	0.6	
7/	11/2018	0.64	
10	0/9/2018	0.56	
1/	31/2019		0.45
3/	28/2019		0.45
9/	12/2019		0.59
3/	31/2020		0.67

	GWC-6	GWC-6
10/5/1999	0.017	
11/12/1999	0.031	
12/29/1999	0.039	
2/17/2000	0.031	
9/13/2000	0.043	
11/10/2000	0.044	
1/4/2001	0.071	
12/11/2001	0.042	
4/4/2002	0.043	
12/6/2002	0.046	
6/28/2003	0.038	
12/13/2003	0.035	
5/28/2004	0.037	
12/10/2004	0.043	
6/24/2005	0.044	
12/13/2005	0.045	
7/12/2006	0.037	
12/1/2006	0.044	
6/21/2007	0.037	
12/15/2007	0.042	
6/22/2008	0.04	
12/7/2008	0.12 (o)	
7/11/2009	0.038	
12/23/2009	0.04	
6/24/2010	0.035	
7/11/2011	0.03	
1/20/2012	0.039	
7/13/2012	0.04	
1/21/2013	0.045	
7/20/2013	0.043	
1/17/2014	0.045	
7/12/2014	0.036	
1/16/2015	0.044	
7/15/2015	0.038	
1/16/2016	0.047	
6/23/2016	0.0393	
9/1/2016	0.075	
1/27/2017	0.046	
7/20/2017	0.045	
9/22/2017	0.04	
1/10/2018	0.027	
3/29/2018	0.044	
7/11/2018	0.051	
10/9/2018	0.041	
1/31/2019		0.053
3/28/2019		0.045
9/12/2019		0.052
3/11/2020		0.048

			Tiant Weintosii	Client. Countern Company	Data: Michitoshi Er	Joon		
	GWA-1A	GWA-1A						
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	0.0028							
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							
6/22/2008	<0.0025							
12/7/2008	<0.0025							
7/11/2009	<0.0025							
12/23/2009	<0.0025							
6/24/2010	<0.0025							
1/9/2011	<0.0025							
7/11/2011	<0.0025							
1/20/2012	<0.0025							
7/13/2012	<0.0025							
1/21/2013	<0.0025							
7/20/2013	<0.0025							
1/17/2014	<0.0013 (J)							
7/12/2014	<0.0013 (J)							
1/16/2015	0.00022 (J)							
7/15/2015	0.00015 (J)							
1/16/2016	0.00011 (J)							
6/22/2016	0.00025 (JD)							
9/1/2016	0.0084 (o)							
2/28/2017	<0.0025							
7/17/2017	<0.0025							
9/20/2017	<0.0025							
1/8/2018	<0.0025							
3/27/2018 7/10/2018	<0.0025 <0.0025							
10/8/2018	<0.0025							
1/30/2019	-0.0023	0.00026 (J)						
3/27/2019		<0.0025 (J)						
9/11/2019		0.0023 0.00019 (J)						
3/10/2020		0.00019 (J) 0.00018 (J)						
5. 15.2020		2.000.0(0)						

	GWA-2A	GWA-2A
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	0.0024	
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	
6/22/2008	<0.0025	
12/7/2008	<0.0025	
7/11/2009	<0.0025	
12/23/2009	<0.0025	
6/24/2010	<0.0025	
7/13/2012	<0.0025	
1/21/2013	0.0037	
7/20/2013	<0.0025	
1/17/2014	<0.0013 (J)	
7/12/2014	<0.0013 (J)	
1/16/2015	0.00038 (J)	
7/15/2015	0.00027 (J)	
1/16/2016	0.00029 (J)	
6/23/2016	0.0007 (J)	
9/1/2016	0.00097 (J)	
1/18/2017	<0.0025	
2/28/2017	<0.0025	
7/18/2017	<0.0025	
9/20/2017	<0.0025	
1/8/2018	<0.0025	
3/27/2018	<0.0025	
7/10/2018	<0.0025	
1/30/2018	<0.0025	0.00037 (1)
1/30/2019 3/27/2019		0.00037 (J) <0.0025
9/11/2019		0.00028 (J)
3/10/2020		0.00035 (J)
5. 10/2020		5.55555 (4)

			Plant Micintosn	Client: Southern Company	Data: McIntosn LF 3 CCR	
	GWA-3A	GWA-3A				
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	0.0024					
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					
6/22/2008	<0.0025					
12/6/2008	<0.0025					
7/10/2009	<0.0025					
12/23/2009	<0.0025					
6/23/2010	<0.0025					
1/8/2011	<0.0025					
7/10/2011	<0.0025					
1/19/2012	<0.0025					
7/12/2012	<0.0025					
1/21/2013	<0.0025					
7/20/2013	<0.0025					
1/17/2014	<0.0025					
7/12/2014	<0.0025					
1/15/2015	0.00039 (J)					
7/15/2015	0.00039 (J) 0.00031 (J)					
1/16/2016	0.00031 (J) 0.00034 (J)					
6/22/2016	0.00034 (J) 0.0004 (J)					
8/31/2016	0.00035 (J)					
1/19/2017	<0.0025					
7/18/2017	0.00038 (J)					
9/20/2017	0.00039 (J)					
1/9/2018	<0.0025					
3/27/2018	<0.0025					
7/10/2018	0.00038 (J)					
10/9/2018	<0.0025					
1/30/2019		0.00051 (J)				
3/28/2019		0.00046 (J)				
9/12/2019		0.00084 (J)				
3/10/2020		0.00058 (J)				
4/2/2020		0.00062 (J)				

	GWA-3B	GWA-3B
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	0.0022	
6/24/2005	<0.0025	
12/13/2005	<0.0025	
7/12/2006	<0.0025	
12/23/2009	<0.0025	
6/23/2010	<0.0025	
7/20/2013	<0.0025	
1/17/2014	<0.0013 (J)	
7/12/2014	<0.0013 (J)	
1/15/2015	0.00019 (J)	
7/15/2015	0.00012 (J)	
1/16/2016	0.00013 (J)	
6/23/2016	<0.0025	
8/31/2016	<0.0025	
1/23/2017	<0.0025	
7/18/2017	<0.0025	
9/20/2017	<0.0025	
1/9/2018	<0.0025	
3/28/2018	<0.0025	
7/10/2018	<0.0025	
10/8/2018	<0.0025	
1/30/2019		0.0003 (J)
3/28/2019		<0.0025
9/12/2019		0.00035 (J)
3/11/2020		<0.0025

				Data. Michitoshi Er 3 C		
	GWA-4	GWA-4				
10/5/1999	<0.001					
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	0.0023					
6/24/2005						
	<0.001					
12/13/2005 7/12/2006	<0.001 <0.001					
12/1/2006	<0.001					
6/21/2007	<0.001					
12/15/2007	<0.001					
6/21/2008	<0.001					
12/6/2008	<0.001					
7/11/2009	<0.001					
12/23/2009	<0.001					
6/23/2010	<0.001					
1/8/2011	<0.001					
7/10/2011	<0.001					
1/19/2012	<0.001					
7/12/2012	<0.001					
1/21/2013	<0.001					
7/20/2013	<0.001					
1/17/2014	<0.0013 (J)					
7/12/2014	<0.0013 (J)					
1/15/2015	0.0002 (J)					
7/15/2015	0.00018 (J)					
1/16/2016	0.00013 (J)					
6/22/2016	0.0001 (J)					
8/31/2016	<0.001					
1/19/2017	<0.001					
7/18/2017	<0.001					
9/21/2017	<0.001					
1/9/2018	<0.001					
3/27/2018	<0.001					
7/10/2018	<0.001					
10/8/2018	<0.001					
1/30/2019		0.00019 (J)				
3/28/2019		<0.001				
9/12/2019		<0.001				
3/10/2020		0.00029 (J)				

			i lant wontoon	Cheric Southern Company	Data. McIntosii Ei 3 00		
	GWA-5	GWA-5					
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	0.0018						
6/28/2003	0.0036						
12/13/2003	0.0019						
5/28/2004	<0.0025						
12/10/2004	0.0035						
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						
6/22/2008	<0.0025						
12/6/2008	<0.0025						
7/11/2009	<0.0025						
12/22/2009	<0.0025						
6/23/2010	<0.0025						
1/8/2011	<0.0025						
7/10/2011	<0.0025						
1/20/2012	<0.0025						
7/12/2012	<0.0025						
1/21/2013	<0.0025						
7/20/2013	<0.0025						
1/17/2014	<0.0013 (J)						
7/12/2014	<0.0013 (J)						
1/16/2015	0.00043 (J)						
	0.00064 (J)						
	0.00039 (J)						
6/22/2016	0.0002 (J)						
8/31/2016	<0.0025						
1/19/2017	<0.0025						
7/19/2017	<0.0025						
9/21/2017	<0.0025						
1/9/2018	<0.0025						
3/27/2018	<0.0025						
7/10/2018	<0.0025						
10/8/2018	<0.0025	0.00024 (!)					
1/30/2019		0.00024 (J) <0.0025					
3/27/2019 9/12/2019		0.0025 0.00036 (J)					
3/10/2020		0.00036 (J) 0.00028 (J)					
5/ 10/2020		0.00020 (0)					

	GWA-7	CIMA 7		
		GWA-7		
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	0.016 (o)			
12/11/2001	<0.0025			
4/4/2002	<0.0025			
12/6/2002	0.0039			
6/28/2003	0.0013			
12/13/2003	0.0041			
5/28/2004	<0.0025			
12/10/2004	0.0025			
6/24/2005	<0.0025			
12/13/2005	<0.0025			
7/12/2006	0.005 (o)			
12/1/2006	<0.0025			
6/21/2007	<0.0025			
12/15/2007	<0.0025			
6/21/2008	<0.0025			
12/6/2008	<0.0025			
7/10/2009	<0.0025			
12/23/2009	<0.0025			
6/23/2010	<0.0025			
1/8/2011	<0.0025			
7/10/2011	<0.0025			
1/19/2012	<0.0025			
7/12/2012				
	<0.0025			
1/21/2013	<0.0025 <0.0025			
7/19/2013 1/16/2014	<0.0023			
7/12/2014	<0.0013 (J)			
1/15/2015 7/15/2015	0.00027 (J) 0.00021 (J)			
1/16/2016	0.00016 (J)			
6/22/2016	0.0002 (J)			
8/30/2016	<0.0025			
1/19/2017	<0.0025			
7/19/2017	<0.0025			
9/20/2017	<0.0025			
1/10/2018	<0.0025			
3/28/2018	<0.0025			
7/10/2018	<0.0025			
10/9/2018	<0.0025			
1/30/2019		0.00047 (J)		
3/28/2019		<0.0025		
9/12/2019		0.00024 (J)		
3/11/2020		<0.0025		

			Plant McIntosh	Client: Southern Company	Data: McIntosh LF 3 CCR	
	GWC-1	GWC-1				
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	0.0013					
12/1/2006	<0.0025					
6/21/2007	<0.0025					
12/15/2007	<0.0025					
6/21/2008	<0.0025					
12/6/2008	<0.0025					
7/11/2009	<0.0025					
12/23/2009	<0.0025					
6/23/2010	<0.0025					
1/8/2011	<0.0025					
7/10/2011	<0.0025					
1/20/2012	<0.0025					
7/12/2012	<0.0025					
1/21/2013	<0.0025					
7/20/2013	<0.0025					
1/17/2014	<0.0025					
7/12/2014	<0.0013 (J)					
1/16/2015	<0.0025					
7/15/2015	<0.0025					
1/16/2016	<0.0025					
6/22/2016	<0.0025					
8/31/2016	<0.0025					
1/23/2017	<0.0025					
7/19/2017	<0.0025					
9/21/2017	<0.0025					
1/9/2018 3/28/2018	<0.0025					
3/28/2018 7/11/2018	<0.0025					
10/9/2018	<0.0025 <0.0025					
1/30/2019	-V.UU2J	<0.0025				
3/28/2019		<0.0025				
9/12/2019		0.0025 0.00043 (J)				
3/11/2020		<0.0025				

NON-2				i lant wontoon	Cheffit Company	Data: Wichitosh Er 3 CCIV		
1917 1919 1910		GWC-2	GWC-2					
1971 1970	10/5/1999	<0.0025						
	11/12/1999	<0.0025						
	12/29/1999	<0.0025						
1142/021	2/17/2000	<0.0025						
14201 40.025 12612 1	9/13/2000	<0.0025						
1411 1200	11/10/2000	<0.0025						
4-4020	1/4/2001	<0.0025						
18620022 0.0025	12/11/2001	<0.0025						
18620022 0.0025	4/4/2002	<0.0025						
12122030								
12122030	6/28/2003	<0.0025						
5/28/204 0.0025		<0.0025						
12/10/2004 0.0023 64/24/2005 -0.0025 1712/2006 0.0013 12/17/2006 -0.0025 671/2007 -0.0025 672/2008 -0.0025 672/2008 -0.0025 17/17/2009 -0.0025 17/17/2009 -0.0025 17/17/2009 -0.0025 17/17/2010 -0.0025 17/17/2011 -0.0025								
6/24/2005 <0.0025	12/10/2004							
12/13/2005 0.0013								
7/12/2006								
12/1/2007 <0.0025								
6/21/2007 <0.0025								
12/15/2007								
6/22/2008 <0.0025								
12/6/2008 <0.0025								
7/1/2009 <0.0025								
12/23/2010								
6/23/2010 <0.0025								
1/8/2011 <0.0025								
7/10/2011 <0.0025								
1/20/2012 <0.0025								
7/12/2012								
1/2/2013 <0.0025								
7/20/2013 <0.0025								
1/17/2014								
7/12/2014								
1/15/2015 0.00018 (J) 1/17/2016 0.00011 (J) 6/22/2016 0.0002 (J) 8/31/2016 <0.0025 1/24/2017 <0.0025 1/9/2017 <0.0025 1/9/2018 <0.0025 1/9/2018 <0.0025 1/9/2018 <0.0025 1/9/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025 1/19/2018 <0.0025								
7/15/2015 0.00018 (J) 1/17/2016 0.00011 (J) 6/22/2016 0.0002 (J) 8/31/2016 <0.0025 1/24/2017 <0.0025 7/19/2017 <0.0025 9/21/2017 <0.0025 1/9/2018 <0.0025 7/10/2018 <0.0025 1/0/9/2018 <0.0025 1/10/2018 <0.0025 1/31/2019 <6.5E-05 (J) 3/28/2019 9/12/2019 <0.0025								
1/17/2016 0.0001 (J) 6/22/2016 0.0002 (J) 8/31/2016 <0.0025								
6/22/2016 0.0002 (J) 8/31/2016 <0.0025								
8/31/2016								
1/24/2017 <0.0025								
7/19/2017								
9/21/2017								
1/9/2018 <0.0025								
3/29/2018								
7/10/2018 <0.0025 10/9/2018 <0.0025 1/31/2019 6.5E-05 (J) 3/28/2019 <0.0025 9/12/2019 <0.0025								
10/9/2018 <0.0025								
1/31/2019 6.5E-05 (J) 3/28/2019 <0.0025 9/12/2019 <0.0025								
3/28/2019 <0.0025 9/12/2019 <0.0025			6.5E-05 (J)					
9/12/2019 <0.0025								

			r lant wichtiosh	Cheff. Godffern Company	Data. Wichitosh Er 3 00	1	
	GWC-4A	GWC-4A					
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	0.0023						
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						
12/6/2008	<0.0025						
7/11/2009	<0.0025						
12/23/2009	<0.0025						
6/23/2010	<0.0025						
1/8/2011	<0.0025						
7/10/2011	<0.0025						
1/20/2012	<0.0025						
7/12/2012	<0.0025						
1/21/2013	<0.0025						
7/20/2013	<0.0025						
1/17/2014	<0.0025						
7/11/2014	<0.0013 (J)						
1/16/2015	0.00012 (J)						
7/15/2015	<0.0025						
1/17/2016	<0.0025						
6/22/2016	<0.0025						
8/31/2016	<0.0025						
1/25/2017	<0.0025						
7/20/2017	<0.0025						
9/21/2017	<0.0025						
1/9/2018	<0.0025						
3/28/2018	<0.0025						
7/10/2018	<0.0025						
10/9/2018	<0.0025						
1/30/2019		7E-05 (J)					
3/28/2019		<0.0025					
9/12/2019		0.00028 (J)					
3/31/2020		<0.0025					

