



2020 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

Plant Yates - AP-1
Newnan, Georgia

July 2020

**2020 Annual Groundwater
Monitoring and Corrective
Action Report**

Plant Yates - AP-1
Newnan, Georgia

Prepared for:

Georgia Power Company
Newnan, Georgia
Coweta, County



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ACRONYMS AND ABBREVIATIONS

ACC	Atlantic Coast Consulting, Inc.
ACM	Assessment of Corrective Measures
AP	Plant Yates Ash Ponds
CCR	Coal Combustion Residuals
CCR Units	the combined monitoring systems of AP-3, A, B, and B', and the R6 Landfill
CFR	Code of Federal Regulations
DO	dissolved oxygen
GAEPD	Georgia Environmental Protection Division
GPC	Georgia Power Company
GWPS	Groundwater Protection Standard
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
mg/L	milligrams per liter
QA/QC	Quality Assurance/Quality Control
SSI	Statistically Significant Increase
SSL	statistically significant level
USEPA	United States Environmental Protection Agency

PROFESSIONAL CERTIFICATION

This *2020 Annual Groundwater Monitoring and Corrective Action Report* for the Georgia Power Company Plant Yates AP-1 has been prepared in compliance with the United States Environmental Protection Agency coal combustion residual rule (40 Code of Federal Regulations 257 Subpart D) and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with Arcadis, U.S., Inc.

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1 INTRODUCTION

This *2020 Annual Groundwater Monitoring and Corrective Action Report* presents groundwater monitoring activities conducted at the Georgia Power Company (GPC) Plant Yates Ash Pond (AP) AP-1 (the Site) in the second half of 2019 and first half of 2020. This report was prepared in accordance with the United States Environmental Protection Agency (USEPA) Coal Combustion Residuals (CCR) Rule (40 Code of Federal Regulations [CFR] 257 Subpart D) and the Georgia Environmental Protection Division (GAEPD) Rules for Solid Waste Management 391-3-4-.10. Groundwater monitoring requirements for the site are specified by GAEPD Rule 391-3-4-.10(6)(a), which also incorporates the USEPA CCR Rule. For ease of reference, the USEPA CCR Rules are cited within this report.

Groundwater monitoring and reporting for CCR units is performed in accordance with the monitoring requirements §§ 257.90 through 257.95 of the Federal CCR Rule and the Georgia EPD Rule 391-3-4-10(6)(a)-(c). A notice of assessment monitoring notification was placed in the operating record in November 2019 based on statistically significant increases (SSIs) documented in the 2019 Annual Groundwater Monitoring and Corrective Action Report. This report presents the results of both the annual monitoring for Appendix IV of 40 CFR 257 conducted in August 2019, and two semiannual monitoring events conducted in October 2019 and March 2020.

1.1 Site Description and Background

Plant Yates is located at 708 Dyer Road on the east bank of the Chattahoochee River in Coweta County, Georgia near the Coweta and Carroll County line. The Site is approximately 8 miles northwest of the city of Newnan and 13 miles southeast of the city of Carrollton. Plant Yates occupies approximately 2,400 acres. **Figure 1** depicts the site location relative to the surrounding area.

AP-1 was closed by removal; the CCR material was removed from AP-1 to an onsite landfill. A permit application to comply with GA EPD Rules was submitted in November 2018 and is currently under review. Semiannual reporting is completed pursuant to 391-3-4-.10(6)(c).

1.2 Site Geology and Hydrogeologic Setting

Plant Yates is located in the Inner Piedmont Physiographic Province of western Georgia, immediately southeast of the Brevard Zone, a regional fault zone that separates the Piedmont from the Blue Ridge. Rock units at Plant Yates are primarily interlayered gneiss and schists. The rocks in the area have been subjected to extensive metamorphism, deformation, and igneous intrusions. Extensive fracture sets are present in the underlying bedrock. Surface expressions of these fractures are observed on topographic maps and aerial photos of the Plant Yates area (ACC February 2020).

A thin layer of soil from one to two feet thick overlies a thick layer of saprolite. The saprolite, which extends to typical depths of 20 to 40 feet below ground surface, was formed in-place by the physical and chemical weathering of the underlying metamorphic rocks. The saprolite typically consists of clay and silt rich soils that grade to sandier soils with depth. A zone of variable thickness (approximately 5 to 20 feet) of transitionally weathered rock typically exists between the saprolite and competent bedrock. The lithology of the transition zone is highly variable and ranges from medium to coarse unconsolidated

material to highly fractured and weathered rock fragments. Localized alluvial soils consisting of generally coarser material (silty-sand, clayey silt, and silty clay with well-rounded gravel and cobbles) that have been observed in saprolite may be related to historical river channel migration.

At Plant Yates, groundwater is typically encountered slightly above the saprolite/weathered rock interface. Groundwater flow in the saprolite zone is through interconnected pores and relict textures and fractures. As the rock becomes increasingly competent with depth, groundwater flow occurs mainly through joints and fractures (i.e., secondary porosity). Recharge to the water-bearing zones in fractured bedrock takes place by seepage through the overlying mantle of soil/saprolite, or by direct entrance through openings in outcrops. The average depth of the water table at Plant Yates varies with topography, ranging from approximately 5 to 50 feet below ground surface. The water table occurs in the saprolite and in the transitionally weathered zone, at least several feet above the top of rock.

Field hydraulic conductivity tests (i.e., slug tests) have been performed in saprolite and weathered bedrock at multiple locations at the Site. The hydraulic conductivity at these locations is typically in a range from 10^{-3} to 10^{-4} centimeters per second, based on multiple rising-head and falling-head slug tests (ACC 2019). This indicates a fairly uniform medium across the saprolite and weathered rock horizon. The hydraulic conductivity values from the field tests fall within a range consistent with that of Piedmont overburden (Newell et al. 1990).

1.3 Groundwater Monitoring Well Network and CCR Unit Description

Pursuant to § 257.91, a groundwater monitoring system was installed within the uppermost aquifer at Plant Yates' AP-1 CCR Unit. The monitoring system is designed to monitor groundwater passing the waste boundary of the CCR Unit within the uppermost aquifer. Wells are located to monitor upgradient and downgradient conditions based on groundwater flow direction. The compliance monitoring well network is summarized in **Table 1** along with a series of piezometers and non-network wells installed to supplement characterization and groundwater elevation measurements.

As typical of the Piedmont Physiographic Province, there is a degree of connectivity between the saprolite and partially weathered rock units. Fractured bedrock may or may not be connected to the overlying units and flow may be controlled by geologic structures present. Based on the site hydrogeology, the monitoring system is designed to monitor groundwater flow in the saprolite, the transition-zone, and the upper bedrock. The monitoring well network for the Site is provided on **Figure 2**.

2 GROUNDWATER MONITORING ACTIVITIES

Pursuant to 40 CFR § 257.90(e), the following describes monitoring-related activities performed in the second half of 2019 and the first half of 2020 and presents the status of the monitoring program. Groundwater sampling was performed in accordance with 40 CFR § 257.93. Samples were collected from each well in the certified monitoring system shown on **Figure 2**.

Table 2 summarizes groundwater sampling events conducted by ACC at the Site during the past year. During the August 2019 event, groundwater samples were collected and analyzed for 40 CFR 257 Appendix IV constituents to meet the requirement of 40 CFR § 257.95(b). During the October 2019 and March 2020 semiannual sampling events, groundwater samples were collected for both 40 CFR 257 Appendix III and

the Appendix IV constituents detected during the August 2019 event. Field sampling logs are provided in **Appendix B**.

2.1 Monitoring Well Installation and Maintenance

Monitoring well related activities were limited to visual inspection well conditions prior to sampling, recording the site conditions, and performing exterior maintenance to provide safe access for sampling. Downgradient monitoring network wells were installed along the downgradient waste boundary pursuant to § 257.91(a)(2). In November 2019 two additional wells (YAMW-6 and YAMW-7) were installed to further characterize groundwater conditions in the vicinity of well YGWC-46. Details regarding the wells are included on **Table 1** and locations presented on **Figure 2**. Installation details for these locations are provided in **Appendix C**.

Monitoring well YGWC-46A was installed to replace well YGWC-46 in June 2020 and YGWC-46 was abandoned. Based upon additional site review, YGWC-46 was found to be located at or near the limits of waste and, consequently, not suitably located to detect groundwater quality passing the AP-1 waste boundary. Monitoring well YAMW-7 was also abandoned at the same time. Additionally, monitoring well YGWC-52 was installed in June 2020 to supplement the well network and provide detection coverage along the northern perimeter of AP-1. YAMW-6 has been renamed PZ-53 going forward. The four downgradient network wells are positioned to provide adequate coverage to detect potential impacts from the AP-1 permitted area. A Well Installation Report is included in **Appendix C**.

2.2 Assessment Monitoring

Statistically Significant Increases (SSIs) of Appendix III constituents were identified in the initial detection monitoring event (March 2019). The initial assessment monitoring event was conducted in August 2019. Semiannual assessment monitoring events were conducted in October 2019 and March 2020. Pursuant to § 257.95(d)(1), groundwater samples collected from the CCR monitoring wells were analyzed for Appendix III constituents and those Appendix IV constituents detected during the initial assessment event.

3 SAMPLING METHODOLOGY AND ANALYSIS

Groundwater monitoring methods used at the Site are described in the following sections.

3.1 Groundwater Flow Direction, Gradient, and Velocity

Prior to each sampling event, static water elevations were recorded from piezometers and wells in the well network at AP-1. Groundwater elevations recorded during the August 2019, October 2019, and March 2020 monitoring events are summarized in **Table 3**. Potentiometric surface maps are provided in **Figures 3 through Figure 5** for the October 2019 and March 2020 sampling events. The general direction of groundwater flow across the site is towards the west/southwest and is consistent with historical patterns.

The groundwater flow velocity at Plant Yates was calculated using a derivation of Darcy's Law.

Specifically:

$$v = \frac{k \left(\frac{dh}{dl} \right)}{n_e}$$

where:

v = groundwater seepage velocity

k = hydraulic conductivity

dh/dl = hydraulic gradient

n_e = effective porosity

Groundwater flow velocities were calculated for the site based on hydraulic gradients, average hydraulic conductivity based on previous slug test data, and an estimated effective porosity of 0.20 (based on a review of several sources, including Driscoll 1986, USEPA 1989, and Freeze and Cherry 1979).

Groundwater flow velocities have been calculated and are presented in **Table 4**. The calculated flow velocity is between 1.3 and 1.4 feet per day or 475 to 511 feet per year.

3.2 Groundwater Sampling

Groundwater samples were collected using low-flow sampling procedures in accordance with 40 CFR § 257.93(a). Monitoring wells were purged and sampled using a dedicated bladder pump until water quality parameters stabilized. For wells sampled with non-dedicated bladder pumps, the pumps were lowered into the well so that the intake was at the midpoint of the well screen (or as appropriate determined by the water level). All non-disposable equipment was decontaminated before use and between well locations.

A smarTroll™ (In-Situ field instrument) was used to monitor and record field water quality parameters (pH, conductivity, and dissolved oxygen [DO]) during well purging to verify stabilization prior to sampling. Turbidity was measured using a Hach 2100Q portable turbidimeter. Groundwater samples were collected when the following stabilization criteria were met for a minimum of three consecutive readings:

- ± 0.1 standard units for pH.
- ± 10% for specific conductance.
- ± 10% for DO where DO > 0.5 milligram per liter (mg/L). No criterion applies if DO < 0.5 mg/L.
- Turbidity measurements less than 10 nephelometric turbidity units.

Once stabilization was achieved, samples were collected directly into laboratory-supplied sample containers with preservative (where applicable). The samples were placed on ice in an insulated cooler following their collection. The samples were submitted to Pace Analytical Services, LLC (following chain-of-custody protocol). Stabilization logs for each well are included in **Appendix B**.

3.3 Laboratory Analysis

Groundwater samples collected from the August 2019 initial assessment monitoring event were analyzed for Appendix IV parameters. Groundwater samples collected during the subsequent semiannual assessment events were analyzed for Appendix III parameters as well as those Appendix IV parameters detected above the laboratory MDL during the initial assessment monitoring event in accordance with 40 CFR § 257.95(d). Appendix IV parameters not detected during the initial assessment event included: antimony, beryllium, chromium, lead, mercury, selenium, and fluoride (although fluoride continued to be monitored as an Appendix III parameter). **Table 5** provides a summary of the constituents monitored

during the events. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in **Appendix A**.

Analytical data collected from the initial assessment scan and semiannual sampling are summarized in **Table 6**. A summary of historical groundwater data is provided in **Appendix D**.

Laboratory analyses were performed by Pace Analytical Services, LLC, which is accredited by the National Environmental Laboratory Accreditation Program and maintains this certification for all parameters analyzed for this project. Laboratory reports and chain-of-custody records for the monitoring events are presented in **Appendix A**.

3.4 Data Quality Assurance/Quality Control and Validation

During each sampling event, quality assurance/quality control (QA/QC) samples were collected at a rate of one sampler per every 10 samples. QA/QC samples included equipment blanks (where non-dedicated equipment is used), field blanks, and duplicate samples. Groundwater quality data in this report was validated in accordance with USEPA guidance (USEPA 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, equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags have been applied to the data using USEPA procedures as guidance (USEPA 2017). The data validation report prepared by ACC included in **Appendix A** summarizes the validation actions and applicable interpretation.

The purpose of the data quality evaluation was to determine the reliability of the chemical analyses and the accuracy and precision of information acquired from the laboratory. Data quality was assessed through the review and evaluation of field sampling activities, quality control samples, and data associated with the chemical analytical results. The complete results of the data quality evaluations are provided in **Appendix A**.

Values followed by a "J" flag indicate that the value is an estimated analyte concentration detected between the MDL and the laboratory reporting limit. The estimated value is positively identified but is below the lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory operating conditions. "J" flagged data are used to establish background statistical limits but are not used when performing statistical analyses.

4 STATISTICAL ANALYSIS

Statistical analysis of Appendix III and IV groundwater monitoring data was performed on samples collected from the AP-1 groundwater monitoring network pursuant to § 257.93(f) in October 2019 and March 2020. The statistical method used at the site was developed in accordance with 40 CFR § 257.93(f) using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance*, March 2009, US EPA 530/R-09-007 (USEPA, 2009).

4.1 Statistical Methods

The Sanitas™ groundwater statistical software was used to perform the statistical analyses. Sanitas™ is a decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations and guidance as recommended in the Unified Guidance document (USEPA 2009). Although Assessment Monitoring has been implemented, statistical evaluation of Appendix III constituents is performed to determine whether constituents have returned to background conditions.