	GWC-4B	GWC-4B	
10/5/1999	<0.0025		
11/12/1999	<0.0025		
2/17/2000	<0.0025		
6/24/2005	<0.0025		
12/13/2005	<0.0025		
6/22/2016	<0.0025		
9/1/2016	<0.0025		
1/25/2017	<0.0025		
7/20/2017	<0.0025		
9/21/2017	<0.0025		
1/9/2018	<0.0025		
3/31/2020		<0.0025	

			Plant Micintosn	Client: Southern Company	Data: McIntosti LF 3 CCR
	GWC-5	GWC-5			
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				
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				
12/7/2008	<0.0025				
7/11/2009	<0.0025				
12/23/2009	<0.0025				
6/23/2010	<0.0025				
1/8/2011	<0.0025				
7/10/2011	<0.0025				
1/20/2012	<0.0025				
7/12/2012	<0.0025				
1/21/2013	<0.0025				
7/20/2013	<0.0025				
1/17/2014	<0.0013 (J)				
7/11/2014	<0.0013 (J)				
1/16/2015	0.00067 (J)				
7/15/2015	0.00065 (J)				
1/16/2016	0.00065 (J)				
6/23/2016	0.0004 (J)				
9/1/2016	<0.0025				
1/24/2017	<0.0025				
7/20/2017	0.00049 (J)				
9/21/2017	0.00068 (J)				
1/10/2018	<0.0025				
3/28/2018	<0.0025				
7/11/2018	0.00043 (J)				
10/9/2018	0.00054 (J)				
1/31/2019		0.0012 (J)			
3/28/2019		0.0017 (J)			
9/12/2019		0.0017			
3/31/2020		0.0006 (J)			

			Plant Micintosn	Client: Southern Company	Data: Micintosh LF 3 CCR
	GWC-6	GWC-6			
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	0.0058 (o)				
2/5/2005	<0.0025				
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				
6/22/2008	<0.0025				
12/7/2008	<0.0025				
7/11/2009	<0.0025				
12/23/2009	<0.0025				
6/24/2010	<0.0025				
7/11/2011	<0.0025				
1/20/2012	<0.0025				
7/13/2012	<0.0025				
1/21/2013	<0.0025				
7/20/2013	<0.0025				
1/17/2014	<0.0013 (J)				
7/12/2014	<0.0013 (J)				
1/16/2015	0.00021 (J)				
7/15/2015	0.00011 (J)				
1/16/2016	0.00019 (J)				
6/23/2016	0.0002 (J)				
9/1/2016	0.0006 (J)				
1/27/2017	<0.0025				
7/20/2017	<0.0025				
9/22/2017	<0.0025				
1/10/2018	<0.0025				
3/29/2018	<0.0025				
7/11/2018	<0.0025				
10/9/2018	<0.0025				
1/31/2019		0.00012 (J)			
3/28/2019		<0.0025			
9/12/2019		0.00025 (J)			
3/11/2020		0.0003 (J)			

	GWA-1A	GWA-1A
10/5/1999	0.023	
11/12/1999	0.03	
12/29/1999	0.059	
2/17/2000	0.048	
9/13/2000	<0.0025	
11/10/2000	0.018	
1/4/2001	<0.0025	
12/11/2001	<0.0025	
4/4/2002	<0.0025	
12/6/2002	0.0046	
6/28/2003	0.0082	
12/13/2003	<0.0025	
5/28/2004	0.016	
12/10/2004	0.0087	
6/24/2005	0.0069	
12/13/2005	0.0075	
7/12/2006	0.027	
12/1/2006	<0.0025	
6/21/2007	0.012	
12/15/2007	0.0085	
6/22/2008	0.021	
12/7/2008	0.01	
7/11/2009	0.0073	
12/23/2009	0.013	
6/24/2010	0.0076	
1/9/2011	0.023	
7/11/2011	0.0042	
1/20/2012	0.009	
7/13/2012	0.013	
1/21/2013	0.032	
7/20/2013	0.01	
1/17/2014	0.024	
7/12/2014	0.0069	
1/16/2015	0.0064	
7/15/2015	0.0051	
1/16/2016	0.0066	
6/22/2016	0.00815 (D)	
9/1/2016	0.12 (o)	
2/28/2017	0.0012 (J)	
7/17/2017	0.003	
9/20/2017	0.0025	
1/8/2018	0.0038	
3/27/2018	0.0044	
7/10/2018	0.0045	
10/8/2018	0.0054	
1/30/2019		0.0061
3/27/2019		0.0044
9/11/2019		0.0076
3/10/2020		0.0041

	GWA-2A	GWA-2A
10/5/1999	0.015	
11/12/1999	0.017	
12/29/1999	0.013	
2/17/2000	0.011	
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	0.0055	
12/1/2006	0.0063	
6/21/2007	<0.0025	
12/15/2007	0.0022	
6/22/2008	0.0019	
12/7/2008	<0.0025	
7/11/2009	0.0026	
12/23/2009	<0.0025	
6/24/2010	<0.0025	
7/13/2012	0.012	
1/21/2013	0.095 (o)	
7/20/2013	0.023	
1/17/2014	0.01	
7/12/2014	0.0055	
1/16/2015	0.0033	
7/15/2015	0.0029	
1/16/2016	0.0042	
6/23/2016	0.007 (J)	
9/1/2016	0.012	
1/18/2017	<0.0025	
2/28/2017	<0.0025	
7/18/2017	<0.0025	
9/20/2017	<0.0025	
1/8/2018	<0.0025	
3/27/2018	0.0016 (J)	
7/10/2018	<0.0025	
10/8/2018	0.0011 (J)	
1/30/2019		<0.0025
3/27/2019		0.0015 (J)
9/11/2019		0.004
3/10/2020		0.0028

 $\label{lem:constituent:Chromium (mg/L)} Constituent: Chromium (mg/L) Analysis Run 6/15/2020 \ 10:58 \ AM \quad View: PL's \ State$ $Plant \ McIntosh \quad Client: Southern \ Company \quad Data: \ McIntosh \ LF \ 3 \ CCR$

			Plant Micintosn	Client: Southern Company	Data: Micintosh LF 3 CCR
	GWA-3A	GWA-3A			
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	0.0053				
12/13/2003	<0.002				
5/28/2004	0.0027				
12/10/2004	0.004				
6/24/2005	0.0031				
12/13/2005	0.0031				
7/12/2006	0.0025				
12/1/2006	0.0037				
6/21/2007	0.0053				
12/15/2007	0.0044				
6/22/2008	0.0059				
12/6/2008	0.0031				
7/10/2009	0.0029				
12/23/2009	0.0025				
6/23/2010	0.0013				
1/8/2011	0.0017				
7/10/2011	<0.002				
1/19/2012	<0.002				
7/12/2012	<0.002				
1/21/2013	0.0014				
7/20/2013	0.0021				
1/17/2014	0.0023				
7/12/2014	<0.0013 (J)				
1/15/2015	<0.002				
7/15/2015	<0.002				
1/16/2016	0.0025				
6/22/2016	0.00255 (JD)				
8/31/2016	0.0042				
1/19/2017	0.0039				
7/18/2017	0.0018 (J)				
9/20/2017	0.0026				
1/9/2018	0.0038				
3/27/2018	0.0037				
7/10/2018	0.0022 (J)				
10/9/2018	0.0047				
1/30/2019		0.005			
3/28/2019		0.0037			
9/12/2019		<0.002			
3/10/2020		<0.002			
4/2/2020		0.0031			

	GWA-3B	GWA-3B
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	
6/28/2003	0.0021	
12/13/2003	<0.002	
5/28/2004	<0.002	
12/10/2004	<0.002	
6/24/2005	<0.002	
12/13/2005	<0.002	
7/12/2006	0.0028	
12/23/2009	0.0041	
6/23/2010	<0.002	
7/20/2013	0.0021	
1/17/2014	<0.002	
7/12/2014	<0.002	
1/15/2015	0.0012 (J)	
7/15/2015	0.0015	
1/16/2016	<0.002	
6/23/2016	<0.002	
8/31/2016	0.0022 (J)	
1/23/2017	<0.002	
7/18/2017	<0.002	
9/20/2017	<0.002	
1/9/2018	<0.002	
3/28/2018	<0.002	
7/10/2018	<0.002	
10/8/2018	0.0013 (J)	
1/30/2019		0.007
3/28/2019		<0.002
9/12/2019		<0.002
3/11/2020		0.0017 (J)

 $\label{lem:constituent:Chromium (mg/L)} Constituent: Chromium (mg/L) Analysis Run 6/15/2020 \ 10:58 \ AM \quad View: PL's \ State$ $Plant \ McIntosh \quad Client: Southern \ Company \quad Data: \ McIntosh \ LF \ 3 \ CCR$

				Data. Wolfitosii Er 3 CCi		
	GWA-4	GWA-4				
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	0.0037					
6/28/2003	0.0039					
12/13/2003	<0.002					
5/28/2004	<0.002					
12/10/2004	<0.002					
6/24/2005	<0.002					
12/13/2005	<0.002					
7/12/2006	0.023 (o)					
12/1/2006	0.0017					
6/21/2007	0.0027					
12/15/2007	0.0026					
6/21/2008	0.0021					
12/6/2008	<0.002					
7/11/2009	<0.002					
12/23/2009	<0.002					
6/23/2010	<0.002					
1/8/2011	<0.002					
7/10/2011	<0.002					
1/19/2012	<0.002					
7/12/2012	<0.002					
1/21/2013	<0.002					
7/20/2013	<0.002					
1/17/2014	<0.002					
7/12/2014	<0.002					
1/15/2015	<0.002					
7/15/2015	<0.002					
1/16/2016	<0.002					
6/22/2016	0.0005 (J)					
8/31/2016	<0.002					
1/19/2017	<0.002					
7/18/2017	<0.002					
9/21/2017	<0.002					
1/9/2018	0.0087					
3/27/2018	<0.002					
7/10/2018	<0.002					
10/8/2018	<0.002					
1/30/2019		0.00088 (J)				
3/28/2019		<0.002				
9/12/2019		<0.002				
3/10/2020		<0.002				

	GWA-5	GWA-5
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	0.027 (o)	
6/28/2003	0.0051	
12/13/2003	<0.0025	
5/28/2004	0.0031	
12/10/2004	0.0067	
6/24/2005	<0.0025	
12/13/2005	<0.0025	
7/12/2006	<0.0025	
12/1/2006	<0.0025	
6/21/2007	0.0021	
12/15/2007	0.0022	
6/22/2008	0.0019	
12/6/2008	<0.0025	
7/11/2009	<0.0025	
12/22/2009	0.0032	
6/23/2010	<0.0025	
1/8/2011	0.0019	
7/10/2011	<0.0025	
1/20/2012	<0.0025	
7/12/2012	0.0044	
1/21/2013	<0.0025	
7/20/2013	0.0017	
1/17/2014	<0.0013 (J)	
7/12/2014	0.0014	
1/16/2015	0.0011 (J)	
7/15/2015	0.0016	
1/16/2016	<0.0025	
6/22/2016	0.002 (J)	
8/31/2016	0.002 (J)	
1/19/2017	0.002 (J)	
7/19/2017	0.0017 (J)	
9/21/2017	0.0021 (J)	
1/9/2018	0.0019 (J)	
3/27/2018	<0.0025	
7/10/2018	0.0012 (J)	
10/8/2018	0.0015 (J)	
1/30/2019		0.0014 (J)
3/27/2019		<0.0025
9/12/2019		0.0032
3/10/2020		0.0031

	GWA-7	GWA-7
10/5/1999	0.097	
11/12/1999	0.056	
12/29/1999	0.05	
2/17/2000	0.058	
9/13/2000	0.043	
11/10/2000	0.011	
1/4/2001	0.33 (o)	
12/11/2001	0.095	
4/4/2002	0.015	
12/6/2002	0.07	
6/28/2003	0.016	
12/13/2003	0.038	
5/28/2004	0.004	
12/10/2004	0.0043	
6/24/2005	0.003	
12/13/2005	0.0037	
7/12/2006	0.071	
12/1/2006	0.0064	
6/21/2007	<0.0013	
12/15/2007	0.0044	
6/21/2008	0.004	
12/6/2008	0.0032	
7/10/2009	0.004	
12/23/2009	0.0041	
6/23/2010	0.0048	
1/8/2011	0.0077	
7/10/2011	0.0058	
1/19/2012	0.0059	
7/12/2012	0.0053	
1/21/2013	0.0059	
7/19/2013	0.0063	
1/16/2014	0.0083	
7/12/2014	0.0087	
1/15/2015	0.0077	
7/15/2015	0.0078	
1/16/2016 6/22/2016	0.0084	
	0.0061 (J)	
8/30/2016	0.0063 0.008	
1/19/2017	0.008	
7/19/2017 9/20/2017	0.0002	
1/10/2018	0.0078	
3/28/2018	0.009	
7/10/2018	0.0095	
10/9/2018	0.0095	
1/30/2019	0.0020	0.01
3/28/2019		0.0048
9/12/2019		0.0048
3/11/2020		0.0053
3/11/2020		0.0000

 $\label{lem:constituent:Chromium (mg/L)} Constituent: Chromium (mg/L) Analysis Run 6/15/2020 \ 10:58 \ AM \quad View: PL's \ State$ $Plant \ McIntosh \quad Client: Southern \ Company \quad Data: \ McIntosh \ LF \ 3 \ CCR$

			i idili iviciiitosii	Client. Couriem Company	Data: Wellitosii El 3 CON	
	GWC-1	GWC-1				
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	0.007 (o)					
12/13/2003	<0.002					
5/28/2004	<0.002					
12/10/2004	<0.002					
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					
12/6/2008	<0.002					
7/11/2009	<0.002					
12/23/2009	<0.002					
6/23/2010	<0.002					
1/8/2011	<0.002					
7/10/2011	<0.002					
1/20/2012	<0.002					
7/12/2012	<0.002					
1/21/2013	<0.002					
7/20/2013	<0.002					
1/17/2014	<0.002					
7/12/2014	<0.002					
1/16/2015	<0.002					
7/15/2015	<0.002					
1/16/2016	<0.002					
6/22/2016	0.0008 (J)					
8/31/2016	<0.002					
1/23/2017	<0.002					
7/19/2017	<0.002					
9/21/2017	<0.002					
1/9/2018	<0.002					
3/28/2018	<0.002					
7/11/2018	<0.002					
10/9/2018	<0.002					
1/30/2019		0.0024 (J)				
3/28/2019		<0.002				
9/12/2019		<0.002				
3/11/2020		<0.002				