4.1.1 Appendix III Constituents

Groundwater data were evaluated using interwell tolerance limits for Appendix III parameters. This method uses pooled upgradient monitoring well data to establish a background statistical limit. Data from the semiannual events were compared to the statistical limit to determine whether concentrations exceeded background levels. The statistical method incorporates an optional 1-of-2 verification resample plan. When an initial statically significant increase (SSI) or questionable result occurs, a second sample may be collected to verify the initial result or determine whether the result was an outlier. If resampling is performed and the initial finding is not verified, the resampled value replaces the initial finding. When the resample confirms the initial result, both values remain in the database and an SSI is declared. The following criteria were applied to the evaluation:

- Statistical analyses were not performed on analytes containing 100 percent non-detects
- When data contained less than 15 percent non-detects in background, simple substitution of one-half the reporting limit was used in the statistical analysis. The reporting limit used for non-detects is the practical quantification limit reported by the laboratory.
- When data contained between 15 to 50 percent non-detects, the Kaplan-Meier non-detect adjustment was 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.
- Non-parametric prediction limits were used on data containing greater than 50 percent non-detects.

4.1.2 Appendix IV Assessment Monitoring Statistics

The dataset used to determine parametric tolerance limits was updated for this reporting period from the plan set forth in *Statistical Analysis Plan – Plant Yates Ash Pond 1* (Groundwater Stat Consulting 2019). Parametric tolerance limits were used to calculate background limits from pooled upgradient well data for Appendix IV parameters with a target of 95 percent confidence and 95 percent coverage. For AP-1, the upgradient well network is comprised of one well – YGWC-47. A larger pool of upgradient data is available from upgradient wells for the other CCR units at Plant Yates. This larger pool of upgradient data was used for the March 2020 Appendix IV statistical calculations to be more representative of the range and variability of naturally occurring concentrations at Plant Yates. This change to the statistical procedures will be documented in a forthcoming revision to the statistical analysis and groundwater monitoring plans. The background wells at Plant Yates are identified below.

Background Wells		
YGWA-47	YGWA-5D	YGWA-30I
YGWA-1I	YGWA-5I	YGWA-4I
YGWA-1D	YGWA-17S	YGWA-21I
YGWA-2I	YGWA-18I	YGWA-39
YGWA-3I	YGWA-18S	YGWA-40
YGWA-3D	YGWA-20S	
GWA-2	YGWA-14S	

The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. The background limits were then used when determining the groundwater protection standards (GWPS) established under 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a).

As described in 40 CFR § 257.95(h)(1-3), the GWPS is:

- The maximum contaminant level (MCL) established under §§ 141.62 and 141.66 of this title;
- For the following constituents:
 - Cobalt 0.006 mg/L
 - Lead 0.015 mg/L
 - Lithium 0.040 mg/L
 - Molybdenum 0.100 mg/L; and
- The background level for constituents where the background level is higher than the MCL or rule identified GWPS.

USEPA revised the federal CCR Rule on July 30, 2018, providing GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR 257.95(h)(2). Presently those updated GWPS have not yet been incorporated in the current GAEPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, background concentrations are considered when determining the GWPS for constituents where an MCL has not been established (or where background is higher than the MCL). Under the existing GAEPD rules, the GWPS is:

- The MCL; or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above federal and state rules, GWPS have been established for statistical comparison of Appendix IV constituents at AP-1 using the larger pool of data from background wells at Plant Yates using the March 2020 data. **Table 7** summarizes the background limits established at each monitoring well for the October 2019 and March 2020 sampling events along with the GWPS established under federal and state rules.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV parameters in each downgradient well. Those confidence intervals were compared to the

GWPS established under the federal and state rules. A well/constituent pair was considered to exceed its respective standard only when the entire confidence interval exceeded a GWPS. If there was an exceedance of the established standard, an SSL exceedance was identified.

4.2 Statistical Analysis Results

Appendix III statistical analysis for wells associated with the Site was performed to determine whether constituents have returned to background levels. Appendix IV assessment monitoring parameters were evaluated to determine whether concentrations statistically exceed the established GWPS. Analytical data from the two semiannual assessment monitoring events (October 2019 and March 2020) were statistically analyzed in accordance with the Statistical Analysis Plan (Groundwater Stats Consulting 2019).

Based on review of the Appendix III statistical analysis presented in **Appendix E**, Appendix III constituents have not returned to background levels for either unit and assessment monitoring should continue pursuant to 40 CFR § 257.95(f).

4.2.1 First Semiannual Assessment Monitoring Event

Statistical analysis of the October 2019 Appendix IV data at AP-1 was completed using the GWPS established according to both 40 CFR § 257.95(h) and GA EPD Rule 391-3-4-.10(6)(a). No SSLs were identified.

4.2.2 Second Semi-Annual Assessment Monitoring Event

Statistical analysis of the March 2020 Appendix IV data was completed using the GWPS established according to both 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a). No SSLs were identified.

5 MONITORING PROGRAM STATUS

In accordance with 40 CFR § 257.94(e), an assessment monitoring program was implemented in November 2019. No statistical exceedance of a GWPS for Appendix IV parameters has been identified. Pursuant to 40 CFR § 257.96(b), groundwater will continue to be monitored at AP-1 in accordance with the assessment monitoring program regulations of 40 CFR § 257.95 due to SSIs for Appendix III parameters.

6 CONCLUSIONS AND FUTURE ACTIONS

This *2020 Annual Groundwater Monitoring and Corrective Action Report* was prepared to fulfill the requirements of USEPA's CCR Rule 40 CFR § 257.95 and GAEPD Rule 391-3-4-.10. Statistical evaluations of the groundwater monitoring data for the Site identified no exceedance of a GWPS for an Appendix IV constituent.

Monitoring well YGWC-46A was installed to replace well YGWC-46 in June 2020 because the original well was found to be at or near the limits of waste and, consequently, not suitably located to detect groundwater quality passing the AP-1 waste boundary. YGWC-46A was sampled for Appendix III and IV

constituents on July 6, 2020; the data is included in **Table 6**. Concentrations of cobalt from YGWC-46A (0.0041J mg/L) were below the cobalt GWPS of 0.035 mg/L. The presence of other constituents at low concentrations, such as boron, confirm that the location of YGWC-46A is appropriately monitoring the quality of groundwater in the uppermost aquifer passing the AP-1 unit boundary. Background sampling for Appendix III and IV constituents will continue at this well as part of the next sampling event. Background sampling for the other added compliance network well, YGWC-52, will begin with the next sampling event. The four downgradient network wells are positioned to provide adequate coverage to detect potential impacts from the AP-1 permitted area.

The next assessment monitoring scan event for Appendix IV parameters is tentatively scheduled for August 2020.

7 REFERENCES

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TABLES



Table 1 - Monitoring Well Summary
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Georgia Power Company
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Well ID	Installation Date	Bottom Depth (ft bTOC)	Bottom Elevation (ft)	Depth to Top of Screen (ft bTOC)	Top of Screen Elevation (ft)	Hydraulic Location / Purpose
Network Wells						
YGWA-47	7/11/2016	59.19	699.50	49.40	708.82	Upgradient
YGWC-44	7/13/2016	89.85	670.00	79.95	678.40	Downgradient
YGWC-45	7/10/2016	73.80	646.50	63.80	655.56	Downgradient
YGWC-46 ¹	7/11/2016	82.98	667.23	72.98	677.23	Downgradient
YGWC-46A ¹	6/1/2020	70.79	662.25	60.79	672.25	Downgradient
YGWC-52 ³	5/28/2020	79.22	676.64	69.22	663.84	Downgradient
Non-Network Wells						
PZ-09S	5/19/2014	57.00	652.80	47.00	665.08	Piezometer
PZ-09I	5/19/2014	77.00	632.80	67.00	645.13	Piezometer
PZ-10S	5/19/2014	16.30	681.80	6.30	694.13	Piezometer
PZ-10I	5/19/2014	46.50	651.30	36.50	663.75	Piezometer
YAMW-6 / PZ-53 ²	11/18/2019	72.00	660.90	61.50	671.40	Downgradient
YAMW-7 ¹	11/18/2019	122.30	611.16	112.00	621.50	Downgradient

Notes

¹ YAMW-7 and YGWC-46 were abandoned in June 2020. YGWC-46A was installed as a replacement well for YGWC-46.

² YAMW-6 was renamed PZ-53 in June 2020.

³ YGWC-52 installed in June 2020.

ft bTOC - feet below top of casing

Elevation in U.S. Survey Feet (NAVD88) based on June 2020 well survey

Table 2
Groundwater Sampling Event Summary
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Georgia Power Company
Plant Yates AP-1

Well ID	Hydraulic Location	Summary of Sampling Events		
		Annual Appendix IV	Semiannual Assessment	Semiannual Assessment
		August 2019	October 2019	March 2020
YGWA-47	Upgradient	Scan	A-02	A-03
YGWC-44	Downgradient	Scan	A-02	A-03
YGWC-45	Downgradient	Scan	A-02	A-03
YGWC-46	Downgradient	Scan	A-02	A-03

Notes

1. Scan - All Appendix IV
2. A-XX - Assessment Event Number (Appendix III and Detected Appendix IV)

Table 3
Summary of Groundwater Elevations
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Well ID	Dated Measured	TOC (ft)	Depth-to-Water (ft bTOC)	Groundwater Elevation (ft)
YGWA-47	8/19/2019	758.22	33.80	724.42
YGWC-44	8/19/2019	758.35	49.53	708.82
YGWC-45	8/19/2019	719.36	22.78	696.58
YGWC-46	8/19/2019	747.23	48.00	699.23
PZ-09S	8/19/2019	712.08	19.74	692.34
PZ-09I	8/19/2019	712.13	19.47	692.66
PZ-10S	8/19/2019	700.43	8.35	692.08
PZ-10I	8/19/2019	700.25	13.90	686.35
YGWA-47	10/7/2019	758.04	35.55	722.49
YGWC-44	10/8/2019	758.27	50.61	707.66
YGWC-45	10/8/2019	719.30	22.85	696.45
YGWC-46	10/8/2019	747.23	48.18	699.05
PZ-09S	10/7/2019	711.90	20.36	691.54
PZ-09I	10/7/2019	712.04	20.62	691.42
PZ-10S	10/7/2019	700.35	8.07	692.28
PZ-10I	10/7/2019	700.27	14.11	686.16
YGWA-47	3/16/2020	758.22	32.58	725.64
YGWC-44	3/16/2020	758.35	48.42	709.93
YGWC-45	3/16/2020	719.36	21.03	698.33
YGWC-46	3/16/2020	747.23	46.07	701.16
PZ-09S	3/16/2020	712.08	14.01	698.07
PZ-09I	3/16/2020	712.13	14.23	697.90
PZ-10S	3/16/2020	700.43	5.70	694.73
PZ-10I	3/16/2020	700.25	9.03	691.22
YAMW-6	3/16/2020	732.90	35.96	696.94
YAMW-7	3/16/2020	733.50	37.04	696.46

Notes

* - Depth to water recorded from transducer reading on March 17, 2020

ft bTOC - feet below top of casing

Elevation in U.S. Survey Feet (NAVD88) based on June 2020 well survey. The October 2019 elevation was not updated in order to match the previously submitted semiannual report figures.

Equation

$$V = \frac{K (dh/dl)}{n_e}$$

where:

V = groundwater velocity
 K = hydraulic conductivity
 dh/dl = hydraulic gradient
 n_e = effective porosity

Values Used in Calculation

Value			Source
K:	3.70E-03 10.5	cm/sec ft/day	See note 1
i ₁ = 0.026 i ₁ = 0.024	unitless	Hydraulic gradient from: YGWA-47 to PZ-09S (Oct. 2019) YGWA-47 to PZ-09S (Mar. 2020)	
n _e = 0.20	unitless	See note 2	

Seepage Velocity

$$V_{\min} = \frac{\text{Oct. 2019}}{0.20} = \frac{(10.5) (0.026)}{0.20}$$

$$V_{\min} = \frac{\text{Mar. 2020}}{0.20} = \frac{(10.5) (0.024)}{0.20}$$

$$V_{\min} = 1.4 \text{ ft/day, or } 511 \text{ ft/year}$$

$$V_{\min} = 1.3 \text{ ft/day, or } 475 \text{ ft/year}$$

Notes

1. Slug tests performed by Atlantaic Coast Consulting, Inc. (2017)
2. Default value recommended by USEPA for silty sand-type soil (USEPA 1996).

Table 5
Summary of Groundwater Monitoring Parameters
2020 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates AP-1

40 CFR 257 Appendix III	40 CFR 257 Appendix IV
Boron	Antimony
Calcium	Arsenic
Chloride	Barium
Fluoride	<i>Beryllium</i>
pH	Cadmium
Sulfate	<i>Chromium</i>
Total Dissolved Solids	Cobalt
	Fluoride
	<i>Lead</i>
	Lithium
	<i>Mercury</i>
	Molybdenum
	Combined Radium - 226/228
	<i>Selenium</i>
	Thallium

Notes:

Italicized groundwater monitoring parameters not detected during the initial assessment monitoring event (August 2019) and therefore not included in semiannual parameter lists (October 2019 and March 2020)

Table 6
 Summary of Groundwater Analytical Data
 2020 Annual Groundwater Monitoring and Corrective Action Report
 Georgia Power Company
 Plant Yates AP-1

Analyte	MCL	YGWA-47	YGWA-47	YGWA-47	YGWC-44	YGWC-44	YGWC-44	YGWC-45	
		8/20/2019	10/8/2019	3/17/2020	8/20/2019	10/8/2019	3/17/2020	8/20/2019	
Appendix III	pH	NA	5.58	5.59	5.57	5.78	5.84	5.90	6.48
	Boron	NA	--	0.012 J	0.023 J	--	0.58	0.61	--
	Calcium	NA	--	9.7	14.8	--	28.1	31.9	--
	Chloride	NA	--	4.4	4.1	--	14.8	14.0	--
	Fluoride	4	< 0.3	0.034 J	< 0.050	< 0.3	< 0.3	< 0.050	< 0.3
	Sulfate	NA	--	52.3	71.6	--	142	121	--
	TDS	NA	--	172	165	--	324	283	--
Appendix IV	Antimony	0.006	< 0.003	--	--	< 0.003	--	--	< 0.003
	Arsenic	0.01	< 0.005	< 0.005	< 0.00035	0.00097 J	< 0.005	< 0.00035	0.00078 J
	Barium	2	0.024	0.025	0.035	0.1	0.098	0.099	0.057
	Beryllium	0.004	< 0.003	--	--	< 0.003	--	NA	< 0.003
	Cadmium	0.005	< 0.0025	< 0.0025	< 0.00011	< 0.0025	< 0.0025	< 0.00011	< 0.0025
	Chromium	0.1	< 0.01	--	--	< 0.01	--	NA	< 0.01
	Cobalt	NA	0.00092 J	0.0014 J	0.0017 J	0.002 J	0.0017 J	0.0040 J	0.00071 J
	Lead	0.015	< 0.005	--	--	< 0.005	--	NA	< 0.005
	Lithium	NA	0.0036 J	0.0036 J	0.0046 J	0.013 J	0.012 J	0.013 J	0.012 J
	Mercury	0.002	< 0.0005	--	--	< 0.0005	--	NA	< 0.0005
	Molybdenum	NA	< 0.01	< 0.01	< 0.00095	< 0.01	< 0.01	< 0.00095	0.0011 J
	Combined Radium - 226/228	5	2.44	1.72	1.22 U	1.71	< 0.769 U	1.37	2.23
	Selenium	0.05	< 0.01	--	--	< 0.01	--	NA	< 0.01
Thallium	0.002	0.000058 J	0.000084 J	< 0.000052	< 0.001	< 0.001	0.000080 J	< 0.001	

Table 6
 Summary of Groundwater Analytical Data
 2020 Annual Groundwater Monitoring and Corrective Action Report
 Georgia Power Company
 Plant Yates AP-1

Analyte	MCL	YGWC-45	YGWC-45	YGWC-46	YGWC-46	YGWC-46	YGWC-46A	
		10/9/2019	3/17/2020	8/21/2019	10/9/2019	3/17/2020	7/6/2020	
Appendix III	pH	NA	6.55	6.69	5.82	5.96	5.99	6.89
	Boron	NA	0.35	0.37	--	1.1	1.3	2.0
	Calcium	NA	47.9	54.8	--	64.2	70.4	105
	Chloride	NA	5.1	4.6	--	25	24.8	25.8
	Fluoride	4	< 0.3	0.076 J	< 0.3	0.12 J	< 0.050	0.12
	Sulfate	NA	183	161	--	< 1	439	385
	TDS	NA	432	391	--	809	733	793
	Appendix IV	Antimony	0.006	--	--	< 0.003	--	--
Arsenic		0.01	< 0.005	< 0.00035	0.00074 J	< 0.005	< 0.00035	0.00079 J
Barium		2	0.058	0.061	0.023	0.024	0.022	0.048
Beryllium		0.004	--	--	< 0.003	--	NA	<0.000074
Cadmium		0.005	< 0.0025	< 0.00011	0.00012 J	< 0.0025	0.00012 J	<0.00011
Chromium		0.1	--	--	< 0.01	--	NA	<0.00039
Cobalt		NA	0.0007 J	0.00081 J	0.027	0.024	0.022	0.0041 J
Lead		0.015	--	--	< 0.005	--	NA	<0.000046
Lithium		NA	0.012 J	0.014 J	0.0076 J	0.0078 J	0.0071 J	0.011 J
Mercury		0.002	--	--	< 0.0005	--	NA	<0.00014
Molybdenum		NA	0.0012 J	0.0016 J	0.0012 J	0.0013 J	0.0015 J	0.0026 J
Combined Radium - 226/228		5	1.61	1.44	1.31	< 0.892 U	1.74	pending
Selenium		0.05	--	--	< 0.01	--	NA	<0.0013
Thallium		0.002	< 0.001	< 0.000052	< 0.001	< 0.001	< 0.000052	<0.000052

Notes:

1. Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.
 2. Appendix III = Indicator parameters evaluated during Detection Monitoring.
 3. Appendix IV = Parameters evaluated during Assessment Monitoring.
 4. The MCL used is the USEPA and Georgia Environmental Protection Division MCL.
- Not analyzed for this constituent.
< Analyte was not detected above the laboratory method detection limit (MDL).
NA = Not applicable; analyte does not have an MCL, but will be further evaluated statistically, as required by the USEPA Coal Combustion Residuals rule.

Acronyms and Abbreviations:

MCL = Maximum Contaminant Level

USEPA = United States Environmental Protection Agency

Laboratory Qualifiers:

J = Estimated concentration above the method detection limit and below the reporting limit.

U - the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not

**Table 7 - Background Levels and Groundwater Protection Standards
2020 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - AP-1**

Constituent	Units	Background	Federal GWPS	State GWPS
October 2019				
Antimony	mg/L	0.003	0.006	0.006
Arsenic	mg/L	0.005	0.010	0.010
Barium	mg/L	0.055	2	2
Beryllium	mg/L	0.003	0.004	0.004
Cadmium	mg/L	0.0010	0.005	0.005
Chromium	mg/L	0.010	0.100	0.100
Cobalt	mg/L	0.018	0.018	0.018
Fluoride	mg/L	0.76	4	4
Lead	mg/L	0.005	0.015	0.005
Lithium	mg/L	0.050	0.040	0.030
Mercury	mg/L	0.0005	0.002	0.002
Molybdenum	mg/L	0.010	0.1	0.010
Selenium	mg/L	0.010	0.050	0.050
Thallium	mg/L	0.001	0.002	0.002
Combined Radium - 226/228	pCi/L	1.48	5	5
March 2020				
Antimony	mg/L	0.0035	0.006	0.006
Arsenic	mg/L	0.005	0.010	0.010
Barium	mg/L	0.071	2	2
Beryllium	mg/L	0.003	0.004	0.004
Cadmium	mg/L	0.0025	0.005	0.005
Chromium	mg/L	0.010	0.100	0.100
Cobalt	mg/L	0.035	0.035 ¹	0.035 ¹
Fluoride	mg/L	0.680	4	4
Lead	mg/L	0.005	0.015	0.005
Lithium	mg/L	0.030	0.040	0.030
Mercury	mg/L	0.0005	0.002	0.002
Molybdenum	mg/L	0.014	0.100	0.014
Selenium	mg/L	0.010	0.050	0.050
Thallium	mg/L	0.001	0.002	0.002
Combined Radium - 226/228	pCi/L	6.9	6.9 ¹	6.9 ¹

Notes

1. Background concentration is higher than the federally promulgated value (0.006 mg/L for Co). Background is higher than radium MCL (5 mg/L). Therefore background is the GWPS.

Site background - Tolerance limits calculated from pooled upgradient well data.

Federal GWPS - Groundwater Protection Standard per 40 CFR §257.95(h).

The background tolerance limit (TL) used to evaluate the lithium State GWPS equals the laboratory reporting limit (RL). Per the SAP, and in accordance with the Unified Guidance, a non-parametric limit approach was used since the data set contains greater than 50% non-detect results. Using this approach, the TL equals the highest value reported, which is the laboratory RL.

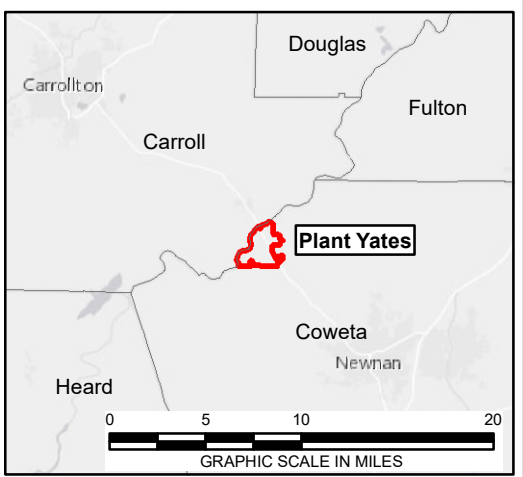
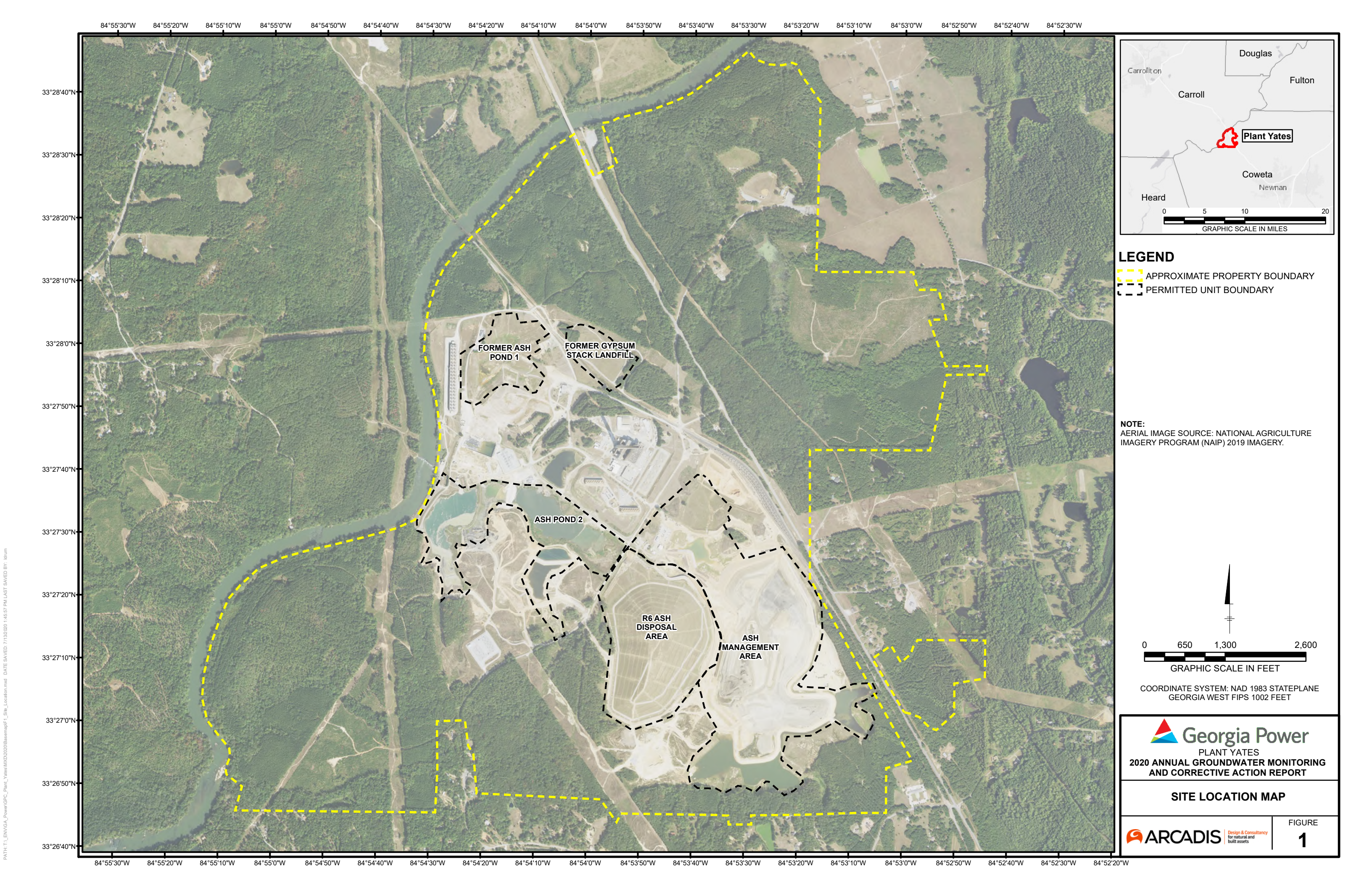
MCL - Maximum Contaminant Level

mg/L - milligrams per liter

pCi/L - picocuries per liter

FIGURES

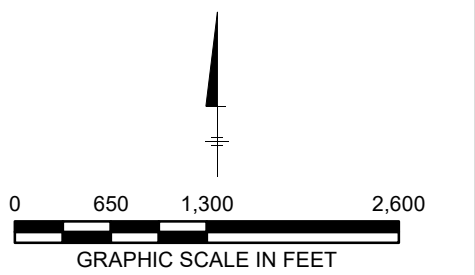




LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- PERMITTED UNIT BOUNDARY

NOTE:
 AERIAL IMAGE SOURCE: NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.



COORDINATE SYSTEM: NAD 1983 STATEPLANE
 GEORGIA WEST FIPS 1002 FEET

 **Georgia Power**
 PLANT YATES
 2020 ANNUAL GROUNDWATER MONITORING
 AND CORRECTIVE ACTION REPORT

SITE LOCATION MAP

 **ARCADIS** Design & Consultancy for natural and built assets

FIGURE
1

PATH: T:\EN\GA_Power\GPC_Plant_Yates\MD\2020\Basemap\F1_Site_Location.mxd DATE SAVED: 7/13/2020 1:45:57 PM LAST SAVED BY: khum

84°54'30"W

84°54'20"W

84°54'10"W

33°28'0"N

33°27'50"N

84°54'30"W

84°54'20"W

84°54'10"W

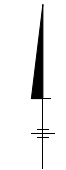


LEGEND

- TRANSITION NETWORK MONITORING WELL LOCATION
- BEDROCK NETWORK MONITORING WELL LOCATION
- SAPROLITE NON-NETWORK WELL/PIEZOMETER
- TRANSITION NON-NETWORK WELL/PIEZOMETER
- BEDROCK NON-NETWORK WELL/PIEZOMETER
- ABANDONED NETWORK MONITORING WELL LOCATION
- ABANDONED NON-NETWORK WELL/PIEZOMETER
- PERMITTED UNIT BOUNDARY

NOTES:

1. YGWC-52 WAS INSTALLED IN JUNE 2020.
2. YGWC-46A WAS INSTALLED AS A REPLACEMENT WELL FOR YGWC-46 IN JUNE 2020.
3. YAMW-7 AND YGWC-46 WERE ABANDONED IN JUNE 2020.
4. AERIAL IMAGE SOURCE: NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.



GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE
GEORGIA WEST FIPS 1002 FEET



WELL LOCATION MAP



FIGURE
2

PATH: T:\ENVOGA_Power\GPC_Plant_Yates\Map\F2_Well_Map_APT.mxd DATE SAVED: 6/30/2020 11:48:03 AM LAST SAVED BY: krum

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84°54'20"W

84°54'10"W

33°28'0"N







33°27'50"N

84°54'30"W

84°54'20"W

84°54'10"W

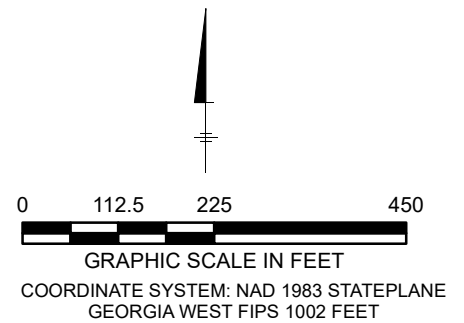
LEGEND

-  TRANSITION NETWORK MONITORING WELL LOCATION
-  BEDROCK NETWORK MONITORING WELL LOCATION
-  SAPROLITE NON-NETWORK WELL/PIEZOMETER
-  TRANSITION NON-NETWORK WELL/PIEZOMETER
-  PERMITTED UNIT BOUNDARY
-  APPROXIMATE POTENTIOMETRIC CONTOUR (FEET)

698.27 GROUNDWATER ELEVATION (FEET)

NOTES:

1. * - WELL NOT USED IN CONTOURING.
2. AERIAL IMAGE SOURCE: NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.