 $\label{lem:constituent:Chromium (mg/L)} Constituent: Chromium (mg/L) Analysis Run 6/15/2020 \ 10:58 \ AM \quad View: PL's \ State$ $Plant \ McIntosh \quad Client: Southern \ Company \quad Data: \ McIntosh \ LF \ 3 \ CCR$

			Plant Micintosn	Client: Southern Company	Data: Micintosn LF 3 CCR
	GWC-2	GWC-2			
10/5/1999	0.017				
11/12/1999	<0.005				
12/29/1999	0.011				
2/17/2000	0.013				
9/13/2000	<0.005				
11/10/2000	<0.005				
1/4/2001	<0.005				
12/11/2001	<0.005				
4/4/2002	<0.005				
12/6/2002	<0.005				
6/28/2003	0.0027				
12/13/2003	<0.005				
5/28/2004	<0.005				
12/10/2004	0.74 (o)				
2/5/2005	<0.005				
6/24/2005	0.0023				
12/13/2005	0.0031				
7/12/2006	0.0016				
12/1/2006	0.0022				
6/21/2007	0.002				
12/15/2007	0.0029				
6/22/2008	0.0023				
12/6/2008	0.0023				
7/11/2009	0.0015				
12/23/2009	0.0014				
6/23/2010	0.0018				
1/8/2011	0.0033				
7/10/2011	0.0028				
1/20/2012	<0.005				
7/12/2012	0.0025				
1/21/2013	0.0022				
7/20/2013	0.0075				
1/17/2014	0.0039				
7/12/2014	0.0031				
1/15/2015	0.0026				
7/15/2015	0.0032				
1/17/2016	0.0029				
6/22/2016	0.0036 (J)				
8/31/2016	0.0027				
1/24/2017	0.0034				
7/19/2017	0.0028				
9/21/2017	0.0035				
1/9/2018	0.003				
3/29/2018	0.0032				
7/10/2018	0.0033				
10/9/2018	0.0039				
1/31/2019		0.0061			
3/28/2019		0.0049			
9/12/2019		0.0048			
3/31/2020		0.005			

	GWC-4A	GWC-4A
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)	
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	
12/6/2008	<0.002	
7/11/2009	<0.002	
12/23/2009	<0.002	
6/23/2010	<0.002	
1/8/2011	<0.002	
7/10/2011	<0.002	
1/20/2012	<0.002	
7/12/2012	<0.002	
1/21/2013	<0.002	
7/20/2013	<0.002	
1/17/2014	<0.002	
7/11/2014	<0.002	
1/16/2015	<0.002	
7/15/2015	<0.002	
1/17/2016	<0.002	
6/22/2016	<0.002	
8/31/2016	<0.002	
1/25/2017	<0.002 (D)	
7/20/2017	<0.002	
9/21/2017	<0.002	
1/9/2018	<0.002	
3/28/2018	0.0019 (J)	
7/10/2018	0.0029	
10/9/2018	<0.002	
1/30/2019		<0.002
3/28/2019		<0.002
9/12/2019		0.0028
3/31/2020		<0.002

	GWC-4B	GWC-4B
10/5/1999	<0.002	
11/12/1999	<0.002	
2/17/2000	<0.002	
6/24/2005	<0.002	
12/13/2005	<0.002	
6/22/2016	<0.002	
9/1/2016	<0.002	
1/25/2017	<0.002 (D)	
7/20/2017	<0.002	
9/21/2017	<0.002	
1/9/2018	<0.002	
3/31/2020		<0.002

 $\label{lem:constituent:Chromium (mg/L)} Constituent: Chromium (mg/L) Analysis Run 6/15/2020 \ 10:58 \ AM \quad View: PL's \ State$ $Plant \ McIntosh \quad Client: Southern \ Company \quad Data: \ McIntosh \ LF \ 3 \ CCR$

			Plant Micintosn	Client: Southern Company	Data: McIntosn LF 3 CCR
	GWC-5	GWC-5			
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	0.008 (o)				
6/28/2003	0.021 (o)				
12/13/2003	0.011 (o)				
5/28/2004	<0.002				
12/10/2004	<0.002				
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	0.0017				
12/7/2008	0.0025				
7/11/2009	<0.002				
12/23/2009	<0.002				
6/23/2010	<0.002				
1/8/2011	<0.002				
7/10/2011	0.0013				
1/20/2012	<0.002				
7/12/2012	<0.002				
1/21/2013	<0.002				
7/20/2013	<0.002				
1/17/2014	<0.002				
7/11/2014	<0.002				
1/16/2015	<0.002				
7/15/2015	<0.002				
1/16/2016	<0.002				
6/23/2016	<0.002				
9/1/2016	<0.002				
1/24/2017	<0.002				
7/20/2017	<0.002				
9/21/2017	<0.002				
1/10/2018	<0.002				
3/28/2018	<0.002				
7/11/2018	<0.002				
10/9/2018	<0.002				
1/31/2019		<0.002			
3/28/2019		<0.002			
9/12/2019		0.0051			
3/31/2020		<0.002			

	GWC-6	GWC-6
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	0.016 (o)	
12/11/2001	<0.002	
4/4/2002	<0.002	
12/6/2002	<0.002	
6/28/2003	0.0021	
12/13/2003	<0.002	
5/28/2004	<0.002	
12/10/2004	0.0046 (o)	
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	0.0016	
6/22/2008	<0.002	
12/7/2008	<0.002	
7/11/2009	<0.002	
12/23/2009	<0.002	
6/24/2010	<0.002	
7/11/2011	<0.002	
1/20/2012	<0.002	
7/13/2012	<0.002	
1/21/2013	0.0025	
7/20/2013	<0.002	
1/17/2014	<0.002	
7/12/2014	<0.002	
1/16/2015	<0.002	
7/15/2015	<0.002	
1/16/2016	<0.002	
6/23/2016	<0.002	
9/1/2016	0.0069 (o)	
1/27/2017	<0.002 (D)	
7/20/2017	<0.002	
9/22/2017	0.0015 (J)	
1/10/2018	<0.002	
3/29/2018	<0.002	
7/11/2018	0.0011 (J)	
10/9/2018	<0.002	
1/31/2019		<0.002
3/28/2019		0.0019 (J)
9/12/2019		0.0022
3/11/2020		<0.002

	GWA-1A	GWA-1A
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	0.0032	
12/1/2006	0.012	
6/21/2007	<0.0025	
12/15/2007	<0.0025	
6/22/2008	0.0031	
12/7/2008	<0.0025	
7/11/2009	<0.0025	
12/23/2009	<0.0025	
6/24/2010	<0.0025	
1/9/2011	0.0031	
7/11/2011	<0.0025	
1/20/2012	<0.0025	
7/13/2012	0.0015	
1/21/2013	0.0035	
7/20/2013	<0.0025	
1/17/2014	0.0027	
7/12/2014	<0.0013 (J)	
1/16/2015	<0.0025	
7/15/2015	<0.0025	
1/16/2016	0.00059 (J)	
6/22/2016	0.00085 (JD)	
9/1/2016	0.023 (o)	
2/28/2017	0.00048 (J)	
7/17/2017	<0.0025	
9/20/2017	<0.0025	
1/8/2018	<0.0025	
3/27/2018	<0.0025	
7/10/2018	<0.0025	
10/8/2018	<0.0025	
1/30/2019		0.00038 (J)
3/27/2019		<0.0025
9/11/2019		0.00032 (J)
3/10/2020		0.00028 (J)

	GWA-2A	GWA-2A
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	
6/22/2008	<0.0025	
12/7/2008	<0.0025	
7/11/2009	<0.0025	
12/23/2009	<0.0025	
6/24/2010	<0.0025	
7/13/2012	0.0018	
1/21/2013	0.012 (o)	
7/20/2013	0.0028	
1/17/2014	<0.0025	
7/12/2014	<0.0013 (J)	
1/16/2015	<0.0025	
7/15/2015	<0.0025	
1/16/2016	0.00052 (J)	
6/23/2016	0.0012 (J)	
9/1/2016	0.0017 (J)	
1/18/2017	0.0006 (J)	
2/28/2017	0.00063 (J)	
7/18/2017	0.00048 (J)	
9/20/2017	0.00044 (J)	
1/8/2018	0.00044 (J)	
3/27/2018	0.0004 (J)	
7/10/2018	0.00044 (J)	
10/8/2018	<0.0025	
1/30/2019		0.0005 (J)
3/27/2019		<0.0025
9/11/2019		0.0004 (J)
3/10/2020		0.00044 (J)

			Plant Micintosn	Client: Southern Company	Data: McIntosn LF 3 CCR	
	GWA-3A	GWA-3A				
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					
6/22/2008	<0.0025					
12/6/2008	<0.0025					
7/10/2009	<0.0025					
12/23/2009	<0.0025					
6/23/2010	<0.0025					
1/8/2011	<0.0025					
7/10/2011	<0.0025					
1/19/2012	<0.0025					
7/12/2012	<0.0025					
1/21/2013	<0.0025					
7/20/2013	<0.0025					
1/17/2014	<0.0013 (J)					
7/12/2014	<0.0013 (J)					
1/15/2015	0.00086 (J)					
7/15/2015	0.00087 (J)					
1/16/2016	0.0011 (J)					
6/22/2016	0.0009 (J)					
8/31/2016	0.00095 (J)					
1/19/2017	0.00087 (J)					
7/18/2017	0.001 (J)					
9/20/2017	0.0011 (J)					
1/9/2018	0.0011 (J)					
3/27/2018	0.0011 (J)					
7/10/2018	0.0012 (J)					
10/9/2018	<0.0025					
1/30/2019		0.0014 (J)				
3/28/2019		0.0014 (J)				
9/12/2019		0.0015				
3/10/2020		0.0019				
4/2/2020		0.0017 (J)				

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		GWA-3B	GWA-3B
	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	
	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	
	12/23/2009	<0.0025	
	6/23/2010	<0.0025	
	7/20/2013	<0.0025	
	1/17/2014	<0.0013 (J)	
	7/12/2014	<0.0013 (J)	
	1/15/2015	0.0011 (J)	
	7/15/2015	0.00087 (J)	
	1/16/2016	0.0013	
	6/23/2016	<0.0025	
	8/31/2016	0.00061 (J)	
	1/23/2017	<0.0025	
	7/18/2017	<0.0025	
	9/20/2017	0.00041 (J)	
	1/9/2018	0.0007 (J)	
	3/28/2018	0.00074 (J)	
	7/10/2018	0.0012 (J)	
	10/8/2018	<0.0025	
	1/30/2019		0.0019 (J)
	3/28/2019		<0.0025
	9/12/2019		0.0014
	3/11/2020		0.00038 (J)

 $\label{lem:constituent: Cobalt (mg/L)} Constituent: Cobalt (mg/L) \quad Analysis Run 6/15/2020 \ 10:58 \ AM \quad View: PL's \ State$ $Plant \ McIntosh \quad Client: Southern \ Company \quad Data: \ McIntosh \ LF \ 3 \ CCR$

			Plant Micintosn	Client: Southern Company	Data: McIntosn LF 3 CCR
	GWA-4	GWA-4			
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	<0.0025				
12/6/2008	<0.0025				
7/11/2009	<0.0025				
12/23/2009	<0.0025				
6/23/2010	<0.0025				
1/8/2011	<0.0025				
7/10/2011	<0.0025				
1/19/2012	<0.0025				
7/12/2012	<0.0025				
1/21/2013	<0.0025				
7/20/2013	<0.0025				
1/17/2014	<0.0013 (J)				
7/12/2014	<0.0013 (J)				
1/15/2015	0.00084 (J)				
7/15/2015	0.00083 (J)				
1/16/2016	0.00092 (J)				
6/22/2016	0.0005 (J)				
8/31/2016	0.00055 (J)				
1/19/2017	0.00041 (J)				
7/18/2017	0.0007 (J)				
9/21/2017	0.00073 (J)				
1/9/2018	0.0012 (J)				
3/27/2018	0.00081 (J)				
7/10/2018	0.00086 (J)				
10/8/2018	<0.0025	0.00000 (1)			
1/30/2019		0.00092 (J)			
3/28/2019		0.00089 (J)			
9/12/2019		0.00091			
3/10/2020		0.0009			

	GWA-5	GWA-5
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	0.018 (o)	
12/13/2003	<0.0025	
5/28/2004	<0.0025	
12/10/2004	0.007	
6/24/2005	0.0072	
12/13/2005	0.0062	
7/12/2006	0.0048	
12/1/2006	0.0032	
6/21/2007	0.0037	
12/15/2007	<0.0025	
6/22/2008	0.0025	
12/6/2008	0.0025	
7/11/2009	<0.0025	
12/22/2009	0.0025	
6/23/2010	<0.0025	
1/8/2011	0.0026	
7/10/2011	<0.0025	
1/20/2012	<0.0025	
7/12/2012	0.002	
1/21/2013	0.0014	
7/20/2013	<0.0025	
1/17/2014	0.0019	
7/12/2014	0.0026	
1/16/2015	0.0021	
7/15/2015	0.0023	
1/16/2016	0.002	
6/22/2016	0.0007 (J)	
8/31/2016	0.001 (J)	
1/19/2017	0.00046 (J)	
7/19/2017	0.00069 (J)	
9/21/2017	0.00073 (J)	
1/9/2018	0.0014 (J)	
3/27/2018	0.0019 (J)	
7/10/2018	0.0015 (J)	
10/8/2018	<0.0025	
1/30/2019		0.00076 (J)
3/27/2019		0.0012 (J)
9/12/2019		0.00074
3/10/2020		0.00099

	GWA-7	GWA-7
10/5/1999	0.013	
11/12/1999	<0.0025	
12/29/1999	<0.0025	
2/17/2000	<0.0025	
9/13/2000	<0.0025	
11/10/2000	0.017	
1/4/2001	0.054 (o)	
12/11/2001	0.014	
4/4/2002	<0.0025	
12/6/2002	<0.0025	
6/28/2003	<0.0025	
12/13/2003	0.0076	
5/28/2004	<0.0025	
12/10/2004	<0.0025	
6/24/2005	<0.0025	
12/13/2005	<0.0025	
7/12/2006	0.012	
12/1/2006	<0.0025	
6/21/2007	0.0064	
12/15/2007	<0.0025	
6/21/2008	<0.0025	
12/6/2008	<0.0025	
7/10/2009	<0.0025	
12/23/2009	<0.0025	
6/23/2010	<0.0025	
1/8/2011	<0.0025	
7/10/2011	<0.0025	
1/19/2012	<0.0025	
7/12/2012	<0.0025	
1/21/2013	<0.0025	
7/19/2013	<0.0025	
1/16/2014	<0.0013 (J)	
7/12/2014	<0.0025	
1/15/2015	<0.0025	
7/15/2015	<0.0025	
1/16/2016	<0.0025	
6/22/2016	<0.0025	
8/30/2016	<0.0025	
1/19/2017	<0.0025	
7/19/2017	<0.0025	
9/20/2017	0.00041 (J)	
1/10/2018	<0.0025	
3/28/2018	<0.0025	
7/10/2018	0.00066 (J)	
10/9/2018	<0.0025	
1/30/2019		0.0012 (J)
3/28/2019		<0.0025
9/12/2019		0.00048 (J)
3/11/2020		0.00033 (J)

 $\label{lem:constituent: Cobalt (mg/L)} Constituent: Cobalt (mg/L) \quad Analysis Run 6/15/2020 \ 10:58 \ AM \quad View: PL's \ State$ $Plant \ McIntosh \quad Client: Southern \ Company \quad Data: \ McIntosh \ LF \ 3 \ CCR$

			Plant Micintosn	Client: Southern Company	Data: Micintosn LF 3 CCR
	GWC-1	GWC-1			
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	0.0048 (o)				
12/6/2008	<0.0025				
7/11/2009	<0.0025				
12/23/2009	<0.0025				
6/23/2010	<0.0025				
1/8/2011	<0.0025				
7/10/2011	<0.0025				
1/20/2012	<0.0025				
7/12/2012	<0.0025				
1/21/2013	<0.0025				
7/20/2013	<0.0025				
1/17/2014	<0.0025				
7/12/2014	<0.0025				
1/16/2015	<0.0025				
7/15/2015	<0.0025				
1/16/2016	<0.0025				
6/22/2016	<0.0025				
8/31/2016	<0.0025				
1/23/2017	<0.0025				
7/19/2017	<0.0025				
9/21/2017	<0.0025				
1/9/2018	<0.0025				
3/28/2018	<0.0025				
7/11/2018	<0.0025				
10/9/2018	<0.0025	0.00023 / I)			
1/30/2019		0.00023 (J)			
3/28/2019 9/12/2019		<0.0025			
3/11/2020		0.00027 (J) 0.00026 (J)			
J: 1 1/2020		0.00020 (0)			

 $\label{lem:constituent: Cobalt (mg/L)} Constituent: Cobalt (mg/L) \quad Analysis Run 6/15/2020 \ 10:58 \ AM \quad View: PL's \ State$ $Plant \ McIntosh \quad Client: Southern \ Company \quad Data: \ McIntosh \ LF \ 3 \ CCR$

	GWC-2	GWC-2			
10/5/1999	<0.0025				
11/12/1999	<0.0025				
12/29/1999	<0.0025				
2/17/2000	<0.0025				
9/13/2000	0.01				
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	0.0062				
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				
6/22/2008	<0.0025				
12/6/2008	<0.0025				
7/11/2009	<0.0025				
12/23/2009	<0.0025				
6/23/2010	<0.0025				
1/8/2011	<0.0025				
7/10/2011	<0.0025				
1/20/2012	<0.0025				
7/12/2012	<0.0025				
1/21/2013	<0.0025				
7/20/2013	<0.0025				
1/17/2014	<0.0025				
7/12/2014	<0.0013 (J)				
1/15/2015	0.00096 (J)				
7/15/2015	0.0006 (J)				
1/17/2016	0.00069 (J)				
6/22/2016	0.0011 (J)				
8/31/2016	0.0006 (J)				
1/24/2017	0.00067 (J)				
7/19/2017	0.00079 (J)				
9/21/2017	0.00077 (J)				
1/9/2018	0.00092 (J)				
3/29/2018	0.0008 (J)				
7/10/2018	0.00097 (J)				
10/9/2018	<0.0025				
1/31/2019		0.00092 (J)			
3/28/2019		0.00072 (J)			
9/12/2019		0.0009			
3/31/2020		0.00061 (J)			

			i idili
	GWC-4A	GWC-4A	
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	0.0025		
12/6/2008	<0.0025		
7/11/2009	<0.0025		
12/23/2009	<0.0025		
6/23/2010	<0.0025		
1/8/2011	<0.0025		
7/10/2011	<0.0025		
1/20/2012	<0.0025		
7/12/2012	<0.0025		
1/21/2013	<0.0025		
7/20/2013	<0.0025		
1/17/2014	<0.0025		
7/11/2014	<0.0025		
1/16/2015	0.00071 (J)		
7/15/2015	0.00064 (J)		
1/17/2016	0.00066 (J)		
6/22/2016	0.0009 (J)		
8/31/2016	0.0006 (J)		
1/25/2017	0.00047 (J)		
7/20/2017	<0.0025		
9/21/2017	<0.0025		
1/9/2018	0.00048 (J)		
3/28/2018	0.00048 (J)		
7/10/2018	0.00084 (J)		
10/9/2018	<0.0025		
1/30/2019		0.00038 (J)	
3/28/2019		<0.0025	
9/12/2019		0.00044 (J)	
3/31/2020		0.00033 (J)	

	GWC-4B	GWC-4B
10/5/1999	<0.0025	
11/12/1999	<0.0025	
2/17/2000	<0.0025	
6/24/2005	<0.0025	
12/13/2005	<0.0025	
6/22/2016	<0.0025	
9/1/2016	<0.0025	
1/25/2017	0.00056 (J)	
7/20/2017	<0.0025	
9/21/2017	0.00046 (J)	
1/9/2018	<0.0025	
3/31/2020		0.00028 (J)

			Plant McIntosh	Client: Southern Com
	GWC-5	GWC-5		
10/5/1999	<0.005			
11/12/1999	<0.005			
12/29/1999	<0.005			
2/17/2000	<0.005			
9/13/2000	<0.005			
11/10/2000	<0.005			
1/4/2001	<0.005			
12/11/2001	<0.005			
4/4/2002	<0.005			
12/6/2002	0.0074			
6/28/2003	<0.005			
12/13/2003	0.0086			
5/28/2004	0.0065			
12/10/2004	0.0052			
6/24/2005	<0.005			
12/13/2005	<0.005			
7/12/2006	0.0055			
12/1/2006	0.0056			
6/21/2007	0.0055			
12/15/2007	0.0051			
6/21/2008	0.0054			
12/7/2008	0.005			
7/11/2009	0.0049			
12/23/2009	0.0035			
6/23/2010	0.0039			
1/8/2011	0.0046			
7/10/2011	0.0036			
1/20/2012	0.0042			
7/12/2012	0.0037			
1/21/2013	0.0038			
7/20/2013	0.003			
1/17/2014	0.0036			
7/11/2014	0.0056			
1/16/2015	0.0042			
7/15/2015	0.0052			
1/16/2016	0.0056			
6/23/2016	0.0073 (J)			
9/1/2016	0.011			
1/24/2017	0.009			
7/20/2017	0.0091			
9/21/2017	0.0093			
1/10/2018	0.0097			
3/28/2018	0.01			
7/11/2018	0.011			
10/9/2018	0.012			
1/31/2019		0.013		
3/28/2019		0.013		
9/12/2019		0.013		
3/31/2020		0.012		

			Plant Micintosn	Client: Southern Company	Data: Micintosn LF 3 CCR
	GWC-6	GWC-6			
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				
6/22/2008	<0.0025				
12/7/2008	<0.0025				
7/11/2009	<0.0025				
12/23/2009	<0.0025				
6/24/2010	<0.0025				
1/9/2011	<0.0025				
7/11/2011	<0.0025				
1/20/2012	<0.0025				
7/13/2012	<0.0025				
1/21/2013	<0.0025				
7/20/2013	<0.0025				
1/17/2014	<0.0013 (J)				
7/12/2014	<0.0025				
1/16/2015	<0.0025				
7/15/2015	<0.0025				
1/16/2016	0.00055 (J)				
6/23/2016	0.0005 (J)				
9/1/2016	0.0014 (J)				
1/27/2017	0.00052 (J)				
7/20/2017	0.00062 (J)				
9/22/2017	0.00048 (J)				
1/10/2018	<0.0025				
3/29/2018	0.00052 (J)				
7/11/2018	0.00064 (J)				
10/9/2018	<0.0025				
1/31/2019		0.00076 (J)			
3/28/2019		0.0007 (J)			
9/12/2019		0.00077			
3/11/2020		0.00073			

	GWA-1A	GWA-1A
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	<0.002	
12/13/2003	<0.002	
5/28/2004	0.0052	
12/10/2004	<0.002	
6/24/2005	<0.002	
12/13/2005	<0.002	
7/12/2006	0.0055	
12/1/2006	<0.002	
6/21/2007	0.0032	
12/15/2007	<0.002	
6/22/2008	<0.002	
12/7/2008	<0.002	
7/11/2009	<0.002	
12/23/2009	0.0025	
6/24/2010	<0.002	
1/9/2011	0.004	
7/11/2011	<0.002	
1/20/2012	<0.002	
7/13/2012	<0.002	
1/21/2013	<0.002	
7/20/2013	<0.002	
1/17/2014	<0.005 (J)	
7/12/2014	<0.005 (J)	
1/16/2015	<0.002	
7/15/2015	<0.002	
1/16/2016	<0.002	
6/22/2016	0.002 (JD)	
2/28/2017	<0.002	
7/17/2017	<0.002	
1/8/2018	<0.002	
7/10/2018	<0.002	
1/30/2019		<0.002
3/27/2019		<0.002
9/11/2019		<0.002
3/10/2020		<0.002

	GWA-2A	GWA-2A
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	0.035 (o)	
6/28/2003	<0.002	
12/13/2003	<0.002	
5/28/2004	<0.002	
12/10/2004	<0.002	
6/24/2005	<0.002	
12/13/2005	<0.002	
7/12/2006	<0.002	
12/1/2006	0.0038	
6/21/2007	<0.002	
12/15/2007	<0.002	
6/22/2008	<0.002	
12/7/2008	<0.002	
7/11/2009	<0.002	
12/23/2009	<0.002	
6/24/2010	<0.002	
7/13/2012	<0.002	
1/21/2013	0.013 (o)	
7/20/2013	<0.002	
1/17/2014	<0.005 (J)	
7/12/2014	<0.002	
1/16/2015	<0.002	
7/15/2015	<0.002	
1/16/2016	<0.002	
6/23/2016	0.0016 (J)	
1/18/2017	<0.002	
7/18/2017	<0.002	
1/8/2018	<0.002	
7/10/2018	<0.002	
1/30/2019		0.0018 (J)
3/27/2019		<0.002
9/11/2019		0.0012 (J)
3/10/2020		<0.002

	GWA-3A	GWA-3A
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	
6/22/2008	<0.0025	
12/6/2008	<0.0025	
7/10/2009	<0.0025	
12/23/2009	<0.0025	
6/23/2010	<0.0025	
1/8/2011	<0.0025	
7/10/2011	<0.0025	
1/19/2012	<0.0025	
7/12/2012	<0.0025	
1/21/2013	<0.0025	
7/20/2013	<0.0025	
1/17/2014	<0.0025	
7/12/2014	<0.0025	
1/15/2015	<0.0025	
7/15/2015	<0.0025	
1/16/2016	<0.0025	
6/22/2016	0.00205 (JD)	
1/19/2017	<0.0025	
7/18/2017	<0.0025	
1/9/2018	<0.0025	
7/10/2018	<0.0025	
1/30/2019		<0.0025
3/28/2019		<0.0025
9/12/2019		0.0024
3/10/2020		0.00082 (J)
4/2/2020		0.0019 (J)

	GWA-3B	GWA-3B
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	
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	
12/23/2009	<0.0025	
6/23/2010	<0.0025	
7/20/2013	<0.0025	
1/17/2014	<0.0025	
7/12/2014	<0.0025	
1/15/2015	<0.0025	
7/15/2015	<0.0025	
1/16/2016	<0.0025	
6/23/2016	0.0005 (J)	
1/23/2017	<0.0025	
7/18/2017	<0.0025	
1/9/2018	<0.0025	
7/10/2018	<0.0025	
1/30/2019		0.0015 (J)
3/28/2019		<0.0025
9/12/2019		0.0032
3/11/2020		0.00067 (J)

	GWA-5	GWA-5
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	0.0089 (o)	
6/28/2003	0.019 (o)	
12/13/2003	0.0067 (o)	
5/28/2004	0.0057 (o)	
12/10/2004	0.0027	
6/24/2005	0.0038	
12/13/2005	<0.0025	
7/12/2006	0.0033	
12/1/2006	<0.0025	
6/21/2007	0.0035	
12/15/2007	<0.0025	
6/22/2008	<0.0025	
12/6/2008	<0.0025	
7/11/2009	<0.0025	
12/22/2009	0.0025	
6/23/2010	<0.0025	
1/8/2011	<0.0025	
7/10/2011	<0.0025	
1/20/2012	<0.0025	
7/12/2012	<0.0025	
1/21/2013	<0.0025	
7/20/2013	<0.0025	
1/17/2014	<0.005 (J)	
7/12/2014	<0.0025	
1/16/2015	<0.0025	
7/15/2015	<0.0025	
1/16/2016	<0.0025	
6/22/2016	0.001	
1/19/2017	<0.0025	
7/19/2017	<0.0025	
1/9/2018	<0.0025	
7/10/2018	<0.0025	
1/30/2019		<0.0025
3/27/2019		<0.0025
9/12/2019		0.0011 (J)
3/10/2020		0.0019 (J)

	GWA-7	GWA-7
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	0.054 (o)	
12/11/2001	<0.002	
4/4/2002	<0.002	
12/6/2002	0.012 (o)	
6/28/2003	<0.002	
12/13/2003	0.01 (o)	
5/28/2004	<0.002	
12/10/2004	<0.002	
6/24/2005	<0.002	
12/13/2005	<0.002	
7/12/2006	0.016 (o)	
12/1/2006	<0.002	
6/21/2007	<0.002	
12/15/2007	<0.002	
6/21/2008	<0.002	
12/6/2008	<0.002	
7/10/2009	<0.002	
12/23/2009	<0.002	
6/23/2010	<0.002	
1/8/2011	<0.002	
7/10/2011	<0.002	
1/19/2012	<0.002	
7/12/2012	<0.002	
1/21/2013	<0.002	
7/19/2013	<0.002	
1/16/2014	<0.002	
7/12/2014	<0.002	
1/15/2015	<0.002	
7/15/2015	<0.002	
1/16/2016	<0.002	
6/22/2016	<0.002	
1/19/2017	<0.002	
7/19/2017	<0.002	
1/10/2018	<0.002	
7/10/2018	<0.002	
1/30/2019		0.0016 (J)
3/28/2019		<0.002
9/12/2019		0.0026
3/11/2020		<0.002