 **Georgia Power**
PLANT YATES

2020 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP,
AUGUST 2019

 **ARCADIS** Design & Consultancy
for natural and
built assets

FIGURE
3



PATH: T:\ENVOGA_Power\GPC_Plant_Yates\IAD\2020\GW_Contours_2020\F3_GWE_Aug2019_API.mxd DATE SAVED: 7/17/2020 11:17:00 AM LAST SAVED BY: ldrum

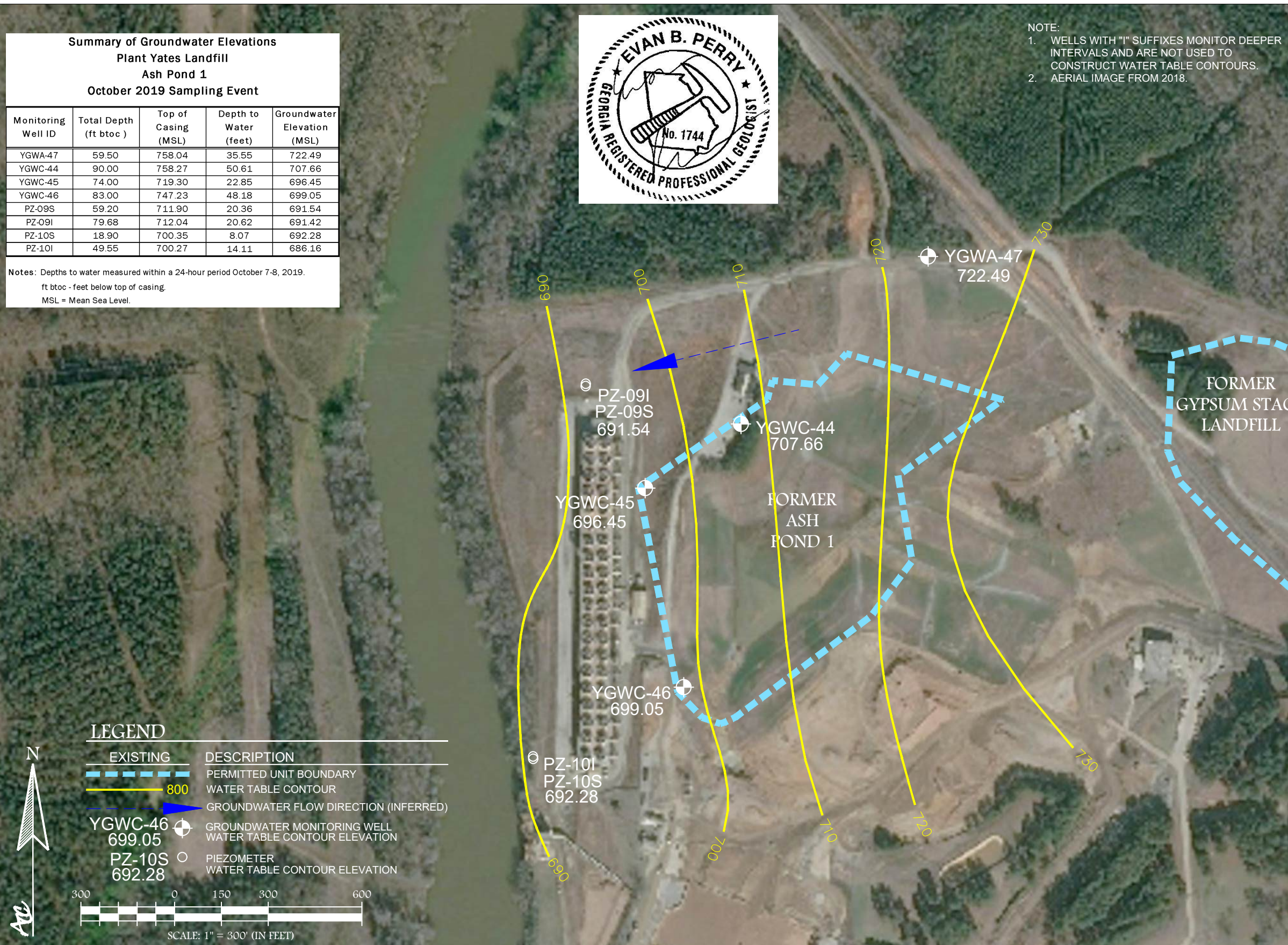
**Summary of Groundwater Elevations
Plant Yates Landfill
Ash Pond 1
October 2019 Sampling Event**

Monitoring Well ID	Total Depth (ft btoc)	Top of Casing (MSL)	Depth to Water (feet)	Groundwater Elevation (MSL)
YGWA-47	59.50	758.04	35.55	722.49
YGWC-44	90.00	758.27	50.61	707.66
YGWC-45	74.00	719.30	22.85	696.45
YGWC-46	83.00	747.23	48.18	699.05
PZ-09S	59.20	711.90	20.36	691.54
PZ-09I	79.68	712.04	20.62	691.42
PZ-10S	18.90	700.35	8.07	692.28
PZ-10I	49.55	700.27	14.11	686.16

Notes: Depths to water measured within a 24-hour period October 7-8, 2019.
ft btoc - feet below top of casing.
MSL = Mean Sea Level.



- NOTE:
1. WELLS WITH "I" SUFFIXES MONITOR DEEPER INTERVALS AND ARE NOT USED TO CONSTRUCT WATER TABLE CONTOURS.
 2. AERIAL IMAGE FROM 2018.



NOTE:
PREPARED BY ATLANTIC COAST CONSULTING, INC.,
NOVEMBER 2019; 2019 SEMI-ANNUAL GROUNDWATER
MONITORING AND CORRECTIVE ACTION REPORT.

LEGEND

EXISTING	DESCRIPTION
	PERMITTED UNIT BOUNDARY
	800 WATER TABLE CONTOUR
	GROUNDWATER FLOW DIRECTION (INFERRED)
	YGWC-46 699.05 GROUNDWATER MONITORING WELL WATER TABLE CONTOUR ELEVATION
	PZ-10S 692.28 PIEZOMETER WATER TABLE CONTOUR ELEVATION



SCALE: 1" = 300' (IN FEET)

Georgia Power
PLANT YATES
2020 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT

**OCTOBER 2019
WATER TABLE CONTOUR MAP**

ARCADIS Design & Consultancy
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FIGURE
4

PATH: T:_ENVGA_Power\GPC_Plant_Yates\MD\2020\GW_Contours_2020\F4_GWE_Oc2019_APl.mxd DATE SAVED: 7/17/2020 2:29:35 PMLAST SAVED BY: blum

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84°54'20"W

84°54'10"W

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33°27'50"N

84°54'30"W

84°54'20"W

84°54'10"W

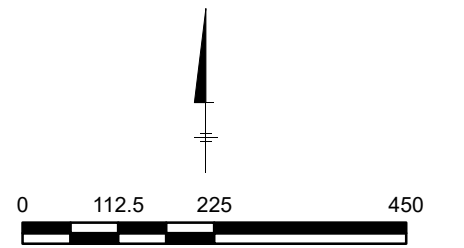
LEGEND

-  TRANSITION NETWORK MONITORING WELL LOCATION
-  BEDROCK NETWORK MONITORING WELL LOCATION
-  SAPROLITE NON-NETWORK WELL/PIEZOMETER
-  TRANSITION NON-NETWORK WELL/PIEZOMETER
-  BEDROCK NON-NETWORK WELL/PIEZOMETER
-  PERMITTED UNIT BOUNDARY
-  APPROXIMATE POTENTIOMETRIC CONTOUR (FEET)

698.27 GROUNDWATER ELEVATION (FEET)

NOTES:

1. * - WELL NOT USED IN CONTOURING.
2. AERIAL IMAGE SOURCE: NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.



COORDINATE SYSTEM: NAD 1983 STATEPLANE
GEORGIA WEST FIPS 1002 FEET



PLANT YATES
2020 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP,
MARCH 2020



FIGURE

5

PATH: T:_ENVGA_Power\GPC_Plant_Yates\MD\2020\GW_Contours_2020\FE_GWE_March2020_API.mxd DATE SAVED: 7/17/2020 2:17:34 PM LAST SAVED BY: krum



APPENDIX A

Laboratory Analytical and Data Validation Reports



August 2019

Initial Assessment Event



December 11, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Yates-Pond 1
Pace Project No.: 2622246

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 21, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This revised report replaces the report issued on 8/29/2019. The report has been revised to correct the project-required RLs per consultant request. No other changes have been made to this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Betsy McDaniel, Atlantic Coast Consulting
Chris Parker, Atlantic Coast Consulting
Evan Perry, Atlantic Coast Consulting
Lauren Petty, Southern Company Services, Inc.
Rebecca Thornton, Pace Analytical Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Yates-Pond 1
Pace Project No.: 2622246

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant Yates-Pond 1

Pace Project No.: 2622246

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622246001	YGWA-47	Water	08/20/19 10:30	08/21/19 16:50
2622246002	YGWC-45	Water	08/20/19 11:35	08/21/19 16:50
2622246003	YGWC-44	Water	08/20/19 13:45	08/21/19 16:50
2622246004	FB-1-8-20-19	Water	08/20/19 13:30	08/21/19 16:50
2622246005	YGWC-46	Water	08/21/19 09:45	08/21/19 16:50
2622246006	EB-1-8-21-19	Water	08/21/19 10:00	08/21/19 16:50
2622246007	Dup-1	Water	08/21/19 00:00	08/21/19 16:50

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Yates-Pond 1
Pace Project No.: 2622246

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2622246001	YGWA-47	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622246002	YGWC-45	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622246003	YGWC-44	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622246004	FB-1-8-20-19	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622246005	YGWC-46	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622246006	EB-1-8-21-19	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622246007	Dup-1	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates-Pond 1
Pace Project No.: 2622246

Sample: YGWA-47		Lab ID: 2622246001		Collected: 08/20/19 10:30		Received: 08/21/19 16:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 17:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 17:07	7440-38-2	
Barium	0.024	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 17:07	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 17:07	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 17:07	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 17:07	7440-47-3	
Cobalt	0.00092J	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 17:07	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 17:07	7439-92-1	
Lithium	0.0036J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 17:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 17:07	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 17:07	7782-49-2	
Thallium	0.000058J	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 17:07	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 10:54	7439-97-6	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Fluoride	ND	mg/L	0.30	0.029	1		08/28/19 21:18	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant Yates-Pond 1
Pace Project No.: 2622246

Sample: YGWC-45		Lab ID: 2622246002		Collected: 08/20/19 11:35		Received: 08/21/19 16:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 17:12	7440-36-0	
Arsenic	0.00078J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 17:12	7440-38-2	
Barium	0.057	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 17:12	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 17:12	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 17:12	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 17:12	7440-47-3	
Cobalt	0.00071J	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 17:12	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 17:12	7439-92-1	
Lithium	0.012J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 17:12	7439-93-2	
Molybdenum	0.0011J	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 17:12	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 17:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 17:12	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 11:04	7439-97-6	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Fluoride	ND	mg/L	0.30	0.029	1		08/28/19 22:26	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant Yates-Pond 1
Pace Project No.: 2622246

Sample: YGWC-44		Lab ID: 2622246003		Collected: 08/20/19 13:45		Received: 08/21/19 16:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 17:18	7440-36-0	
Arsenic	0.00097J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 17:18	7440-38-2	
Barium	0.10	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 17:18	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 17:18	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 17:18	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 17:18	7440-47-3	
Cobalt	0.0020J	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 17:18	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 17:18	7439-92-1	
Lithium	0.013J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 17:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 17:18	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 17:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 17:18	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 11:06	7439-97-6	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Fluoride	ND	mg/L	0.30	0.029	1		08/28/19 22:48	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant Yates-Pond 1
Pace Project No.: 2622246

Sample: FB-1-8-20-19		Lab ID: 2622246004		Collected: 08/20/19 13:30		Received: 08/21/19 16:50		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 17:24	7440-36-0		
Arsenic	0.00063J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 17:24	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 17:24	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 17:24	7440-41-7		
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 17:24	7440-43-9		
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 17:24	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 17:24	7440-48-4		
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 17:24	7439-92-1		
Lithium	ND	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 17:24	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 17:24	7439-98-7		
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 17:24	7782-49-2		
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 17:24	7440-28-0		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 11:08	7439-97-6		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Fluoride	ND	mg/L	0.30	0.029	1		08/28/19 23:11	16984-48-8		

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ANALYTICAL RESULTS

Project: Plant Yates-Pond 1
Pace Project No.: 2622246

Sample: YGWC-46		Lab ID: 2622246005		Collected: 08/21/19 09:45		Received: 08/21/19 16:50		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 17:30	7440-36-0		
Arsenic	0.00074J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 17:30	7440-38-2		
Barium	0.023	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 17:30	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 17:30	7440-41-7		
Cadmium	0.00012J	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 17:30	7440-43-9		
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 17:30	7440-47-3		
Cobalt	0.027	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 17:30	7440-48-4		
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 17:30	7439-92-1		
Lithium	0.0076J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 17:30	7439-93-2		
Molybdenum	0.0012J	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 17:30	7439-98-7		
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 17:30	7782-49-2		
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 17:30	7440-28-0		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 11:15	7439-97-6		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Fluoride	ND	mg/L	0.30	0.029	1		08/28/19 23:34	16984-48-8		

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ANALYTICAL RESULTS

Project: Plant Yates-Pond 1
Pace Project No.: 2622246

Sample: EB-1-8-21-19		Lab ID: 2622246006		Collected: 08/21/19 10:00		Received: 08/21/19 16:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 17:35	7440-36-0	
Arsenic	0.00063J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 17:35	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 17:35	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 17:35	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 17:35	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 17:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 17:35	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 17:35	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 17:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 17:35	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 17:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 17:35	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 11:18	7439-97-6	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Fluoride	ND	mg/L	0.30	0.029	1		08/28/19 23:56	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant Yates-Pond 1

Pace Project No.: 2622246

Sample: Dup-1		Lab ID: 2622246007		Collected: 08/21/19 00:00		Received: 08/21/19 16:50		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 17:41	7440-36-0	
Arsenic	0.00061J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 17:41	7440-38-2	
Barium	0.025	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 17:41	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 17:41	7440-41-7	
Cadmium	0.00011J	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 17:41	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 17:41	7440-47-3	
Cobalt	0.028	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 17:41	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 17:41	7439-92-1	
Lithium	0.0080J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 17:41	7439-93-2	
Molybdenum	0.0013J	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 17:41	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 17:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 17:41	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 11:20	7439-97-6	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 00:19	16984-48-8	