	GWC-1	GWC-1
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	<0.002	
12/13/2003	<0.002	
5/28/2004	<0.002	
12/10/2004	<0.002	
6/24/2005	<0.002	
12/13/2005	<0.002	
7/12/2006	0.0047 (o)	
12/1/2006	<0.002	
6/21/2007	<0.002	
12/15/2007	<0.002	
6/21/2008	<0.002	
12/6/2008	<0.002	
7/11/2009	<0.002	
12/23/2009	<0.002	
6/23/2010	<0.002	
1/8/2011	<0.002	
7/10/2011	<0.002	
1/20/2012	<0.002	
7/12/2012	<0.002	
1/21/2013	<0.002	
7/20/2013	<0.002	
1/17/2014	<0.002	
7/12/2014	<0.002	
1/16/2015	<0.002	
7/15/2015	<0.002	
	<0.002	
	<0.002	
1/23/2017	<0.002	
7/19/2017	<0.002	
1/9/2018	<0.002	
7/11/2018	<0.002	
1/30/2019		<0.002
3/28/2019		<0.002
9/12/2019		0.0024
3/11/2020		<0.002

	GWC-2	GWC-2
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	<0.002	
12/13/2003	<0.002	
5/28/2004	<0.002	
12/10/2004	0.11 (o)	
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	
6/22/2008	<0.002	
12/6/2008	<0.002	
7/11/2009	<0.002	
12/23/2009	<0.002	
6/23/2010	<0.002	
1/8/2011	<0.002	
7/10/2011	<0.002	
1/20/2012	<0.002	
7/12/2012	<0.002	
1/21/2013	<0.002	
7/20/2013	<0.002	
1/17/2014	0.0065 (o)	
7/12/2014	<0.002	
1/15/2015	<0.002	
7/15/2015	<0.002	
1/17/2016	<0.002	
6/22/2016	0.0005 (J)	
1/24/2017	<0.002	
7/19/2017	<0.002	
1/9/2018	<0.002	
7/10/2018	<0.002	
1/31/2019		<0.002
3/28/2019		<0.002
9/12/2019		0.002
3/31/2020		<0.002

	GWC-4A	GWC-4A
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	<0.002	
12/13/2003	<0.002	
5/28/2004	<0.002	
12/10/2004	<0.002	
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	
12/6/2008	<0.002	
7/11/2009	<0.002	
12/23/2009	<0.002	
6/23/2010	<0.002	
1/8/2011	<0.002	
7/10/2011	<0.002	
1/20/2012	<0.002	
7/12/2012	<0.002	
1/21/2013	<0.002	
7/20/2013	<0.002	
1/17/2014	<0.002	
7/11/2014	<0.002	
1/16/2015	<0.002	
7/15/2015	<0.002	
1/17/2016	<0.002	
6/22/2016	<0.002	
1/25/2017	<0.002	
7/20/2017	<0.002	
1/9/2018	<0.002	
7/10/2018	<0.002	
1/30/2019		<0.002
3/28/2019		<0.002
9/12/2019		<0.002
3/31/2020		<0.002

	GWC-4B	GWC-4B
10/5/1999	<0.002	
11/12/1999	<0.002	
2/17/2000	<0.002	
6/24/2005	<0.002	
12/13/2005	<0.002	
6/22/2016	<0.002	
1/25/2017	<0.002	
7/20/2017	<0.002	
1/9/2018	<0.002	
3/31/2020		<0.002

	GWC-5	GWC-5	
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	<0.002		
12/13/2003	0.0026		
5/28/2004	<0.002		
12/10/2004	<0.002		
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		
12/7/2008	<0.002		
7/11/2009	<0.002		
12/23/2009	<0.002		
6/23/2010	<0.002		
1/8/2011	<0.002		
7/10/2011	<0.002		
1/20/2012	<0.002		
7/12/2012	<0.002		
1/21/2013	<0.002		
7/20/2013	<0.002		
1/17/2014	<0.002		
7/11/2014	<0.002		
1/16/2015	<0.002		
7/15/2015	<0.002		
1/16/2016	<0.002		
6/23/2016	0.0007 (J)		
1/24/2017	<0.002		
7/20/2017	<0.002		
1/10/2018	<0.002		
7/11/2018	<0.002		
1/31/2019		<0.002	
3/28/2019		<0.002	
9/12/2019		0.00084 (J)	
3/31/2020		<0.002	

	GWC-6	GWC-6
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	<0.002	
12/13/2003	<0.002	
5/28/2004	<0.002	
12/10/2004	0.0044 (o)	
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	
6/22/2008	<0.002	
12/7/2008	<0.002	
7/11/2009	<0.002	
12/23/2009	<0.002	
6/24/2010	<0.002	
1/9/2011	<0.002	
7/11/2011	<0.002	
1/20/2012	<0.002	
7/13/2012	<0.002	
1/21/2013	<0.002	
7/20/2013	<0.002	
1/17/2014	<0.002	
7/12/2014	<0.002	
1/16/2015	<0.002	
7/15/2015	<0.002	
1/16/2016	<0.002	
6/23/2016	<0.002	
1/27/2017	<0.002	
7/20/2017	<0.002	
1/10/2018	<0.002	
7/11/2018	<0.002	
1/31/2019		<0.002
3/28/2019		<0.002
9/12/2019		0.003
3/11/2020		<0.002

	GWA-1A	GWA-1A
10/5/1999	0.007 (o)	
11/12/1999	0.0063 (o)	
12/29/1999	0.016 (o)	
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	0.015 (o)	
12/10/2004	0.01 (o)	
6/24/2005	<0.001	
12/13/2005	<0.001	
7/12/2006	0.013 (o)	
12/1/2006	<0.001	
6/21/2007	<0.001	
12/15/2007	<0.001	
6/22/2008	<0.001	
12/7/2008	<0.001	
7/11/2009	<0.001	
12/23/2009	<0.001	
6/24/2010	<0.001	
1/9/2011	<0.001	
7/11/2011	<0.001	
1/20/2012	<0.001	
7/13/2012	<0.001	
1/21/2013	<0.001	
7/20/2013	<0.001	
1/17/2014	<0.001	
7/12/2014	<0.001	
1/16/2015	<0.001	
7/15/2015	<0.001	
1/16/2016	<0.001	
6/22/2016	0.00125 (JD)	
9/1/2016	0.082 (o)	
2/28/2017	<0.001	
7/17/2017	<0.001	
9/20/2017	0.00035 (J)	
1/8/2018	<0.001	
3/27/2018	<0.001	
7/10/2018	<0.001	
10/8/2018	<0.001	
1/30/2019		0.00021 (J)
3/27/2019		<0.001
9/11/2019		<0.001
3/10/2020		0.00015 (J)

	GWA-2A	GWA-2A
10/5/1999	<0.001	
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	
6/22/2008	<0.001	
12/7/2008	<0.001	
7/11/2009	<0.001	
12/23/2009	<0.001	
6/24/2010	<0.001	
7/13/2012	<0.001	
1/21/2013	0.021 (o)	
7/20/2013	<0.001	
1/17/2014	<0.001	
7/12/2014	<0.001	
1/16/2015	<0.001	
7/15/2015	<0.001	
1/16/2016	<0.001	
6/23/2016	0.0025 (J)	
9/1/2016	0.0028	
1/18/2017	<0.001	
2/28/2017	<0.001	
7/18/2017	<0.001	
9/20/2017	0.0058	
1/8/2018	<0.001	
3/27/2018	<0.001	
7/10/2018	<0.001	
10/8/2018	<0.001	
1/30/2019		<0.001
3/27/2019		<0.001
9/11/2019		0.00019 (J)
3/10/2020		<0.001

				, ,
	GWA-3A	GWA-3A		
10/5/1999	<0.001			
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			
6/22/2008	<0.001			
12/6/2008	<0.001			
7/10/2009	<0.001			
12/23/2009	<0.001			
6/23/2010	<0.001			
1/8/2011	<0.001			
7/10/2011	<0.001			
1/19/2012	<0.001			
7/12/2012	<0.001			
1/21/2013	<0.001			
7/20/2013	<0.001			
1/17/2014	<0.001			
7/12/2014	<0.001			
1/15/2015	<0.001			
7/15/2015	<0.001			
1/16/2016	<0.001			
6/22/2016	0.00025 (JD)			
8/31/2016	<0.001			
1/19/2017	<0.001			
7/18/2017	<0.001			
9/20/2017	<0.001			
1/9/2018	<0.001			
3/27/2018	<0.001			
7/10/2018	<0.001			
10/9/2018	<0.001			
1/30/2019		0.00034 (J)		
3/28/2019		0.00038 (J)		
9/12/2019		<0.001		
3/10/2020		0.00013 (J)		
4/2/2020		0.00062 (J)		

	GWA-3B	GWA-3B
10/5/1999	<0.0013	
11/12/1999	<0.0013	
12/29/1999	<0.0013	
2/17/2000	<0.0013	
9/13/2000	<0.0013	
11/10/2000	<0.0013	
1/4/2001	<0.0013	
12/11/2001	<0.0013	
6/28/2003	<0.0013	
12/13/2003	<0.0013	
5/28/2004	<0.0013	
12/10/2004	<0.0013	
6/24/2005	<0.0013	
12/13/2005	<0.0013	
7/12/2006	<0.0013	
12/23/2009	<0.0013	
6/23/2010	<0.0013	
7/20/2013	<0.0013	
1/17/2014	<0.0013	
7/12/2014	<0.0013	
1/15/2015	<0.0013	
7/15/2015	<0.0013	
1/16/2016	<0.0013	
6/23/2016	0.0015 (J)	
8/31/2016	0.0016	
1/23/2017	0.00055 (J)	
7/18/2017	0.0008 (J)	
9/20/2017	0.0016	
1/9/2018	0.00041 (J)	
3/28/2018	0.00036 (J)	
7/10/2018	0.00053 (J)	
10/8/2018	<0.0013	
1/30/2019		0.001
3/28/2019		0.00052 (J)
9/12/2019		0.00069 (J)
3/11/2020		0.0011

	GWA-4	GWA-4			
10/5/1999	<0.001				
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	<0.001				
12/6/2008	<0.001				
7/11/2009	<0.001				
12/23/2009	<0.001				
6/23/2010	<0.001				
1/8/2011	<0.001				
7/10/2011	<0.001				
1/19/2012	<0.001				
7/12/2012	<0.001				
1/21/2013	<0.001				
7/20/2013	<0.001				
1/17/2014	<0.001				
7/12/2014	<0.001				
1/15/2015	<0.001				
7/15/2015	<0.001				
1/16/2016	<0.001				
6/22/2016	0.0003 (J)				
8/31/2016	<0.001				
1/19/2017	<0.001				
7/18/2017	<0.001				
9/21/2017	0.0076 (o)				
1/9/2018	0.0023				
3/27/2018	<0.001				
7/10/2018	<0.001				
10/8/2018	<0.001				
1/30/2019		0.00013 (J)			
3/28/2019		<0.001			
9/12/2019		<0.001			
3/10/2020		0.00031 (J)			

	GWA-5	GWA-5	
10/5/1999	<0.0013		
11/12/1999	<0.0013		
12/29/1999	<0.0013		
2/17/2000	<0.0013		
9/13/2000	<0.0013		
11/10/2000	<0.0013		
1/4/2001	<0.0013		
12/11/2001	<0.0013		
4/4/2002	<0.0013		
12/6/2002	0.011 (o)		
6/28/2003	<0.0013		
12/13/2003	<0.0013		
5/28/2004	<0.0013		
12/10/2004	<0.0013		
6/24/2005	<0.0013		
12/13/2005	<0.0013		
7/12/2006	<0.0013		
12/1/2006	<0.0013		
6/21/2007	<0.0013		
12/15/2007	<0.0013		
6/22/2008	<0.0013		
12/6/2008	<0.0013		
7/11/2009	<0.0013		
12/22/2009	<0.0013		
6/23/2010	<0.0013		
1/8/2011	<0.0013		
7/10/2011	<0.0013		
1/20/2012	<0.0013		
7/12/2012	<0.0013		
1/21/2013	<0.0013		
7/20/2013	<0.0013		
1/17/2014	<0.0013		
7/12/2014	<0.0013		
1/16/2015	<0.0013		
7/15/2015	<0.0013		
1/16/2016	<0.0013		
6/22/2016	0.001 (J)		
8/31/2016	0.00099 (J)		
1/19/2017	0.001 (J)		
7/19/2017	0.00081 (J)		
9/21/2017	0.00086 (J)		
1/9/2018	0.00059 (J)		
3/27/2018	<0.0013		
7/10/2018	0.00045 (J)		
10/8/2018	<0.0013		
1/30/2019		0.00064 (J)	
3/27/2019		0.0012 (J)	
9/12/2019		0.00082 (J)	
3/10/2020		0.0022	
		-	

	GWA-7	GWA-7
10/5/1999	0.024	
11/12/1999	0.012	
12/29/1999	0.012	
2/17/2000	< 0.0013	
9/13/2000	0.044	
11/10/2000	0.024	
1/4/2001	0.094 (o)	
12/11/2001	0.024	
4/4/2002	< 0.0013	
12/6/2002	0.023	
6/28/2003	0.0091	
12/13/2003	0.024	
5/28/2004	<0.0013	
12/10/2004	< 0.0013	
6/24/2005	< 0.0013	
12/13/2005	< 0.0013	
7/12/2006	0.028	
12/1/2006	<0.0013	
6/21/2007	<0.0013	
12/15/2007	<0.0013	
6/21/2008	<0.0013	
12/6/2008	<0.0013	
7/10/2009	<0.0013	
12/23/2009	<0.0013	
6/23/2010	<0.0013	
1/8/2011	<0.0013	
7/10/2011	<0.0013	
1/19/2012	<0.0013	
7/12/2012	<0.0013	
1/21/2013	<0.0013	
7/19/2013	<0.0013	
1/16/2014	<0.0013	
7/12/2014	<0.0013	
1/15/2015	<0.0013	
7/15/2015	<0.0013	
1/16/2016	<0.0013	
6/22/2016	0.0002 (J)	
8/30/2016	<0.0013	
1/19/2017	<0.0013	
7/19/2017	<0.0013	
9/20/2017	0.00054 (J)	
1/10/2018	<0.0013	
3/28/2018	<0.0013	
7/10/2018	0.0013	
10/9/2018	<0.0013	
1/30/2019		0.0021
3/28/2019		<0.0013
9/12/2019		0.00036 (J)
3/11/2020		0.00015 (J)

	GWC-2	GWC-2
10/5/1999	0.0054 (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	
6/22/2008	<0.001	
12/6/2008	<0.001	
7/11/2009	<0.001	
12/23/2009	<0.001	
6/23/2010	<0.001	
1/8/2011	<0.001	
7/10/2011	<0.001	
1/20/2012	<0.001	
7/12/2012	<0.001	
1/21/2013	<0.001	
7/20/2013	<0.001	
1/17/2014	<0.001	
7/12/2014	<0.001	
1/15/2015	<0.001	
7/15/2015	<0.001	
1/17/2016	<0.001	
6/22/2016	0.0001 (J)	
8/31/2016	<0.001	
1/24/2017	<0.001	
7/19/2017	<0.001	
9/21/2017	0.0014 (o)	
1/9/2018	<0.001	
3/29/2018	<0.001	
7/10/2018	<0.001	
10/9/2018	<0.001	
1/31/2019		<0.001
3/28/2019		<0.001
9/12/2019		<0.001
3/31/2020		<0.001

	GWC-4B	GWC-4B
10/5/1999	<0.0013	
11/12/1999	<0.0013	
2/17/2000	<0.0013	
6/24/2005	<0.0013	
12/13/2005	<0.0013	
6/22/2016	0.0002 (J)	
9/1/2016	<0.0013	
1/25/2017	0.00071 (JD)	
7/20/2017	<0.0013	
9/21/2017	0.0007 (J)	
1/9/2018	<0.0013	
3/31/2020		0.00018 (J)

	GWC-5	GWC-5
10/5/1999	<0.001	
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	0.007 (o)	
6/28/2003	<0.001	
12/13/2003	0.018 (o)	
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	<0.001	
12/7/2008	<0.001	
7/11/2009	<0.001	
12/23/2009	<0.001	
6/23/2010	<0.001	
1/8/2011	<0.001	
7/10/2011	<0.001	
1/20/2012	<0.001	
7/12/2012	<0.001	
1/21/2013	<0.001	
7/20/2013	<0.001	
1/17/2014	<0.001	
7/11/2014	<0.001	
1/16/2015	<0.001	
7/15/2015	<0.001	
1/16/2016	<0.001	
6/23/2016	0.0001 (J)	
9/1/2016	<0.001	
1/24/2017	<0.001	
7/20/2017	<0.001	
9/21/2017	<0.001	
1/10/2018	<0.001	
3/28/2018	<0.001	
7/11/2018	<0.001	
10/9/2018	<0.001	
1/31/2019		<0.001
3/28/2019		<0.001
9/12/2019		0.00024 (J)
3/31/2020		<0.001

	GWC-6	GWC-6
10/5/1999	<0.001	
11/12/1999	<0.001	
12/29/1999	<0.001	
2/17/2000	<0.001	
9/13/2000	0.079 (o)	
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	0.0073	
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	
6/22/2008	<0.001	
12/7/2008	<0.001	
7/11/2009	<0.001	
12/23/2009	<0.001	
6/24/2010	<0.001	
7/11/2011	<0.001	
1/20/2012	<0.001	
7/13/2012	<0.001	
1/21/2013	<0.001	
7/20/2013	<0.001	
1/17/2014	<0.001	
7/12/2014	<0.001	
1/16/2015	<0.001	
7/15/2015	<0.001	
1/16/2016	<0.001	
6/23/2016	<0.001	
9/1/2016	0.006	
1/27/2017	<0.001 (D)	
7/20/2017	<0.001	
9/22/2017	0.00042 (J)	
1/10/2018	<0.001	
3/29/2018	<0.001	
7/11/2018	0.00037 (J)	
10/9/2018	<0.001	
1/31/2019		<0.001
3/28/2019		0.00052 (J)
9/12/2019		0.00065 (J)
3/11/2020		<0.001

	GWA-1A	GWA-1A
10/5/1999	0.02	
11/12/1999	0.027	
12/29/1999	0.055	
2/17/2000	0.042	
9/13/2000	<0.001	
11/10/2000	0.014	
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	0.017	
12/10/2004	0.0082	
6/24/2005	<0.001	
12/13/2005	<0.001	
7/12/2006	0.023	
12/1/2006	0.0081	
6/21/2007	0.009	
12/15/2007	0.0056	
6/22/2008	0.013	
12/7/2008	0.0027	
7/11/2009	0.0032	
12/23/2009	0.0093	
6/24/2010	0.0033	
1/9/2011	<0.001	
7/11/2011	<0.001	
1/20/2012	<0.001	
7/13/2012	0.011	
1/21/2013	0.028	
7/20/2013	<0.001	
1/17/2014	0.019	
7/12/2014	<0.005 (J)	
1/16/2015	0.0012 (J)	
7/15/2015	<0.001	
1/16/2016	0.0015 (J)	
6/22/2016	0.0081 (D)	
2/28/2017	0.0019 (J)	
7/17/2017	<0.001	
1/8/2018	<0.001	
7/10/2018	<0.001	
1/30/2019		<0.001
3/27/2019		<0.001
9/11/2019		0.0014
3/10/2020		<0.001

	GWA-2A	GWA-2A
10/5/1999	0.019	
11/12/1999	0.023	
12/29/1999	0.012	
2/17/2000	0.014	
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	
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	0.0071	
12/1/2006	0.0075	
6/21/2007	<0.001	
12/15/2007	0.0027	
6/22/2008	<0.001	
12/7/2008	<0.001	
7/11/2009	0.0049	
12/23/2009	<0.001	
6/24/2010	<0.001	
7/13/2012	0.012	
1/21/2013	0.092 (o)	
7/20/2013	0.019	
1/17/2014	0.0062	
7/12/2014	<0.005 (J)	
1/16/2015	0.0017 (J)	
7/15/2015	0.0019 (J)	
1/16/2016	0.0029 (J)	
6/23/2016	0.0053 (J)	
1/18/2017	0.0028	
7/18/2017	<0.001	
1/8/2018	<0.001	
7/10/2018	<0.001	
1/30/2019		<0.001
3/27/2019		<0.001
9/11/2019		0.0016
3/10/2020		<0.001

	GWA-3A	GWA-3A
10/5/1999	<0.001	
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	0.0038	
12/15/2007	<0.001	
6/22/2008	<0.001	
12/6/2008	<0.001	
7/10/2009	<0.001	
12/23/2009	<0.001	
6/23/2010	<0.001	
1/8/2011	<0.001	
7/10/2011	<0.001	
1/19/2012	<0.001	
7/12/2012	<0.001	
1/21/2013	<0.001	
7/20/2013	<0.001	
1/17/2014	<0.001	
7/12/2014	<0.001	
1/15/2015	<0.001	
7/15/2015	<0.001	
1/16/2016	0.0011 (J)	
6/22/2016	<0.001	
1/19/2017	<0.001	
7/18/2017	<0.001	
1/9/2018	<0.001	
7/10/2018	<0.001	
1/30/2019		<0.001
3/28/2019		<0.001
9/12/2019		0.002
3/10/2020		<0.001
4/2/2020		0.0013

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		GWA-3B	GWA-3B
	10/5/1999	<0.0028	
	11/12/1999	<0.0028	
	12/29/1999	<0.0028	
	2/17/2000	<0.0028	
	9/13/2000	<0.0028	
	11/10/2000	<0.0028	
	1/4/2001	<0.0028	
	12/11/2001	0.011 (o)	
	6/28/2003	<0.0028	
	12/13/2003	<0.0028	
	5/28/2004	<0.0028	
	12/10/2004	<0.0028	
	6/24/2005	<0.0028	
	12/13/2005	<0.0028	
	7/12/2006	0.0061	
	12/23/2009	0.0064	
	6/23/2010	<0.0028	
	7/20/2013	<0.0028	
	1/17/2014	<0.0028	
	7/12/2014	<0.005 (J)	
	1/15/2015	0.0016	
	7/15/2015	0.0028 (J)	
	1/16/2016	0.0018	
	6/23/2016	0.0023 (J)	
	1/23/2017	0.0035	
	7/18/2017	0.0014	
	1/9/2018	<0.0028	
	7/10/2018	<0.0028	
	1/30/2019		0.0043
	3/28/2019		<0.0028
	9/12/2019		0.0041
	3/11/2020		0.0028

	GWA-4	GWA-4
10/5/1999	<0.001	
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	<0.001	
12/6/2008	<0.001	
7/11/2009	<0.001	
12/23/2009	<0.001	
6/23/2010	<0.001	
1/8/2011	<0.001	
7/10/2011	<0.001	
1/19/2012	<0.001	
7/12/2012	<0.001	
1/21/2013	<0.001	
7/20/2013	<0.001	
1/17/2014	<0.001	
7/12/2014	<0.001	
1/15/2015	<0.001	
7/15/2015	<0.001	
1/16/2016	0.00082 (J)	
6/22/2016	<0.001	
1/19/2017	0.0025	
7/18/2017	<0.001	
1/9/2018	0.0072 (o)	
7/10/2018	<0.001	
1/30/2019		<0.001
3/28/2019		<0.001
9/12/2019		0.0017
3/10/2020		<0.001

	GWA-5	GWA-5
10/5/1999	<0.0082	
11/12/1999	<0.0082	
12/29/1999	<0.0082	
2/17/2000	<0.0082	
9/13/2000	<0.0082	
11/10/2000	<0.0082	
1/4/2001	<0.0082	
12/11/2001	<0.0082	
4/4/2002	<0.0082	
12/6/2002	0.03 (o)	
6/28/2003	<0.0082	
12/13/2003	<0.0082	
5/28/2004	<0.0082	
12/10/2004	<0.0082	
6/24/2005	<0.0082	
12/13/2005	<0.0082	
7/12/2006	<0.0082	
12/1/2006	<0.0082	
6/21/2007	0.07 (o)	
12/15/2007	<0.0082	
6/22/2008	0.0026	
12/6/2008	<0.0082	
7/11/2009	<0.0082	
12/22/2009	<0.0082	
6/23/2010	<0.0082	
1/8/2011	<0.0082	
7/10/2011	<0.0082	
1/20/2012	<0.0082	
7/12/2012	<0.0082	
1/21/2013	<0.0082	
7/20/2013	<0.0082	
1/17/2014	<0.0082	
7/12/2014	<0.0082	
1/16/2015	0.0011 (J)	
7/15/2015	0.0016 (J)	
1/16/2016	<0.0082	
6/22/2016	0.0018 (J)	
1/19/2017	0.0033	
7/19/2017	0.0045	
1/9/2018	0.0027	
7/10/2018	<0.0082	0.0040 (1)
1/30/2019		0.0019 (J)
3/27/2019		<0.0082
9/12/2019		0.004
3/10/2020		0.01

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		GWA-7	GWA-7
	10/5/1999	0.087	
	11/12/1999	0.05	
	12/29/1999	0.045	
	9/13/2000	0.028	
	11/10/2000	0.11	
	1/4/2001	0.32 (o)	
	12/11/2001	0.091	
	4/4/2002	0.012	
	12/6/2002	0.07	
	6/28/2003	0.016	
	12/13/2003	0.046	
	5/28/2004	<0.0063	
	12/10/2004	<0.0063	
	6/24/2005	<0.0063	
	12/13/2005	<0.0063	
	7/12/2006	0.071 (o)	
	12/1/2006	<0.0063	
	6/21/2007	<0.0063	
	12/15/2007	<0.0063	
	6/21/2008	0.0026	
	12/6/2008	<0.0063	
	7/10/2009	<0.0063	
	12/23/2009	<0.0063	
	6/23/2010	<0.0063	
	1/8/2011	<0.0063	
	7/10/2011	<0.0063	
	1/19/2012	<0.0063	
	7/12/2012	<0.0063	
	1/21/2013	<0.0063	
	7/19/2013	<0.0063	
	1/16/2014	<0.0063	
	7/12/2014	<0.0063	
	1/15/2015	0.002 (J)	
	7/15/2015	0.0015 (J)	
	1/16/2016	0.001 (J)	
	6/22/2016	<0.0063	
	1/19/2017	0.0025	
	7/19/2017	0.0025	
	1/10/2018	0.0015 (J)	
	7/10/2018	<0.0063	
	1/30/2019		0.0043
	3/28/2019		<0.0063
	9/12/2019		0.0037
	3/11/2020		0.0013

10/5/1999 11/12/1999 12/29/1999 2/17/2000 9/13/2000 11/10/2000 11/4/2001 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 12/13/2007 12/15/2007 6/21/2008 12/16/2008	GWC-1 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	GWC-1
11/12/1999 12/29/1999 2/17/2000 9/13/2000 11/10/2000 11/4/2001 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 12/12/2006 6/21/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
12/29/1999 2/17/2000 9/13/2000 11/10/2000 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	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
2/17/2000 9/13/2000 11/10/2000 11/4/2001 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	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
9/13/2000 11/10/2000 11/4/2001 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 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
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 12/13/2006 12/1/2006 6/21/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
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 12/13/2006 12/1/2006 6/21/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
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 12/1/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
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 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
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 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
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 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
12/13/2003 5/28/2004 12/10/2004 6/24/2005 12/13/2005 7/12/2006 12/1/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
5/28/2004 12/10/2004 6/24/2005 12/13/2005 7/12/2006 12/1/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
12/10/2004 6/24/2005 12/13/2005 7/12/2006 12/1/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
6/24/2005 12/13/2005 7/12/2006 12/1/2006 6/21/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001	
12/13/2005 7/12/2006 12/1/2006 6/21/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001 <0.001 <0.001 <0.001	
7/12/2006 12/1/2006 6/21/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001 <0.001 <0.001	
12/1/2006 6/21/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001 <0.001	
6/21/2007 12/15/2007 6/21/2008 12/6/2008	<0.001 <0.001	
12/15/2007 6/21/2008 12/6/2008	<0.001	
6/21/2008 12/6/2008		
12/6/2008	< 0.001	
	<0.001	
7/11/2009	<0.001	
12/23/2009	<0.001	
6/23/2010	<0.001	
1/8/2011	<0.001	
7/10/2011	<0.001	
1/20/2011	<0.001	
7/12/2012	<0.001	
1/21/2013	<0.001	
7/20/2013	<0.001	
1/17/2014	<0.001	
7/12/2014	<0.001	
1/16/2015	<0.001	
7/15/2015	<0.001	
1/16/2016	<0.001	
6/22/2016	<0.001	
1/23/2017	0.0063	
7/19/2017	<0.001	
1/9/2018	<0.001	
7/11/2018	<0.001	
1/30/2019		<0.001
3/28/2019		<0.001
9/12/2019		0.0023
3/11/2020		<0.001

	GWC-2	GWC-2
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	
6/22/2008	<0.001	
12/6/2008	<0.001	
7/11/2009	<0.001	
12/23/2009	<0.001	
6/23/2010	<0.001	
1/8/2011	<0.001	
7/10/2011	<0.001	
1/20/2012	<0.001	
7/12/2012	<0.001	
1/21/2013	<0.001	
7/20/2013	<0.001	
1/17/2014	<0.001	
7/12/2014	<0.001	
1/15/2015	<0.001	
7/15/2015	<0.001	
1/17/2016	<0.001	
6/22/2016	0.0019 (J)	
1/24/2017	0.0062	
7/19/2017	0.0015 (J)	
1/9/2018	<0.001	
7/10/2018	<0.001	
1/31/2019		<0.001
3/28/2019		<0.001
9/12/2019		0.0018
3/31/2020		<0.001

			. ,
	GWC-4A	GWC-4A	
10/5/1999	<0.001		
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	<0.001		
12/6/2008	<0.001		
7/11/2009	<0.001		
12/23/2009	<0.001		
6/23/2010	<0.001		
1/8/2011	<0.001		
7/10/2011	<0.001		
1/20/2012	<0.001		
7/12/2012	<0.001		
1/21/2013	<0.001		
7/20/2013	<0.001		
1/17/2014	<0.001		
7/11/2014	<0.001		
1/16/2015	<0.001		
7/15/2015	<0.001		
1/17/2016	<0.001		
6/22/2016	<0.001		
1/25/2017	<0.001		
7/20/2017	<0.001		
1/9/2018	<0.001		
7/10/2018	<0.001		
1/30/2019		<0.001	
3/28/2019		<0.001	
9/12/2019		0.0021	
3/31/2020		<0.001	