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QUALITY CONTROL DATA

Project: Plant Yates-Pond 1

Pace Project No.: 2622246

QC Batch: 34231

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Associated Lab Samples: 2622246001, 2622246002, 2622246003, 2622246004, 2622246005, 2622246006, 2622246007

METHOD BLANK: 154028

Matrix: Water

Associated Lab Samples: 2622246001, 2622246002, 2622246003, 2622246004, 2622246005, 2622246006, 2622246007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	08/27/19 10:49	

LABORATORY CONTROL SAMPLE: 154029

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 154030 154031

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2622246001 Result	Spike Conc.	Spike Conc.	Conc.								
Mercury	mg/L	ND	0.0025	0.0025	0.0026	0.0025	103	99	75-125	3	20		

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QUALITY CONTROL DATA

Project: Plant Yates-Pond 1
Pace Project No.: 2622246

QC Batch: 34176 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2622246001, 2622246002, 2622246003, 2622246004, 2622246005, 2622246006, 2622246007

METHOD BLANK: 153777 Matrix: Water
Associated Lab Samples: 2622246001, 2622246002, 2622246003, 2622246004, 2622246005, 2622246006, 2622246007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	08/26/19 16:54	
Arsenic	mg/L	ND	0.0050	0.00035	08/26/19 16:54	
Barium	mg/L	ND	0.010	0.00049	08/26/19 16:54	
Beryllium	mg/L	ND	0.0030	0.000074	08/26/19 16:54	
Cadmium	mg/L	ND	0.0025	0.00011	08/26/19 16:54	
Chromium	mg/L	ND	0.010	0.00039	08/26/19 16:54	
Cobalt	mg/L	ND	0.0050	0.00030	08/26/19 16:54	
Lead	mg/L	ND	0.0050	0.000046	08/26/19 16:54	
Lithium	mg/L	ND	0.030	0.00078	08/26/19 16:54	
Molybdenum	mg/L	ND	0.010	0.00095	08/26/19 16:54	
Selenium	mg/L	ND	0.010	0.0013	08/26/19 16:54	
Thallium	mg/L	ND	0.0010	0.000052	08/26/19 16:54	

LABORATORY CONTROL SAMPLE: 153778

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.10	103	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 153779 153780

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		2622250005 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Arsenic	mg/L	0.00059J	0.1	0.1	0.098	0.098	97	98	75-125	1	20	
Barium	mg/L	0.020	0.1	0.1	0.12	0.12	95	96	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	

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QUALITY CONTROL DATA

Project: Plant Yates-Pond 1

Pace Project No.: 2622246

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 153779		153780		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2622250005 Result	MS Spike Conc.	MSD Spike Conc.									
Chromium	mg/L	0.00051J	0.1	0.1	0.10	0.10	101	100	75-125	1	20		
Cobalt	mg/L	0.0010J	0.1	0.1	0.10	0.10	100	99	75-125	0	20		
Lead	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	0	20		
Lithium	mg/L	0.00094J	0.1	0.1	0.096	0.096	95	95	75-125	0	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Selenium	mg/L	0.0030J	0.1	0.1	0.098	0.10	95	97	75-125	2	20		
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Yates-Pond 1

Pace Project No.: 2622246

QC Batch: 34413 Analysis Method: EPA 300.0
 QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
 Associated Lab Samples: 2622246001, 2622246002, 2622246003, 2622246004, 2622246005, 2622246006, 2622246007

METHOD BLANK: 154817 Matrix: Water
 Associated Lab Samples: 2622246001, 2622246002, 2622246003, 2622246004, 2622246005, 2622246006, 2622246007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.30	0.029	08/28/19 20:32	

LABORATORY CONTROL SAMPLE: 154818

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	10	9.5	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 154819 154820

Parameter	Units	2622246001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	10	10	9.9	9.8	99	98	90-110	1	15	

MATRIX SPIKE SAMPLE: 154821

Parameter	Units	2622246002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	ND	10	9.7	97	90-110	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Yates-Pond 1
Pace Project No.: 2622246

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates-Pond 1
Pace Project No.: 2622246

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622246001	YGWA-47	EPA 3005A	34176	EPA 6020B	34193
2622246002	YGWC-45	EPA 3005A	34176	EPA 6020B	34193
2622246003	YGWC-44	EPA 3005A	34176	EPA 6020B	34193
2622246004	FB-1-8-20-19	EPA 3005A	34176	EPA 6020B	34193
2622246005	YGWC-46	EPA 3005A	34176	EPA 6020B	34193
2622246006	EB-1-8-21-19	EPA 3005A	34176	EPA 6020B	34193
2622246007	Dup-1	EPA 3005A	34176	EPA 6020B	34193
2622246001	YGWA-47	EPA 7470A	34231	EPA 7470A	34309
2622246002	YGWC-45	EPA 7470A	34231	EPA 7470A	34309
2622246003	YGWC-44	EPA 7470A	34231	EPA 7470A	34309
2622246004	FB-1-8-20-19	EPA 7470A	34231	EPA 7470A	34309
2622246005	YGWC-46	EPA 7470A	34231	EPA 7470A	34309
2622246006	EB-1-8-21-19	EPA 7470A	34231	EPA 7470A	34309
2622246007	Dup-1	EPA 7470A	34231	EPA 7470A	34309
2622246001	YGWA-47	EPA 300.0	34413		
2622246002	YGWC-45	EPA 300.0	34413		
2622246003	YGWC-44	EPA 300.0	34413		
2622246004	FB-1-8-20-19	EPA 300.0	34413		
2622246005	YGWC-46	EPA 300.0	34413		
2622246006	EB-1-8-21-19	EPA 300.0	34413		
2622246007	Dup-1	EPA 300.0	34413		

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Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power		CONTAINER TYPE: PRESERVATION:		ANALYSIS REQUESTED		CONTAINER TYPE		PRESERVATION	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		# of				P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER		1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	
REPORT TO: Joju Abraham	CC:	CONTAINERS				DW - DRINKING WATER WW - WASTEWATER GW - GROUNDWATER SW - SURFACE WATER ST - STORM WATER W - WATER		S - SOIL SL - SLUDGE SD - SOLID A - AIR L - LIQUID P - PRODUCT	
REQUESTED COMPLETION DATE:	PO #:	PROJECT NAME/STATE: Plant Yates - Pond 1				*MATRIX CODES:			
PROJECT #:						REMARKS/ADDITIONAL INFORMATION			
Collection DATE	Collection TIME	MATRIX CODE	C O M P	G R A B	SAMPLE IDENTIFICATION	Metals App. IV (EPA 6020/7470)	Flouride	Radium 226 & 228 (SW-846 9315/9320)	
8-20-19	1030	GW	X	X	YGWA-47	✓	✓	✓	
8-20-19	1135	GW	X	X	YGWC-45	✓	✓	✓	
8-20-19	1345	GW	X	X	YGWC-44	✓	✓	✓	extra Red wire
8-20-19	1330	W	X	X	FB-1-8-20-19	✓	✓	✓	
8-21-19	0945	GW	X	X	YGWC-46	✓	✓	✓	
8-21-19	1000	W	X	X	FB-1-8-21-19	✓	✓	✓	
		GW	X	X	Dup-1	✓	✓	✓	
SAMPLED BY AND TITLE: JPC/3rd		DATE/TIME: See above	RELINQUISHED BY:	DATE/TIME: 8-21-19 1650	LAB #:		FOR LAB USE ONLY		
RECEIVED BY:		DATE/TIME:	RELINQUISHED BY:	DATE/TIME:	Entered Into LIMS:		Tracking #:		
RECEIVED BY/LAB: R. D. Abman		DATE/TIME: 08/21/19 1650	SAMPLE SHIPPED VIA: UPS	FED-EX	USPS	COURIER	CLIENT	OTHER	FS
Temperature: Min. Max.		2.0	Custody Seal: Intact Broken Not Present						

WO#: 2622246



2622246

Yates Phase- Pond 1 - Blank COCs



Sample Condition Upon Receipt

Client Name: GIA Power Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____
Tracking #: _____

WO#: 2622246

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

PM: BM Due Date: 08/28/19
CLIENT: GAPower-CCR

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 83 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 2'0 Biological Tissue is Frozen: Yes No
Temp should be above freezing to 6°C

Date and Initials of person examining contents: 8/21/19 MR

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Lot # of added preservative
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Pace Trip Blank Lot # (if purchased):	_____	

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

September 16, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Yates-Pond 1
Pace Project No.: 2622248

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 21, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Chris Parker, Atlantic Coast Consulting
Evan Perry, Atlantic Coast Consulting
Lauren Petty, Southern Company Services, Inc.
Rebecca Thornton, Pace Analytical Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Yates-Pond 1
Pace Project No.: 2622248

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622248001	YGWA-47	Water	08/20/19 10:30	08/21/19 16:50
2622248002	YGWC-45	Water	08/20/19 11:35	08/21/19 16:50
2622248003	YGWC-44	Water	08/20/19 13:45	08/21/19 16:50
2622248004	FB-1-8-20-19	Water	08/20/19 13:30	08/21/19 16:50
2622248005	YGWC-46	Water	08/21/19 09:45	08/21/19 16:50
2622248006	EB-1-8-21-19	Water	08/21/19 10:00	08/21/19 16:50
2622248007	Dup-1	Water	08/21/19 00:00	08/21/19 16:50

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SAMPLE ANALYTE COUNT

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622248001	YGWA-47	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622248002	YGWC-45	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622248003	YGWC-44	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622248004	FB-1-8-20-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622248005	YGWC-46	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622248006	EB-1-8-21-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622248007	Dup-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

Sample: YGWA-47 **Lab ID: 2622248001** Collected: 08/20/19 10:30 Received: 08/21/19 16:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.884 ± 0.360 (0.298) C:91% T:NA	pCi/L	09/05/19 11:25	13982-63-3	
Radium-228	EPA 9320	1.56 ± 0.588 (0.902) C:79% T:73%	pCi/L	09/12/19 10:29	15262-20-1	
Total Radium	Total Radium Calculation	2.44 ± 0.948 (1.20)	pCi/L	09/16/19 11:22	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

Sample: YGWC-45 **Lab ID: 2622248002** Collected: 08/20/19 11:35 Received: 08/21/19 16:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.869 ± 0.372 (0.404) C:93% T:NA	pCi/L	09/05/19 08:30	13982-63-3	
Radium-228	EPA 9320	1.36 ± 0.515 (0.785) C:78% T:81%	pCi/L	09/12/19 10:29	15262-20-1	
Total Radium	Total Radium Calculation	2.23 ± 0.887 (1.19)	pCi/L	09/16/19 11:22	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

Sample: YGWC-44 **Lab ID: 2622248003** Collected: 08/20/19 13:45 Received: 08/21/19 16:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.727 ± 0.353 (0.413) C:84% T:NA	pCi/L	09/05/19 08:30	13982-63-3	
Radium-228	EPA 9320	0.984 ± 0.482 (0.852) C:77% T:82%	pCi/L	09/12/19 10:29	15262-20-1	
Total Radium	Total Radium Calculation	1.71 ± 0.835 (1.27)	pCi/L	09/16/19 11:22	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

Sample: FB-1-8-20-19 **Lab ID: 2622248004** Collected: 08/20/19 13:30 Received: 08/21/19 16:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.436 ± 0.271 (0.382) C:90% T:NA	pCi/L	09/05/19 08:30	13982-63-3	
Radium-228	EPA 9320	0.611 ± 0.435 (0.853) C:77% T:81%	pCi/L	09/12/19 10:29	15262-20-1	
Total Radium	Total Radium Calculation	1.05 ± 0.706 (1.24)	pCi/L	09/16/19 11:22	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

Sample: YGWC-46 **Lab ID: 2622248005** Collected: 08/21/19 09:45 Received: 08/21/19 16:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.719 ± 0.340 (0.388) C:89% T:NA	pCi/L	09/05/19 08:30	13982-63-3	
Radium-228	EPA 9320	0.590 ± 0.412 (0.801) C:77% T:86%	pCi/L	09/12/19 10:29	15262-20-1	
Total Radium	Total Radium Calculation	1.31 ± 0.752 (1.19)	pCi/L	09/16/19 11:22	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

Sample: EB-1-8-21-19 **Lab ID: 2622248006** Collected: 08/21/19 10:00 Received: 08/21/19 16:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.405 ± 0.280 (0.468) C:98% T:NA	pCi/L	09/05/19 08:30	13982-63-3	
Radium-228	EPA 9320	0.339 ± 0.436 (0.932) C:80% T:90%	pCi/L	09/12/19 10:38	15262-20-1	
Total Radium	Total Radium Calculation	0.744 ± 0.716 (1.40)	pCi/L	09/16/19 11:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

Sample: Dup-1 **Lab ID: 2622248007** Collected: 08/21/19 00:00 Received: 08/21/19 16:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.567 ± 0.325 (0.473) C:91% T:NA	pCi/L	09/05/19 08:30	13982-63-3	
Radium-228	EPA 9320	1.01 ± 0.528 (0.974) C:79% T:85%	pCi/L	09/12/19 10:38	15262-20-1	
Total Radium	Total Radium Calculation	1.58 ± 0.853 (1.45)	pCi/L	09/16/19 11:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

QC Batch: 359489

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 2622248001, 2622248002, 2622248003, 2622248004, 2622248005, 2622248006, 2622248007

METHOD BLANK: 1745578

Matrix: Water

Associated Lab Samples: 2622248001, 2622248002, 2622248003, 2622248004, 2622248005, 2622248006, 2622248007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.402 ± 0.246 (0.327) C:100% T:NA	pCi/L	09/05/19 08:30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

QC Batch: 358698

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 2622248001, 2622248002, 2622248003, 2622248004, 2622248005, 2622248006, 2622248007

METHOD BLANK: 1741705

Matrix: Water

Associated Lab Samples: 2622248001, 2622248002, 2622248003, 2622248004, 2622248005, 2622248006, 2622248007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.944 ± 0.396 (0.631) C:81% T:90%	pCi/L	09/12/19 10:29	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates-Pond 1