	GWC-4B	GWC-4B
10/5/1999	<0.0025	
11/12/1999	<0.0025	
2/17/2000	<0.0025	
6/24/2005	<0.0025	
12/13/2005	<0.0025	
6/22/2016	<0.0025	
1/25/2017	<0.0025	
7/20/2017	0.0019 (J)	
1/9/2018	<0.0025	
3/31/2020		0.0011

	GWC-5	GWC-5
10/5/1999	<0.007	
11/12/1999	<0.007	
12/29/1999	<0.007	
2/17/2000	<0.007	
9/13/2000	<0.007	
11/10/2000	<0.007	
1/4/2001	<0.007	
12/11/2001	<0.007	
4/4/2002	<0.007	
12/6/2002	0.0082	
6/28/2003	<0.007	
12/13/2003	0.017	
5/28/2004	<0.007	
12/10/2004	<0.007	
6/24/2005	<0.007	
12/13/2005	<0.007	
7/12/2006	<0.007	
12/1/2006	<0.007	
6/21/2007	<0.007	
12/15/2007	<0.007	
6/21/2008	<0.007	
12/7/2008	<0.007	
7/11/2009	<0.007	
12/23/2009	<0.007	
6/23/2010	<0.007	
1/8/2011	<0.007	
7/10/2011	<0.007	
1/20/2012	<0.007	
7/12/2012	<0.007	
1/21/2013	<0.007	
7/20/2013	<0.007	
1/17/2014	<0.007	
7/11/2014	<0.007	
1/16/2015	<0.007	
7/15/2015	<0.007	
1/16/2016	<0.007	
6/23/2016	0.0021 (J)	
1/24/2017	0.044 (o)	
7/20/2017	0.014	
1/10/2018	0.014	
7/11/2018	0.011 (J)	
1/31/2019		<0.007
3/28/2019		<0.007
9/12/2019		0.0044
3/31/2020		0.0016

	GWC-6	GWC-6
10/5/1999	<0.001	
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	
6/22/2008	<0.001	
12/7/2008	<0.001	
7/11/2009	<0.001	
12/23/2009	<0.001	
6/24/2010	<0.001	
7/11/2011	<0.001	
1/20/2012	<0.001	
7/13/2012	<0.001	
1/21/2013	<0.001	
7/20/2013	<0.001	
1/17/2014	<0.001	
7/12/2014	<0.001	
1/16/2015	<0.001	
7/15/2015	<0.001	
1/16/2016	<0.001	
6/23/2016	<0.001	
1/27/2017	<0.001	
7/20/2017	0.0021 (J)	
1/10/2018	<0.001	
7/11/2018	<0.001	
1/31/2019		<0.001
3/28/2019		<0.001
9/12/2019		0.0043
3/11/2020		<0.001

	GWA-1A	GWA-1A
10/5/1999	0.043	
11/12/1999	0.035	
12/29/1999	0.058	
2/17/2000	0.051	
9/13/2000	<0.005	
11/10/2000	<0.005	
1/4/2001	<0.005	
12/11/2001	<0.005	
4/4/2002	<0.005	
12/6/2002	<0.005	
6/28/2003	<0.005	
12/13/2003	<0.005	
5/28/2004	0.034	
12/10/2004	0.021	
6/24/2005	<0.005	
12/13/2005	0.013	
7/12/2006	0.074	
12/1/2006	0.048	
6/21/2007	0.067	
12/15/2007	0.053	
6/22/2008	0.024	
12/7/2008	0.0087	
7/11/2009	0.045	
12/23/2009	0.054	
6/24/2010	0.0065	
1/9/2011	0.022	
7/11/2011	0.0032	
1/20/2012	0.0089	
7/13/2012	0.012	
1/21/2013	0.024	
7/20/2013	0.0068	
1/17/2014	0.02	
7/12/2014	0.0055	
1/16/2015	0.0043	
7/15/2015	0.0026	
1/16/2016	0.0035	
6/22/2016	0.00805 (JD)	
2/28/2017	<0.005	
7/17/2017	<0.005	
1/8/2018	<0.005	
7/10/2018	<0.005	
1/30/2019		<0.005
3/27/2019		<0.005
9/11/2019		0.0062
3/10/2020		<0.005

	GWA-2A	GWA-2A
10/5/1999	0.056	
11/12/1999	0.053	
12/29/1999	0.045	
2/17/2000	0.033	
9/13/2000	0.032	
11/10/2000	0.036	
1/4/2001	0.052	
12/11/2001	0.041	
4/4/2002	0.062	
12/6/2002	0.076	
6/28/2003	0.026	
12/13/2003	0.011	
5/28/2004	0.016	
12/10/2004	<0.005	
6/24/2005	0.011	
12/13/2005	0.017	
7/12/2006	0.059	
12/1/2006	0.063	
6/21/2007	0.018	
12/15/2007	0.0099	
6/22/2008	0.012	
12/7/2008	0.049	
7/11/2009	0.049	
12/23/2009	0.0099	
6/24/2010	0.009	
7/13/2012	0.057	
1/21/2013	0.15 (o)	
7/20/2013	0.03	
1/17/2014	0.016	
7/12/2014	0.012	
1/16/2015	0.0091	
7/15/2015	0.0087	
1/16/2016	0.009	
6/23/2016	0.0179	
1/18/2017	<0.005	
7/18/2017	<0.005	
1/8/2018	<0.005	
7/10/2018	<0.005	
1/30/2019		0.0051 (J)
3/27/2019		<0.005
9/11/2019		0.0057
3/10/2020		<0.005

	GWA-3A	GWA-3A
10/5/1999	0.023 (o)	
11/12/1999	<0.02	
12/29/1999	<0.02	
2/17/2000	<0.02	
9/13/2000	<0.02	
11/10/2000	<0.02	
1/4/2001	<0.02	
12/11/2001	<0.02	
4/4/2002	<0.02	
12/6/2002	<0.02	
6/28/2003	<0.02	
12/13/2003	<0.02	
5/28/2004	<0.02	
12/10/2004	<0.02	
6/24/2005	<0.02	
12/13/2005	<0.02	
7/12/2006	0.0047	
12/1/2006	0.065 (o)	
6/21/2007	0.008	
12/15/2007	0.0043	
6/22/2008	0.0062	
12/6/2008	0.051 (o)	
7/10/2009	0.0043	
12/23/2009	0.0039	
6/23/2010	<0.02	
1/8/2011	0.0037	
7/10/2011	0.0047	
1/19/2012	0.0045	
7/12/2012	0.0033	
1/21/2013	0.0038	
7/20/2013	0.004	
1/17/2014	0.005	
7/12/2014	0.004	
1/15/2015	0.0056	
7/15/2015	0.0034	
1/16/2016	0.0038	
6/22/2016	0.00575 (JD)	
1/19/2017	<0.02	
7/18/2017	<0.02	
1/9/2018	<0.02	
7/10/2018	<0.02	
1/30/2019		0.0058 (J)
3/28/2019		<0.02
9/12/2019		0.0081
3/10/2020		0.0079
4/2/2020		0.011

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		GWA-3B	GWA-3B
	10/5/1999	<0.02	
	11/12/1999	<0.02	
	12/29/1999	<0.02	
	2/17/2000	<0.02	
	9/13/2000	<0.02	
	11/10/2000	<0.02	
	1/4/2001	<0.02	
	12/11/2001	<0.02	
	6/28/2003	<0.02	
	12/13/2003	<0.02	
	5/28/2004	<0.02	
	12/10/2004	<0.02	
	6/24/2005	0.022 (o)	
	12/13/2005	0.013	
	7/12/2006	0.018	
	12/23/2009	0.07 (o)	
	6/23/2010	0.01	
	7/20/2013	0.0076	
	1/17/2014	0.008	
	7/12/2014	0.0062	
	1/15/2015	0.0092	
	7/15/2015	0.0062	
	1/16/2016	0.0053	
	6/23/2016	0.0051 (J)	
	1/23/2017	<0.02	
	7/18/2017	<0.02	
	1/9/2018	<0.02	
	7/10/2018	<0.02	
	1/30/2019		0.0041 (J)
	3/28/2019		<0.02
	9/12/2019		0.01
	3/11/2020		0.0055

	GWA-4	GWA-4
10/5/1999	0.039	
11/12/1999	0.025	
12/29/1999	0.023	
2/17/2000	<0.02	
9/13/2000	0.035	
11/10/2000	0.023	
1/4/2001	0.027	
12/11/2001	0.036	
4/4/2002	0.038	
12/6/2002	0.033	
6/28/2003	0.018	
12/13/2003	0.013	
5/28/2004	<0.02	
12/10/2004	<0.02	
6/24/2005	<0.02	
12/13/2005	0.011	
7/12/2006	0.0055	
12/1/2006	0.0052	
6/21/2007	0.0062	
12/15/2007	0.0055	
6/21/2008	0.011	
12/6/2008	0.008	
7/11/2009	0.011	
12/23/2009	0.0051	
6/23/2010	0.0031	
1/8/2011	0.0035	
7/10/2011	0.0081	
1/19/2012	0.017	
7/12/2012	0.01	
1/21/2013	0.013	
7/20/2013	<0.02	
1/17/2014	0.0066	
7/12/2014	0.0054	
1/15/2015	0.0076	
7/15/2015	0.0053	
1/16/2016	0.0048	
6/22/2016	0.0038 (J)	
1/19/2017	<0.02	
7/18/2017	<0.02	
1/9/2018	0.0072 (J)	
7/10/2018	<0.02	
1/30/2019		0.006 (J)
3/28/2019		<0.02
9/12/2019		0.0073
3/10/2020		0.0079

	GWA-5	GWA-5
10/5/1999	<0.02	GWA-5
11/12/1999	<0.02	
12/29/1999	<0.02	
2/17/2000	<0.02	
9/13/2000	0.021	
11/10/2000	<0.021	
1/4/2001	<0.02	
12/11/2001	<0.02	
4/4/2002	<0.02	
12/6/2002	0.06	
6/28/2003	0.19 (o)	
12/13/2003	0.067	
5/28/2004	0.068	
12/10/2004	0.039	
6/24/2005	0.033	
12/13/2005	0.039	
7/12/2006	0.022	
12/1/2006	0.018	
6/21/2007	0.058	
12/15/2007	0.0072	
6/22/2008	0.011	
12/6/2008	0.011	
7/11/2009	0.013	
12/22/2009	0.013	
6/23/2010	0.0084	
1/8/2011	0.0089	
7/10/2011	0.0084	
1/20/2012	0.0094	
7/12/2012	0.0098	
1/21/2013	0.007	
7/20/2013	0.0074	
1/17/2014	0.0092	
7/12/2014	0.013	
1/16/2015	0.0081	
7/15/2015	0.009	
1/16/2016	0.007	
6/22/2016	0.0091 (J)	
1/19/2017	0.0065 (J)	
7/19/2017	0.0099 (J)	
1/9/2018	0.014 (J)	
7/10/2018	0.0089 (J)	
1/30/2019		0.0057 (J)
3/27/2019		0.01 (J)
9/12/2019		0.0074
3/10/2020		0.0071

	GWA-7	GWA-7
10/5/1999	0.091	
11/12/1999	0.057	
12/29/1999	0.047	
2/17/2000	0.048	
9/13/2000	0.062	
11/10/2000	0.11	
1/4/2001	0.39 (o)	
12/11/2001	0.096	
4/4/2002	<0.005	
12/6/2002	0.084	
6/28/2003	0.026	
12/13/2003	0.054	
5/28/2004	<0.005	
12/10/2004	<0.005	
6/24/2005	<0.005	
12/13/2005	<0.005	
7/12/2006	0.15 (o)	
12/1/2006	0.047	
6/21/2007	0.003	
12/15/2007	<0.005	
6/21/2008	0.0034	
12/6/2008	0.041	
7/10/2009	0.0038	
12/23/2009	<0.005	
6/23/2010	<0.005	
1/8/2011	0.0031	
7/10/2011	<0.005	
1/19/2012	0.0035	
7/12/2012	<0.005	
1/21/2013	<0.005	
7/19/2013	<0.005	
1/16/2014	0.0033	
7/12/2014	0.0028	
1/15/2015	0.0025	
7/15/2015	0.0021 (J)	
1/16/2016	0.0017 (J)	
6/22/2016	0.0087 (J)	
1/19/2017	<0.005	
7/19/2017	<0.005	
1/10/2018	<0.005	
7/10/2018	<0.005	
1/30/2019		0.014 (J)
3/28/2019		<0.005
9/12/2019		0.0059
3/11/2020		<0.005

	CWC 1	CWC 1
10/F/1000	GWC-1	GWC-1
10/5/1999 11/12/1999	<0.005 <0.005	
12/29/1999	<0.005	
2/17/2000		
	<0.005	
9/13/2000	<0.005	
11/10/2000	<0.005	
1/4/2001	<0.005	
12/11/2001	<0.005	
4/4/2002	<0.005	
12/6/2002	0.011	
6/28/2003	<0.005	
12/13/2003	<0.005	
5/28/2004	<0.005	
12/10/2004	<0.005	
6/24/2005	<0.005	
12/13/2005	0.015	
7/12/2006	0.0042	
12/1/2006	0.0047	
6/21/2007	0.0052	
12/15/2007	0.0046	
6/21/2008	0.0067	
12/6/2008	0.0054	
7/11/2009	0.0038	
12/23/2009	0.0029	
6/23/2010	<0.005	
1/8/2011	0.0032	
7/10/2011	0.004	
1/20/2012	0.0067	
7/12/2012	0.0036	
1/21/2013	0.0031	
7/20/2013	<0.005	
1/17/2014	0.0031	
7/12/2014	<0.0025 (J)	
1/16/2015	0.002 (J)	
7/15/2015	0.0015 (J)	
1/16/2016	0.0015 (J)	
6/22/2016	<0.005	
1/23/2017	<0.005	
7/19/2017	<0.005	
1/9/2018	<0.005	
7/11/2018	<0.005	
1/30/2019		<0.005
3/28/2019		<0.005
9/12/2019		0.0039 (J)
3/11/2020		<0.005

	GWC-2	GWC-2
10/5/1999	0.028	
11/12/1999	<0.02	
12/29/1999	0.022	
2/17/2000	0.021	
9/13/2000	<0.02	
11/10/2000	<0.02	
1/4/2001	<0.02	
12/11/2001	<0.02	
4/4/2002	0.069 (o)	
12/6/2002	0.012	
6/28/2003	0.011	
12/13/2003	<0.02	
5/28/2004	<0.02	
12/10/2004	0.027	
6/24/2005	<0.02	
12/13/2005	0.011	
7/12/2006	0.0064	
12/1/2006	0.0077	
6/21/2007	0.0082	
12/15/2007	0.0063	
6/22/2008	0.0074	
12/6/2008	0.0066	
7/11/2009	0.0054	
12/23/2009	0.0046	
6/23/2010	0.0041	
1/8/2011	0.019	
7/10/2011	0.005	
1/20/2012	0.007	
7/12/2012	0.0045	
1/21/2013	0.0045	
7/20/2013	<0.02	
1/17/2014	0.0075	
7/12/2014	0.0051	
1/15/2015	0.0054	
7/15/2015	0.0049	
1/17/2016	0.0051	
6/22/2016	0.0087 (J)	
1/24/2017	0.0071 (J)	
7/19/2017	<0.02	
1/9/2018	0.0079 (J)	
7/10/2018	0.0067 (J)	
1/31/2019		<0.02
3/28/2019		0.0069 (J)
9/12/2019		0.0089
3/31/2020		0.0065