Pace Project No.: 2622248

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622248001	YGWA-47	EPA 9315	359489		
2622248002	YGWC-45	EPA 9315	359489		
2622248003	YGWC-44	EPA 9315	359489		
2622248004	FB-1-8-20-19	EPA 9315	359489		
2622248005	YGWC-46	EPA 9315	359489		
2622248006	EB-1-8-21-19	EPA 9315	359489		
2622248007	Dup-1	EPA 9315	359489		
2622248001	YGWA-47	EPA 9320	358698		
2622248002	YGWC-45	EPA 9320	358698		
2622248003	YGWC-44	EPA 9320	358698		
2622248004	FB-1-8-20-19	EPA 9320	358698		
2622248005	YGWC-46	EPA 9320	358698		
2622248006	EB-1-8-21-19	EPA 9320	358698		
2622248007	Dup-1	EPA 9320	358698		
2622248001	YGWA-47	Total Radium Calculation	361426		
2622248002	YGWC-45	Total Radium Calculation	361426		
2622248003	YGWC-44	Total Radium Calculation	361426		
2622248004	FB-1-8-20-19	Total Radium Calculation	361426		
2622248005	YGWC-46	Total Radium Calculation	361426		
2622248006	EB-1-8-21-19	Total Radium Calculation	361426		
2622248007	Dup-1	Total Radium Calculation	361426		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power		ANALYSIS REQUESTED		CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER		PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₈ , ≤6°C 7 - ≤6°C not frozen	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		CONTAINER TYPE: P 3		PRESERVATION: # of		MATRIX CODES: DW - DRINKING WATER S - SOIL MW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT	
REPORT TO: Joju Abraham		P 7		P 3		REMARKS/ADDITIONAL INFORMATION	
REQUESTED COMPLETION DATE:		P 7		P 3		L A B I D N U M B E R →	
PROJECT NAME/STATE: Plant Yates - Pond 1		P 3		P 3			
PROJECT #:		P 7		P 3		Radium 226 & 228 (SW-846 9316/9320) Fluoride (FPA 6020/7470) Metals App. IV	
Collection DATE		P 7		P 3			
Collection TIME		P 7		P 3		WO#: 2622248 2622248	
MATRIX CODE		P 7		P 3			
C O M P		P 7		P 3		FOR LAB USE ONLY LAB #: Entered into LIMS: Tracking #:	
G R A B		P 7		P 3			
X YGWA-47		P 7		P 3		DATE/TIME: 8/21/19 1650 DATE/TIME:	
X YGWC-45		P 7		P 3			
X YGWC-44		P 7		P 3		RELINQUISHED BY: <i>[Signature]</i> RELINQUISHED BY:	
X FB-1-8-20-19		P 7		P 3			
X YGWC-46		P 7		P 3		SAMPLE SHIPPED VIA: USPS FED-EX USPS COURIER OTHER FS # of Coolers Broken Not Present	
X EB-1-8-21-19		P 7		P 3			
X Dup-1		P 7		P 3		DATE/TIME: 8/21/19 1650 DATE/TIME:	
		P 7		P 3			
SAMPLED BY AND TITLE: <i>[Signature]</i>		P 7		P 3		RECEIVED BY: RECEIVED BY:	
DATE/TIME: See above		P 7		P 3			
RECEIVED BY:		P 7		P 3		RECEIVED BY LAB: <i>[Signature]</i>	
DATE/TIME:		P 7		P 3			
TEMPERATURE: 2.0 Max		P 7		P 3		RECEIVED BY LAB: <i>[Signature]</i>	
NA Yes No NA		P 7		P 3			

Yates Phase- Pond 1 - Blank COCS

Sample Condition Upon Receipt



Client Name: GIA Power

Project # _____

WO# : 2622248

Courier: Fed Ex UPS USPS Client Commercial Pace Other
Tracking #: _____

PM: **BM** Due Date: **09/19/19**
CLIENT: **GAPower-CCR**

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 83 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 2'0 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/21/19 MR

Temp should be above freezing to 6°C

Comments: _____

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Georgia Power Company – Plant Yates Ash Pond-1

Quality Control Review of Analytical Data – August 2019

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Pace Analytical Services, Atlanta and Pittsburgh for groundwater samples collected at Plant Yates AP-1 between August 20, 2019 and August 21, 2019. 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 2622246 was revised by the laboratory to correct the reporting limits (RLs) to meet project requirements.

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), Mercury in Liquid Wastes (USEPA Method 7470A), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the 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, with the exception of Radum-226 on YGWC-44 (2622248003) as described in the qualifications section below.

Field Precision: Field goals for precision were met.

Accuracy: Laboratory goals for accuracy were met.

Detection Limits: Project goals for detection limits were met.

Completeness: There were no rejected analytical results for this event, resulting in a completion of 100%.

Holding Times: Holding time requirements were met.

QUALIFICATIONS

In general, chemical results for the samples collected at the site were qualified on the basis of low precision or low accuracy or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the validation process:

J: The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample

ND: The analyte was not detected above the method detection limit

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines 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 YGWC-44 (2622248003) was qualified as estimated (J) for Radium-226 as the laboratory relative percent difference (RPD) exceeded QC criteria (78.31% above limit of 25).
- Radium-226 data for YGWA-47 (2622248001) was qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, the minimum detectable concentration (MDC) was raised to the sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from the Plant Yates Ash Pond-1 sampled between August 20, 2019 and August 21, 2019 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 – Plant Yates Ash Pond-1

Sample Summary Table – August 2019

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
22246	YGWA-47	8/20/2019	2622246001	GW		X	X	X	
22248	YGWA-47	8/20/2019	2622248001	GW					X
22246	YGWC-45	8/20/2019	2622246002	GW		X	X	X	
22248	YGWC-45	8/20/2019	2622248002	GW					X
22246	YGWC-44	8/20/2019	2622246003	GW		X	X	X	
22248	YGWC-44	8/20/2019	2622248003	GW					X
22246	FB-1-8-20-19	8/20/2019	2622246004	WQ	FB	X	X	X	
22248	FB-1-8-20-19	8/20/2019	2622248004	WQ	FB				X
22246	YGWC-46	8/21/2019	2622246005	GW		X	X	X	
22248	YGWC-46	8/21/2019	2622248005	GW					X
22246	EB-1-8-21-19	8/21/2019	2622246006	WQ	EB	X	X	X	
22248	EB-1-8-21-19	8/21/2019	2622248006	WQ	EB				X
22246	DUP-1	8/21/2019	2622246007	GW	FD (YGWC-46)	X	X	X	
22248	DUP-1	8/21/2019	2622248007	GW	FD (YGWC-46)				X

Abbreviations:

EB – Equipment Blank

FB – Field Blank

FD – Field Duplicate

GW – Groundwater

QC – Quality Control

TDS – Total Dissolved Solids

WQ – Water Quality Control

TABLE 2

Georgia Power Company – Plant Yates Ash Pond-1

Qualifier Summary Table – August 2019

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
22248	YGWA-47	Radium-226		0.298	ND	Blank detection
22248	YGWC-44	Radium-226			J	RPD exceeds laboratory goal

Abbreviations:

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

Qualifiers:

J – Estimated Result
 ND – Non-Detect Result

October 2019

Semiannual Event



December 11, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Yates Pond 1
Pace Project No.: 2624140

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 09, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This revised report replaces the report issued on 10/16/2019. The report has been revised to include Appendix IV Metals data which were omitted in the original report. No other changes have been made to this report.

This revised report replaces the revised report issued on 10/25/2019. The report has been revised to correct sample IDs per consultant request. No other changes have been made to this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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December 11, 2019

Page 2

cc: Betsy McDaniel, Atlantic Coast Consulting
Chris Parker, Atlantic Coast Consulting
Evan Perry, Atlantic Coast Consulting
Lauren Petty, Southern Company Services, Inc.
Rebecca Thornton, Pace Analytical Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Yates Pond 1

Pace Project No.: 2624140

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant Yates Pond 1

Pace Project No.: 2624140

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624140001	YGWA-47	Water	10/08/19 12:34	10/09/19 17:00
2624140002	YGWC-44	Water	10/08/19 14:07	10/09/19 17:00
2624140003	YGWC-45	Water	10/09/19 10:23	10/09/19 17:00
2624140004	EB-1 10-9-19	Water	10/09/19 10:40	10/09/19 17:00
2624140005	FB-1 10-9-19	Water	10/08/19 13:40	10/09/19 17:00
2624140006	YGWC-46	Water	10/09/19 12:22	10/09/19 17:00
2624140007	DUP-1	Water	10/09/19 00:00	10/09/19 17:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Yates Pond 1

Pace Project No.: 2624140

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2624140001	YGWA-47	EPA 6020B	CSW	9
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624140002	YGWC-44	EPA 6020B	CSW	9
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624140003	YGWC-45	EPA 6020B	CSW	9
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624140004	EB-1 10-9-19	EPA 6020B	CSW	9
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624140005	FB-1 10-9-19	EPA 6020B	CSW	9
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624140006	YGWC-46	EPA 6020B	CSW	9
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624140007	DUP-1	EPA 6020B	CSW	9
		SM 2540C	ALW	1
		EPA 300.0	MWB	3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pond 1
Pace Project No.: 2624140

Sample: YGWA-47		Lab ID: 2624140001		Collected: 10/08/19 12:34		Received: 10/09/19 17:00		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	mg/L	0.0050	0.00035	1	10/10/19 17:50	10/14/19 18:20	7440-38-2		
Barium	0.025	mg/L	0.010	0.00049	1	10/10/19 17:50	10/14/19 18:20	7440-39-3		
Boron	0.012J	mg/L	0.040	0.0049	1	10/10/19 17:50	10/14/19 18:20	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	10/10/19 17:50	10/14/19 18:20	7440-43-9		
Calcium	9.7	mg/L	0.10	0.011	1	10/10/19 17:50	10/14/19 18:20	7440-70-2	M6	
Cobalt	0.0014J	mg/L	0.0050	0.00030	1	10/10/19 17:50	10/14/19 18:20	7440-48-4		
Lithium	0.0036J	mg/L	0.030	0.00078	1	10/10/19 17:50	10/14/19 18:20	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00095	1	10/10/19 17:50	10/14/19 18:20	7439-98-7		
Thallium	0.000084J	mg/L	0.0010	0.000052	1	10/10/19 17:50	10/14/19 18:20	7440-28-0		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	172	mg/L	10.0	10.0	1		10/11/19 11:28			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	4.4	mg/L	1.0	0.024	1		10/12/19 08:27	16887-00-6	B	
Fluoride	0.034J	mg/L	0.30	0.029	1		10/12/19 08:27	16984-48-8		
Sulfate	52.3	mg/L	10.0	0.17	10		10/14/19 19:00	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pond 1
Pace Project No.: 2624140

Sample: YGWC-44		Lab ID: 2624140002		Collected: 10/08/19 14:07		Received: 10/09/19 17:00		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	mg/L	0.0050	0.00035	1	10/10/19 17:50	10/14/19 19:12	7440-38-2		
Barium	0.098	mg/L	0.010	0.00049	1	10/10/19 17:50	10/14/19 19:12	7440-39-3		
Boron	0.58	mg/L	0.040	0.0049	1	10/10/19 17:50	10/14/19 19:12	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	10/10/19 17:50	10/14/19 19:12	7440-43-9		
Calcium	28.1	mg/L	5.0	0.55	50	10/10/19 17:50	10/14/19 19:17	7440-70-2		
Cobalt	0.0017J	mg/L	0.0050	0.00030	1	10/10/19 17:50	10/14/19 19:12	7440-48-4		
Lithium	0.012J	mg/L	0.030	0.00078	1	10/10/19 17:50	10/14/19 19:12	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00095	1	10/10/19 17:50	10/14/19 19:12	7439-98-7		
Thallium	ND	mg/L	0.0010	0.000052	1	10/10/19 17:50	10/14/19 19:12	7440-28-0		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	324	mg/L	10.0	10.0	1		10/11/19 11:28			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	14.8	mg/L	1.0	0.024	1		10/12/19 08:49	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		10/12/19 08:49	16984-48-8		
Sulfate	142	mg/L	10.0	0.17	10		10/15/19 02:39	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pond 1
Pace Project No.: 2624140

Sample: YGWC-45		Lab ID: 2624140003		Collected: 10/09/19 10:23		Received: 10/09/19 17:00		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	mg/L	0.0050	0.00035	1	10/10/19 17:50	10/14/19 19:23	7440-38-2		
Barium	0.058	mg/L	0.010	0.00049	1	10/10/19 17:50	10/14/19 19:23	7440-39-3		
Boron	0.35	mg/L	0.040	0.0049	1	10/10/19 17:50	10/14/19 19:23	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	10/10/19 17:50	10/14/19 19:23	7440-43-9		
Calcium	47.9	mg/L	5.0	0.55	50	10/10/19 17:50	10/14/19 19:29	7440-70-2		
Cobalt	0.00070J	mg/L	0.0050	0.00030	1	10/10/19 17:50	10/14/19 19:23	7440-48-4		
Lithium	0.012J	mg/L	0.030	0.00078	1	10/10/19 17:50	10/14/19 19:23	7439-93-2		
Molybdenum	0.0012J	mg/L	0.010	0.00095	1	10/10/19 17:50	10/14/19 19:23	7439-98-7		
Thallium	ND	mg/L	0.0010	0.000052	1	10/10/19 17:50	10/14/19 19:23	7440-28-0		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	432	mg/L	10.0	10.0	1		10/14/19 11:51			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	5.1	mg/L	1.0	0.024	1		10/12/19 10:18	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		10/12/19 10:18	16984-48-8		
Sulfate	183	mg/L	10.0	0.17	10		10/15/19 02:59	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pond 1
Pace Project No.: 2624140

Sample: EB-1 10-9-19		Lab ID: 2624140004		Collected: 10/09/19 10:40	Received: 10/09/19 17:00	Matrix: Water				
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	mg/L	0.0050	0.00035	1	10/10/19 17:50	10/14/19 19:35	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	10/10/19 17:50	10/14/19 19:35	7440-39-3		
Boron	ND	mg/L	0.040	0.0049	1	10/10/19 17:50	10/14/19 19:35	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	10/10/19 17:50	10/14/19 19:35	7440-43-9		
Calcium	0.13	mg/L	0.10	0.011	1	10/10/19 17:50	10/14/19 19:35	7440-70-2		
Cobalt	ND	mg/L	0.0050	0.00030	1	10/10/19 17:50	10/14/19 19:35	7440-48-4		
Lithium	ND	mg/L	0.030	0.00078	1	10/10/19 17:50	10/14/19 19:35	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00095	1	10/10/19 17:50	10/14/19 19:35	7439-98-7		
Thallium	ND	mg/L	0.0010	0.000052	1	10/10/19 17:50	10/14/19 19:35	7440-28-0		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	18.0	mg/L	10.0	10.0	1		10/14/19 11:52		D6	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.030J	mg/L	1.0	0.024	1		10/12/19 10:40	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		10/12/19 10:40	16984-48-8		
Sulfate	0.10J	mg/L	1.0	0.017	1		10/12/19 10:40	14808-79-8		

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ANALYTICAL RESULTS

Project: Plant Yates Pond 1

Pace Project No.: 2624140

Sample: FB-1 10-9-19 **Lab ID: 2624140005** Collected: 10/08/19 13:40 Received: 10/09/19 17:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Arsenic	ND	mg/L	0.0050	0.00035	1	10/10/19 17:50	10/14/19 19:40	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	10/10/19 17:50	10/14/19 19:40	7440-39-3	
Boron	ND	mg/L	0.040	0.0049	1	10/10/19 17:50	10/14/19 19:40	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/10/19 17:50	10/14/19 19:40	7440-43-9	
Calcium	ND	mg/L	0.10	0.011	1	10/10/19 17:50	10/14/19 19:40	7440-70-2	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/10/19 17:50	10/14/19 19:40	7440-48-4	
Lithium	ND	mg/L	0.030	0.00078	1	10/10/19 17:50	10/14/19 19:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/10/19 17:50	10/14/19 19:40	7439-98-7	
Thallium	ND	mg/L	0.0010	0.000052	1	10/10/19 17:50	10/14/19 19:40	7440-28-0	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		10/11/19 11:28		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	ND	mg/L	1.0	0.024	1		10/12/19 11:25	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		10/12/19 11:25	16984-48-8	
Sulfate	0.020J	mg/L	1.0	0.017	1		10/12/19 11:25	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Yates Pond 1
Pace Project No.: 2624140

Sample: YGWC-46		Lab ID: 2624140006		Collected: 10/09/19 12:22		Received: 10/09/19 17:00		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	ND	mg/L	0.0050	0.00035	1	10/10/19 17:50	10/14/19 19:46	7440-38-2		
Barium	0.024	mg/L	0.010	0.00049	1	10/10/19 17:50	10/14/19 19:46	7440-39-3		
Boron	1.1	mg/L	0.040	0.0049	1	10/10/19 17:50	10/14/19 19:46	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	10/10/19 17:50	10/14/19 19:46	7440-43-9		
Calcium	64.2	mg/L	5.0	0.55	50	10/10/19 17:50	10/14/19 19:52	7440-70-2		
Cobalt	0.024	mg/L	0.0050	0.00030	1	10/10/19 17:50	10/14/19 19:46	7440-48-4		
Lithium	0.0078J	mg/L	0.030	0.00078	1	10/10/19 17:50	10/14/19 19:46	7439-93-2		
Molybdenum	0.0013J	mg/L	0.010	0.00095	1	10/10/19 17:50	10/14/19 19:46	7439-98-7		
Thallium	ND	mg/L	0.0010	0.000052	1	10/10/19 17:50	10/14/19 19:46	7440-28-0		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	809	mg/L	10.0	10.0	1		10/14/19 11:52			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	25.0	mg/L	1.0	0.024	1		10/15/19 04:02	16887-00-6		
Fluoride	0.12J	mg/L	0.30	0.029	1		10/15/19 04:02	16984-48-8		
Sulfate	ND	mg/L	1.0	0.017	1		10/15/19 04:02	14808-79-8		

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ANALYTICAL RESULTS

Project: Plant Yates Pond 1
Pace Project No.: 2624140

Sample: DUP-1		Lab ID: 2624140007		Collected: 10/09/19 00:00	Received: 10/09/19 17:00	Matrix: Water				
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Arsenic	0.00041J	mg/L	0.0050	0.00035	1	10/10/19 17:50	10/14/19 19:58	7440-38-2		
Barium	0.024	mg/L	0.010	0.00049	1	10/10/19 17:50	10/14/19 19:58	7440-39-3		
Boron	1.1	mg/L	0.040	0.0049	1	10/10/19 17:50	10/14/19 19:58	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	10/10/19 17:50	10/14/19 19:58	7440-43-9		
Calcium	62.2	mg/L	5.0	0.55	50	10/10/19 17:50	10/14/19 20:03	7440-70-2		
Cobalt	0.024	mg/L	0.0050	0.00030	1	10/10/19 17:50	10/14/19 19:58	7440-48-4		
Lithium	0.0076J	mg/L	0.030	0.00078	1	10/10/19 17:50	10/14/19 19:58	7439-93-2		
Molybdenum	0.0013J	mg/L	0.010	0.00095	1	10/10/19 17:50	10/14/19 19:58	7439-98-7		
Thallium	ND	mg/L	0.0010	0.000052	1	10/10/19 17:50	10/14/19 19:58	7440-28-0		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	798	mg/L	10.0	10.0	1		10/14/19 11:52			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	24.9	mg/L	1.0	0.024	1		10/15/19 04:22	16887-00-6		
Fluoride	0.11J	mg/L	0.30	0.029	1		10/15/19 04:22	16984-48-8		
Sulfate	ND	mg/L	1.0	0.017	1		10/15/19 04:22	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Yates Pond 1
Pace Project No.: 2624140

QC Batch: 36815 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2624140001, 2624140002, 2624140003, 2624140004, 2624140005, 2624140006, 2624140007

METHOD BLANK: 166313 Matrix: Water
Associated Lab Samples: 2624140001, 2624140002, 2624140003, 2624140004, 2624140005, 2624140006, 2624140007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	0.00035	10/14/19 18:02	
Barium	mg/L	ND	0.010	0.00049	10/14/19 18:02	
Boron	mg/L	ND	0.040	0.0049	10/14/19 18:02	
Cadmium	mg/L	ND	0.0025	0.00011	10/14/19 18:02	
Calcium	mg/L	ND	0.10	0.011	10/14/19 18:02	
Cobalt	mg/L	ND	0.0050	0.00030	10/14/19 18:02	
Molybdenum	mg/L	ND	0.010	0.00095	10/14/19 18:02	
Thallium	mg/L	ND	0.0010	0.000052	10/14/19 18:02	

LABORATORY CONTROL SAMPLE: 166314

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	0.95	95	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Calcium	mg/L	1	0.97	97	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 166315 166316

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2624140001 Result	Spike Conc.	Spike Conc.	MS Result						
Boron	mg/L	0.012J	1	1	0.92	0.93	91	92	75-125	1	20
Calcium	mg/L	9.7	1	1	9.8	9.3	11	-46	75-125	6	20 M6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Yates Pond 1
Pace Project No.: 2624140

QC Batch: 36858 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2624140001, 2624140002, 2624140005

LABORATORY CONTROL SAMPLE: 166584

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	411	103	84-108	

SAMPLE DUPLICATE: 166585

Parameter	Units	2624021007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	7930	8140	3	10	

SAMPLE DUPLICATE: 166586

Parameter	Units	2624140002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	324	337	4	10	

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QUALITY CONTROL DATA

Project: Plant Yates Pond 1

Pace Project No.: 2624140

QC Batch: 36914

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2624140003, 2624140004, 2624140006, 2624140007

LABORATORY CONTROL SAMPLE: 166870

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	366	92	84-108	

SAMPLE DUPLICATE: 166871

Parameter	Units	2624187005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	526	532	1	10	

SAMPLE DUPLICATE: 166872

Parameter	Units	2624140004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	18.0	13.0	32	10	D6

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QUALITY CONTROL DATA

Project: Plant Yates Pond 1
Pace Project No.: 2624140

QC Batch: 36855 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2624140001, 2624140002, 2624140003, 2624140004, 2624140005, 2624140006, 2624140007

METHOD BLANK: 166564 Matrix: Water
Associated Lab Samples: 2624140001, 2624140002, 2624140003, 2624140004, 2624140005, 2624140006, 2624140007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.44J	1.0	0.024	10/12/19 04:46	
Fluoride	mg/L	ND	0.30	0.029	10/12/19 04:46	
Sulfate	mg/L	ND	1.0	0.017	10/12/19 04:46	

LABORATORY CONTROL SAMPLE: 166565

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.1	101	90-110	
Fluoride	mg/L	10	10.2	102	90-110	
Sulfate	mg/L	10	10.2	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 166566 166567

Parameter	Units	2624117001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	35.5	10	10	39.4	39.9	38	44	90-110	1	15	M1

MATRIX SPIKE SAMPLE: 166568

Parameter	Units	2624140004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	0.030J	10	10.0	100	90-110	
Fluoride	mg/L	ND	10	10.2	102	90-110	
Sulfate	mg/L	0.10J	10	10.1	100	90-110	

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QUALIFIERS

Project: Plant Yates Pond 1

Pace Project No.: 2624140

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pond 1
Pace Project No.: 2624140

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624140001	YGWA-47	EPA 3005A	36815	EPA 6020B	36833
2624140002	YGWC-44	EPA 3005A	36815	EPA 6020B	36833
2624140003	YGWC-45	EPA 3005A	36815	EPA 6020B	36833
2624140004	EB-1 10-9-19	EPA 3005A	36815	EPA 6020B	36833
2624140005	FB-1 10-9-19	EPA 3005A	36815	EPA 6020B	36833
2624140006	YGWC-46	EPA 3005A	36815	EPA 6020B	36833
2624140007	DUP-1	EPA 3005A	36815	EPA 6020B	36833
2624140001	YGWA-47	SM 2540C	36858		
2624140002	YGWC-44	SM 2540C	36858		
2624140003	YGWC-45	SM 2540C	36914		
2624140004	EB-1 10-9-19	SM 2540C	36914		
2624140005	FB-1 10-9-19	SM 2540C	36858		
2624140006	YGWC-46	SM 2540C	36914		
2624140007	DUP-1	SM 2540C	36914		
2624140001	YGWA-47	EPA 300.0	36855		
2624140002	YGWC-44	EPA 300.0	36855		
2624140003	YGWC-45	EPA 300.0	36855		
2624140004	EB-1 10-9-19	EPA 300.0	36855		
2624140005	FB-1 10-9-19	EPA 300.0	36855		
2624140006	YGWC-46	EPA 300.0	36855		
2624140007	DUP-1	EPA 300.0	36855		

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 (770) 734-4200 : FAX (770) 734-4201

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME: Georgia Power		CONTAINER TYPE: P 3		ANALYSIS REQUESTED P 7		PRESERVATION 3		L A B	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		PRESERVATION: # of		P 3		P 3		P 3	
REPORT TO: Joju Abraham		CONTAINERS		P 7		P 3		P 3	
REQUESTED COMPLETION DATE: IP O #:		METALS APP. III Boron, Calcium		CL, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)		DETECTED APP IV: Radium 226 & 228 (SW-846 9315/9320)		DETECTED APP IV METALS: (See list below)	
PROJECT NAME/STATE: Plant Yates - Pond 1		C O M P		✓		✓		✓	
PROJECT #:		SAMPLE IDENTIFICATION		✓		✓		✓	
Collection DATE	Collection TIME	MATRIX CODE*	G R A B	✓	✓	✓	✓	✓	✓
10-8-19	1234	GW	✓	Y GWA-47	✓	✓	✓	✓	✓
10-8-19	1407	GW	✓	Y GWC-44	✓	✓	✓	✓	✓
10-9-19	1023	GW	✓	Y GWC-45	✓	✓	✓	✓	✓
10-9-19	1040	W	✓	EB-1 10-9-19	✓	✓	✓	✓	✓
10-8-19	1340	N	✓	FB-1 10-8-19	✓	✓	✓	✓	✓
10-9-19	1222	GW	✓	Y GWC-46	✓	✓	✓	✓	✓
10-9-19	---	GW	✓	Dup-1	✓	✓	✓	✓	✓
SAMPLED BY AND TITLE: Taylor Goble		DATE/TIME: See above		RELINQUISHED BY: Taylor Goble		DATE/TIME: 10-9-19/1700		LAB #: FOR LAB USE ONLY	
RECEIVED BY: Taylor Goble		DATE/TIME:		RELINQUISHED BY:		DATE/TIME:		ENTERED INTO IIMS: NO#: 2624140	
RECEIVED BY LAB: Pace Analytical		DATE/TIME: 10/9/19 1700		SAMPLE SHIPPED VIA: UPS		FED-EX		USPS	
Temperature: Min: 1.8°C Max:		Custody Seal: Broken Not Present		COURIER		OTHER		CLIENT	
No NA		No NA		# of Coolers		Cooler ID:		Cooler ID:	



NO#: 2624140

Yates - Blank COCs



Sample Condition Upon Receipt

WO#: 2624140

Client Name: Georgia Power

PM: BM Due Date: 10/16/19

CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Proj. Due Date: _____
Proj. Name: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 214 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 1.8C Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6C

Date and Initials of person examining contents: 10/19/19 CCF

Table with 16 rows of checklist items including Chain of Custody Present, Filled Out, Relinquished, Sampler Name & Signature, Samples Arrived within Hold Time, Short Hold Time Analysis, Rush Turn Around Time, Sufficient Volume, Correct Containers Used, Containers Intact, Filtered volume received, Sample Labels match, All containers needing preservation, Samples checked for dechlorination, Headspace in VOA Vials, Trip Blank Present, Trip Blank Custody Seals Present, Pace Trip Blank Lot #.