	GWC-4A	GWC-4A
10/5/1999	<0.005	
11/12/1999	<0.005	
12/29/1999	<0.005	
2/17/2000	<0.005	
9/13/2000	0.036 (o)	
11/10/2000	<0.005	
1/4/2001	<0.005	
12/11/2001	<0.005	
4/4/2002	<0.005	
12/6/2002	0.012	
6/28/2003	<0.005	
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	<0.005	
12/1/2006	0.098 (o)	
6/21/2007	0.0043	
12/15/2007	0.0057	
6/21/2008	0.0064	
12/6/2008	0.0052	
7/11/2009	0.0049	
12/23/2009	0.005	
6/23/2010	0.0044	
1/8/2011	0.0036	
7/10/2011	0.0046	
1/20/2012	0.0045	
7/12/2012	0.0041	
1/21/2013	0.0038	
7/20/2013	0.0047	
1/17/2014	0.0051	
7/11/2014	0.0066	
1/16/2015	0.0046	
7/15/2015	0.0036	
1/17/2016	0.004	
6/22/2016	0.0053 (J)	
1/25/2017	<0.005	
7/20/2017	<0.005	
1/9/2018	<0.005	
7/10/2018	<0.005	
1/30/2019		0.0042 (J)
3/28/2019		<0.005
9/12/2019		0.0093
3/31/2020		<0.005

	GWC-4B	GWC-4B
10/5/1999	<0.005	
11/12/1999	<0.005	
2/17/2000	<0.005	
6/24/2005	<0.005	
12/13/2005	<0.005	
6/22/2016	0.0013 (J)	
1/25/2017	<0.005	
7/20/2017	<0.005	
1/9/2018	<0.005	
3/31/2020		<0.005

	GWC-5	GWC-5
10/5/1999	0.037	
11/12/1999	0.022	
12/29/1999	0.036	
2/17/2000	<0.02	
9/13/2000	0.027	
11/10/2000	<0.02	
1/4/2001	<0.02	
12/11/2001	<0.02	
4/4/2002	0.028	
12/6/2002	0.028	
6/28/2003	0.012	
12/13/2003	0.026	
5/28/2004	0.018	
12/10/2004	0.029	
6/24/2005	0.016	
12/13/2005	0.017	
7/12/2006	0.013	
12/1/2006	0.03	
6/21/2007	0.017	
12/15/2007	0.013	
6/21/2008	0.016	
12/7/2008	0.05	
7/11/2009	0.013	
12/23/2009	0.01	
6/23/2010	0.011	
1/8/2011	0.012	
7/10/2011	0.0096	
1/20/2012	0.014	
7/12/2012	0.01	
1/21/2013	0.011	
7/20/2013	0.0089	
1/17/2014	0.0098	
7/11/2014	0.014	
1/16/2015	0.011	
7/15/2015	0.012	
1/16/2016	0.014	
6/23/2016	0.0116	
1/24/2017	0.01 (J)	
7/20/2017	0.016 (J)	
1/10/2018	0.012 (J)	
7/11/2018	0.015 (J)	
1/31/2019		0.033
3/28/2019		0.032
9/12/2019		0.033
3/31/2020		0.025

	GWC-6	GWC-6
10/5/1999	0.063 (o)	
11/12/1999	0.025	
12/29/1999	0.024	
2/17/2000	<0.02	
9/13/2000	0.061 (o)	
11/10/2000	0.061 (o)	
1/4/2001	0.05 (o)	
12/11/2001	<0.02	
4/4/2002	<0.02	
12/6/2002	0.013	
6/28/2003	0.014	
12/13/2003	<0.02	
5/28/2004	<0.02	
12/10/2004	<0.02	
6/24/2005	<0.02	
12/13/2005	<0.02	
7/12/2006	0.0057	
12/1/2006	0.0068	
6/21/2007	0.016	
12/15/2007	0.012	
6/22/2008	0.014	
12/7/2008	0.044 (o)	
7/11/2009	0.0062	
12/23/2009	0.007	
6/24/2010	0.0049	
7/11/2011	0.0052	
1/20/2012	0.0081	
7/13/2012	0.004	
1/21/2013	0.0093	
7/20/2013	0.0054	
1/17/2014	0.0054	
7/12/2014	0.0057	
1/16/2015	0.0084	
7/15/2015	0.0046	
1/16/2016	0.0051	
6/23/2016	0.0041 (J)	
1/27/2017	<0.02	
7/20/2017	<0.02	
1/10/2018	<0.02	
7/11/2018	<0.02	
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9/12/2019		0.011
3/11/2020		0.0047 (J)

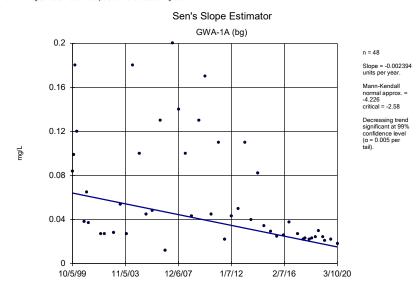
FIGURE H.

Trend Test Summary - Significant Results (State) Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 6/15/2020, 11:08 AM

	Plant McIntosh Client: Sou	ithern Company	Data: McIntos	h LF 3 CCR	Prin	ted 6/15	2020, 11	I:08 AM			
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Barium (mg/L)	GWA-1A (bg)	-0.002394	-4.226	-2.58	Yes	48	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-2A (bg)	0.000979	2.662	2.58	Yes	47	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-3A (bg)	0.001027	6.613	2.58	Yes	49	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-3B (bg)	-0.001193	-201	-191	Yes	36	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-4 (bg)	0.0008915	5.665	2.58	Yes	49	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-7 (bg)	-0.001874	-5.76	-2.58	Yes	48	0	n/a	n/a	0.01	NP
Chromium (mg/L)	GWA-5 (bg)	-0.00002918	-2.918	-2.58	Yes	48	50	n/a	n/a	0.01	NP

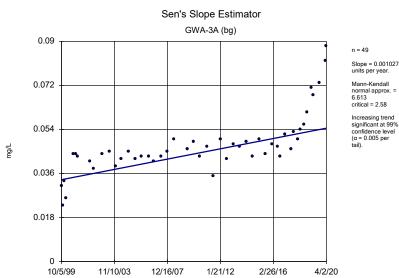
Trend Test Summary - All Results (State)

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR Printed 6/15/2020, 11:08 AM Constituent <u>Well</u> Calc. Critical Sig. $\underline{\mathsf{N}}$ <u>%NDs</u> <u>Normality</u> <u>Xform</u> <u>Alpha</u> Method GWA-1A (bg) -0.002394 -4.226 Yes 48 0 Barium (mg/L) -2.58 n/a n/a 0.01 NP 0.000979 2.662 Yes 47 Barium (mg/L) GWA-2A (bg) 2.58 0 n/a n/a 0.01 NP Barium (mg/L) GWA-3A (bg) 0.001027 6.613 2.58 Yes 49 NP n/a n/a 0.01 Barium (mg/L) GWA-3B (bg) -0.001193 -201 -191 0.01 Barium (mg/L) GWA-4 (bg) 0.0008915 5.665 2.58 Yes 49 NΡ n/a n/a 0.01 Barium (mg/L) GWA-5 (bg) 0.001333 1.391 2.58 No 48 n/a 0.01 NP Barium (mg/L) GWA-7 (bg) -0.001874 ΝP -5.76 -2.58 Yes 48 n/a n/a 0.01 Barium (mg/L) GWC-5 0.01033 2.11 2.58 No 48 0 n/a 0.01 ΝP Chromium (mg/L) GWA-1A (bg) -0.00031 No 48 12.5 n/a NP -2.137 -2.58 n/a 0.01 Chromium (mg/L) GWA-2A (bg) -1.288 -2.58 No 0.01 NP GWA-3A (bg) Chromium (mg/L) 0.000007446 1.502 2.58 No 50 38 n/a 0.01 NP n/a Chromium (mg/L) GWA-3B (bg) -40 -191 No 36 72.22 0.01 NP 0 GWA-4 (bg) -2.58 48 81.25 n/a NP Chromium (mg/L) -1.31 No 0.01 n/a Chromium (mg/L) GWA-5 (bg) -0.00002918 0.01 NΡ Chromium (mg/L) GWA-7 (bg) NP -0.0003064 -1.529 -2.58 No 48 2.083 n/a n/a 0.01 Chromium (mg/L) GWC-2 -0.00001388 -1.095 No 22.45 n/a 0.01

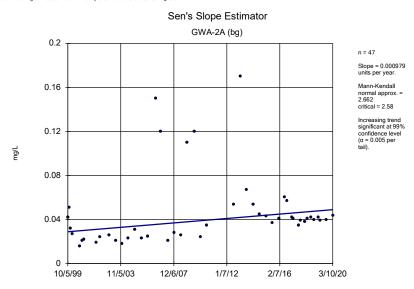


Constituent: Barium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

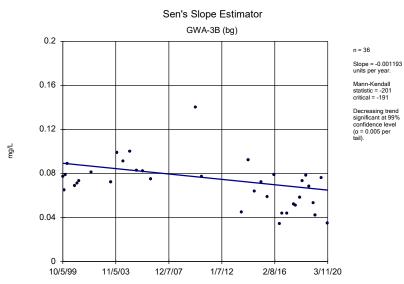


Constituent: Barium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



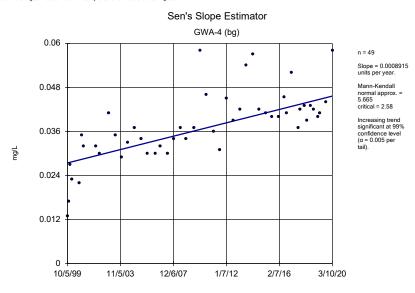
Constituent: Barium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG



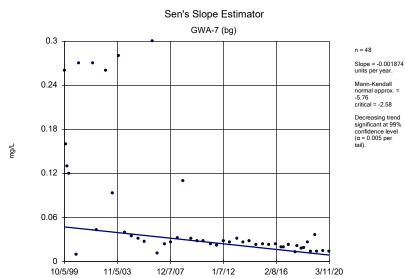
Constituent: Barium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

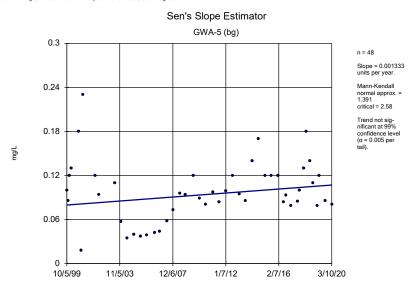


Constituent: Barium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

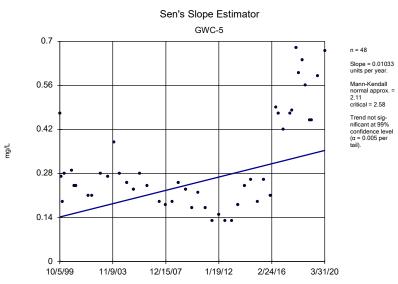


Constituent: Barium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



Constituent: Barium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State
Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

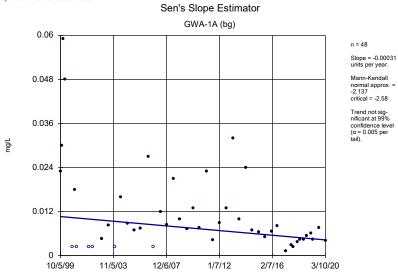


Constituent: Barium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State

Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

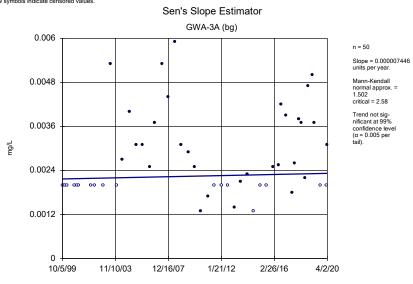
Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.



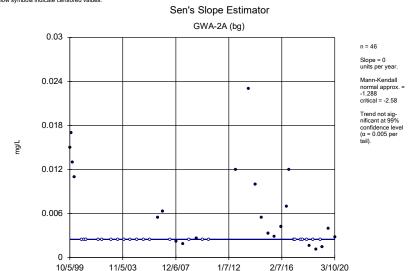
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Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



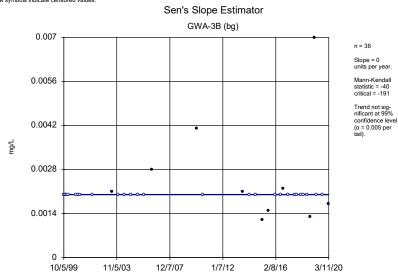
Constituent: Chromium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Chromium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

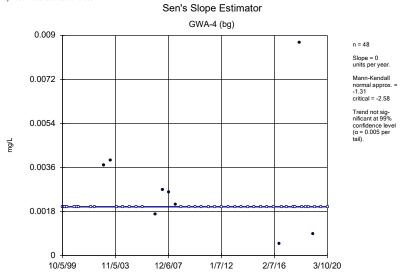
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Constituent: Chromium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.



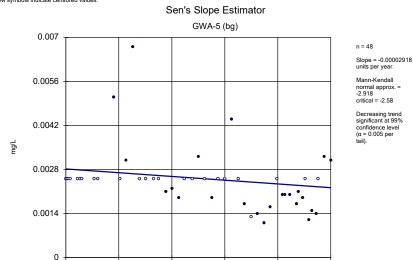
Constituent: Chromium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Sen's Slope Estimator GWA-7 (bg) 0.1 Slope = -0.0003064 units per year. 0.08 Mann-Kendall normal approx. = critical = -2.58 Trend not significant at 99% 0.06 confidence level (\alpha = 0.005 per 0.04 0.02 10/5/99 11/5/03 12/7/07 1/7/12 2/8/16 3/11/20

Constituent: Chromium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Chromium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR

1/7/12

2/7/16

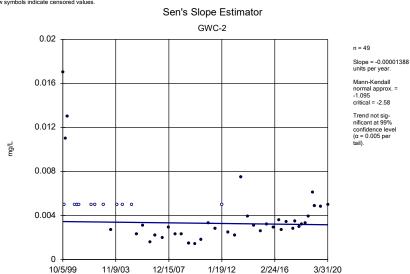
12/6/07

3/10/20

Sanitas™ v.9.6.25g Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

10/5/99

11/5/03



Constituent: Chromium Analysis Run 6/15/2020 11:07 AM View: Trend Tests - State Plant McIntosh Client: Southern Company Data: McIntosh LF 3 CCR



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