Client Notification/ Resolution: Field Data Required? Y / N
Person Contacted: _____ Date/Time: _____
Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

November 12, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Yates Pond 1
Pace Project No.: 2624141

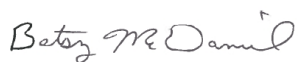
Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 09, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report was revised 11/12/19 to correct a sample ID error made by the lab.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Chris Parker, Atlantic Coast Consulting
Evan Perry, Atlantic Coast Consulting
Lauren Petty, Southern Company Services, Inc.
Rebecca Thornton, Pace Analytical Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Yates Pond 1
Pace Project No.: 2624141

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant Yates Pond 1
Pace Project No.: 2624141

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624141001	YGWA-47	Water	10/08/19 12:34	10/09/19 17:00
2624141002	YGWC-44	Water	10/08/19 14:07	10/09/19 17:00
2624141003	YGWC-45	Water	10/09/19 10:23	10/09/19 17:00
2624141004	EB-1 10-9-19	Water	10/09/19 10:40	10/09/19 17:00
2624141005	FB-1 10-9-19	Water	10/08/19 13:40	10/09/19 17:00
2624141006	YGWC-46	Water	10/09/19 12:22	10/09/19 17:00
2624141007	DUP-1	Water	10/09/19 00:00	10/09/19 17:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Yates Pond 1
Pace Project No.: 2624141

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2624141001	YGWA-47	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624141002	YGWC-44	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624141003	YGWC-45	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624141004	EB-1 10-9-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624141005	FB-1 10-9-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624141006	YGWC-46	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624141007	DUP-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pond 1

Pace Project No.: 2624141

Sample: YGWA-47 **Lab ID: 2624141001** Collected: 10/08/19 12:34 Received: 10/09/19 17:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.710 ± 0.267 (0.231) C:91% T:NA	pCi/L	11/04/19 08:50	13982-63-3	
Radium-228	EPA 9320	1.01 ± 0.471 (0.786) C:69% T:82%	pCi/L	11/04/19 12:59	15262-20-1	
Total Radium	Total Radium Calculation	1.72 ± 0.738 (1.02)	pCi/L	11/07/19 09:47	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pond 1

Pace Project No.: 2624141

Sample: YGWC-44 **Lab ID: 2624141002** Collected: 10/08/19 14:07 Received: 10/09/19 17:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.731 ± 0.276 (0.193) C:88% T:NA	pCi/L	11/04/19 08:51	13982-63-3	
Radium-228	EPA 9320	0.0381 ± 0.406 (0.934) C:70% T:78%	pCi/L	11/04/19 13:02	15262-20-1	
Total Radium	Total Radium Calculation	0.769 ± 0.682 (1.13)	pCi/L	11/07/19 09:47	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pond 1

Pace Project No.: 2624141

Sample: YGWC-45 **Lab ID: 2624141003** Collected: 10/09/19 10:23 Received: 10/09/19 17:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	1.43 ± 0.403 (0.253) C:96% T:NA	pCi/L	11/04/19 08:52	13982-63-3	
Radium-228	EPA 9320	0.178 ± 0.584 (1.31) C:70% T:76%	pCi/L	11/04/19 13:08	15262-20-1	
Total Radium	Total Radium Calculation	1.61 ± 0.987 (1.56)	pCi/L	11/07/19 09:47	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pond 1

Pace Project No.: 2624141

Sample: EB-1 10-9-19 **Lab ID: 2624141004** Collected: 10/09/19 10:40 Received: 10/09/19 17:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.398 ± 0.203 (0.228) C:86% T:NA	pCi/L	11/04/19 08:54	13982-63-3	
Radium-228	EPA 9320	0.336 ± 0.460 (0.987) C:66% T:91%	pCi/L	11/04/19 13:08	15262-20-1	
Total Radium	Total Radium Calculation	0.734 ± 0.663 (1.22)	pCi/L	11/07/19 09:47	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pond 1

Pace Project No.: 2624141

Sample: FB-1 10-9-19 **Lab ID: 2624141005** Collected: 10/08/19 13:40 Received: 10/09/19 17:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.440 ± 0.203 (0.197) C:96% T:NA	pCi/L	11/04/19 08:54	13982-63-3	
Radium-228	EPA 9320	0.401 ± 0.477 (1.01) C:69% T:87%	pCi/L	11/04/19 13:08	15262-20-1	
Total Radium	Total Radium Calculation	0.841 ± 0.680 (1.21)	pCi/L	11/07/19 09:47	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pond 1

Pace Project No.: 2624141

Sample: YGWC-46 **Lab ID: 2624141006** Collected: 10/09/19 12:22 Received: 10/09/19 17:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.480 ± 0.214 (0.226) C:97% T:NA	pCi/L	11/04/19 08:55	13982-63-3	
Radium-228	EPA 9320	0.412 ± 0.534 (1.14) C:72% T:87%	pCi/L	11/04/19 13:08	15262-20-1	
Total Radium	Total Radium Calculation	0.892 ± 0.748 (1.37)	pCi/L	11/07/19 09:47	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pond 1

Pace Project No.: 2624141

Sample: DUP-1 **Lab ID: 2624141007** Collected: 10/09/19 00:00 Received: 10/09/19 17:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.610 ± 0.327 (0.436) C:86% T:NA	pCi/L	11/06/19 08:02	13982-63-3	
Radium-228	EPA 9320	0.219 ± 0.367 (0.798) C:79% T:85%	pCi/L	11/06/19 17:17	15262-20-1	
Total Radium	Total Radium Calculation	0.829 ± 0.694 (1.23)	pCi/L	11/08/19 13:51	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pond 1

Pace Project No.: 2624141

QC Batch: 366971 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Associated Lab Samples: 2624141001, 2624141002, 2624141003, 2624141004, 2624141005, 2624141006

METHOD BLANK: 1780043 Matrix: Water

Associated Lab Samples: 2624141001, 2624141002, 2624141003, 2624141004, 2624141005, 2624141006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.325 ± 0.327 (0.672) C:75% T:91%	pCi/L	11/04/19 13:01	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pond 1

Pace Project No.: 2624141

QC Batch: 366969 Analysis Method: EPA 9315

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Associated Lab Samples: 2624141001, 2624141002, 2624141003, 2624141004, 2624141005, 2624141006

METHOD BLANK: 1780037 Matrix: Water

Associated Lab Samples: 2624141001, 2624141002, 2624141003, 2624141004, 2624141005, 2624141006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.340 ± 0.211 (0.351) C:96% T:NA	pCi/L	11/04/19 08:33	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pond 1

Pace Project No.: 2624141

QC Batch: 368259

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 2624141007

METHOD BLANK: 1786863

Matrix: Water

Associated Lab Samples: 2624141007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.306 ± 0.244 (0.419) C:96% T:NA	pCi/L	11/06/19 08:02	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pond 1

Pace Project No.: 2624141

QC Batch: 368258

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 2624141007

METHOD BLANK: 1786861

Matrix: Water

Associated Lab Samples: 2624141007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0170 ± 0.384 (0.894) C:77% T:79%	pCi/L	11/06/19 17:17	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Yates Pond 1

Pace Project No.: 2624141

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pond 1
Pace Project No.: 2624141

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624141001	YGWA-47	EPA 9315	366969		
2624141002	YGWC-44	EPA 9315	366969		
2624141003	YGWC-45	EPA 9315	366969		
2624141004	EB-1 10-9-19	EPA 9315	366969		
2624141005	FB-1 10-9-19	EPA 9315	366969		
2624141006	YGWC-46	EPA 9315	366969		
2624141007	DUP-1	EPA 9315	368259		
2624141001	YGWA-47	EPA 9320	366971		
2624141002	YGWC-44	EPA 9320	366971		
2624141003	YGWC-45	EPA 9320	366971		
2624141004	EB-1 10-9-19	EPA 9320	366971		
2624141005	FB-1 10-9-19	EPA 9320	366971		
2624141006	YGWC-46	EPA 9320	366971		
2624141007	DUP-1	EPA 9320	368258		
2624141001	YGWA-47	Total Radium Calculation	369812		
2624141002	YGWC-44	Total Radium Calculation	369812		
2624141003	YGWC-45	Total Radium Calculation	369812		
2624141004	EB-1 10-9-19	Total Radium Calculation	369812		
2624141005	FB-1 10-9-19	Total Radium Calculation	369812		
2624141006	YGWC-46	Total Radium Calculation	369812		
2624141007	DUP-1	Total Radium Calculation	370118		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME: Georgia Power		CONTAINER TYPE: P 3 P 7 P 3 P 3		ANALYSIS REQUESTED		CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		PRESERVATION: # of		PRESERVATION:		PRESERVATION	
REPORT TO: Joju Abraham		PO #:		CONTAINERS		MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT	
REQUESTED COMPLETION DATE:		PROJECT NAME/STATE: Plant Yates - Pond 1		PROJECT #:		REMARKS/ADDITIONAL INFORMATION	
Collection DATE	Collection TIME	MATRIX CODE	C O R A B	SAMPLE IDENTIFICATION	LAB #	FOR LAB USE ONLY	
10-8-19	1234	GW	✓	YGWA-47	1		
10-8-19	1407	GW	✓	YGWC-44	2		
10-9-19	1023	GW	✓	YGWC-45	3		
10-9-19	1040	W	✓	EB-1 10-9-19	4		
10-8-19	1340	NI	✓	FB-1 10-8-19	5		
10-9-19	1222	GW	✓	YGWC-46	6		
10-9-19	---	GW	✓	Dup-1	7		
SAMPLED BY AND TITLE: Taylor Goble		RELINQUISHED BY: Taylor Goble		DATE/TIME: 10-9-19/1700		LAB #:	
RECEIVED BY:		RELINQUISHED BY:		DATE/TIME:		FOR LAB USE ONLY	
RECEIVED BY LAB: Cherise Hawk		SAMPLE SHIPPED VIA: UPS		DATE/TIME: 10-9-19/1700		Entered into LIMS: Tracking #:	
PH checked: Yes		Broken		DATE/TIME:		W0#: 2624141	
NA No		Net Present		DATE/TIME:		Barcode	
NA No		# of Coolers		DATE/TIME:		2624141	
NA No		Cooler ID:		DATE/TIME:		Yates - Blank COCs	
NA No		Client		DATE/TIME:		8 of 19	
NA No		Other FS		DATE/TIME:			



Sample Condition Upon Receipt

Client Name: Georgia Power

WO#: 2624141

PM: BM Due Date: 11/06/19 CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 214 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 1.8 C Biological Tissue is Frozen: Yes No Date and Initials of person examining contents: 10/19/19 CDF

Table with 16 rows and 3 columns. Columns: Question, Yes/No/N/A checkboxes, and Numbered field. Rows include Chain of Custody Present, Chain of Custody Filled Out, Chain of Custody Relinquished, Sampler Name & Signature on COC, Samples Arrived within Hold Time, Short Hold Time Analysis (<72hr), Rush Turn Around Time Requested, Sufficient Volume, Correct Containers Used, Containers Intact, Filtered volume received for Dissolved tests, Sample Labels match COC, All containers needing preservation have been checked, All containers needing preservation are found to be in compliance with EPA recommendation, exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Samples checked for dechlorination, Headspace in VOA Vials (>6mm), Trip Blank Present, Trip Blank Custody Seals Present, Pace Trip Blank Lot # (if purchased).

Client Notification/ Resolution: Field Data Required? Y / N Person Contacted: Date/Time: Comments/ Resolution:

Project Manager Review: Date:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Georgia Power Company – Plant Yates Ash Pond-1

Quality Control Review of Analytical Data – October 2019

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Pace Analytical Services, Atlanta and Pittsburgh for groundwater samples collected at Plant Yates AP-1 between October 8, 2019 and October 9, 2019. 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 2624140 was revised by the laboratory to add target analytes that were missing from the original report. SDGs 2624140 and 2624141 were revised by the laboratory to correct sample identifications.

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), Mercury in Liquid Wastes (USEPA Method 7470A), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the 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, with the exception of Radium-226 on DUP-1 (2624142007) as described in the qualifications section below. Additionally, Radium-226 in SDG 2624141 yielded a relative percent difference (RPD) for the laboratory control sample/laboratory control sample duplicate that exceeded the QC criteria (54.43% above limit of 36). This batch was passed on the individual recoveries, and no batch qualification was necessary for Radium-226.

Field Precision: Field goals for precision were met.

Accuracy: Laboratory goals for accuracy were met, with the exception of Calcium in SDG 2624140 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

ND: The analyte was not detected above the method detection limit

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. The applied qualifications may not have been required for all samples collected at the site. A summary of sample qualifications can be found in Table 2 of this Appendix.

- Sample YGWA-47 (2624140001) was qualified as estimated (J) for Calcium as the associated matrix spike and matrix spike duplicate recoveries were outside the QC criteria. The sample received 50-times dilution, which yielded spike recoveries that could not be evaluated.
- Sample DUP-1 (2624141007) was qualified as estimated (J) for Radium-226 as the laboratory RPD exceeded QC criteria (41.19% above limit of 25).
- The Chloride result for sample YGWA-47 (2624140001) was qualified as estimated (J) due to the analyte being detected at a concentration between the method detection limit (MDL) and reporting limit (RL) in an associated blank sample and an order of magnitude above the RL in the sample. As shown in Table 2, the MDL was raised as part of the qualification process.
- Certain radium results in SDGs 2624140 and 2624141 were qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, the minimum detectable concentration (MDC) was raised to the sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from the Plant Yates Ash Pond-1 sampled between October 8, 2019 and October 9, 2019 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 – Plant Yates Ash Pond-1

Sample Summary Table – October 2019

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
24140	YGWA-47	10/8/2019	2624140001	GW		X	X	X	
24141	YGWA-47	10/8/2019	2624141001	GW					X
24140	YGWC-44	10/8/2019	2624140002	GW		X	X	X	
24141	YGWC-44	10/8/2019	2624141002	GW					X
24140	YGWC-45	10/9/2019	2624140003	GW		X	X	X	
24141	YGWC-45	10/9/2019	2624141003	GW					X
24140	EB-1 10-9-19	10/9/2019	2624140004	WQ	EB	X	X	X	
24141	EB-1 10-9-19	10/9/2019	2624141004	WQ	EB				X
24140	FB-1 10-9-19	10/8/2019	2624140005	WQ	FB	X	X	X	
24141	FB-1 10-9-19	10/8/2019	2624141005	WQ	FB				X
24140	YGWC-46	10/9/2019	2624140006	GW		X	X	X	
24141	YGWC-46	10/9/2019	2624141006	GW					X
24140	DUP-1	10/9/2019	2624140007	GW	FD (YGWC-46)	X	X	X	
24141	DUP-1	10/9/2019	2624141007	GW	FD (YGWC-46)				X

Abbreviations:

EB – Equipment Blank

FB – Field Blank

FD – Field Duplicate

GW – Groundwater

QC – Quality Control

TDS – Total Dissolved Solids

WQ – Water Quality Control

TABLE 2

Georgia Power Company – Plant Yates Ash Pond-1

Qualifier Summary Table – October 2019

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
24140	YGWA-47	Calcium			J	MS/MSD outside QC criteria
24140	YGWA-47	Chloride		0.445	J	Blank detection above MDL and sample detection above RL
24141	YGWA-47	Radium-226		0.231	ND	Blank detection
24141	YGWC-44	Radium-226		0.193	ND	Blank detection
24141	YGWC-45	Radium-226		0.253	ND	Blank detection
24141	YGWC-46	Radium-226		0.226	ND	Blank detection
24241	DUP-1	Radium-226			J	RPD exceeds laboratory goal

Abbreviations:

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

Qualifiers:

J – Estimated Result
ND – Non-Detect Result

Georgia Power Company – Plant Yates Ash Pond-1

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 Pace Analytical Services, Asheville, Atlanta, and Pittsburgh for groundwater samples collected at Plant Yates AP-1 on March 17, 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.

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 (USEPA Method 6010D), Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the 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 exception of Radium-228 on YGWA-47 (2630257001) and DUP-1 (2630257006) as described in the qualifications section below.

Accuracy: Laboratory goals for accuracy were met.

Detection Limits: Project goals for detection limits were met.

Completeness: There were no rejected analytical results for this event, resulting in a completion of 100%.

Holding Times: Holding time requirements were met.

QUALIFICATIONS

In general, chemical results for the samples collected at the site were qualified on the basis of low precision or low accuracy or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the validation process:

J: The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample

ND: The analyte was not detected above the method detection limit

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. The applied qualifications may not have been required for all samples collected at the site. A summary of sample qualifications can be found in Table 2 of this Appendix.

- Samples YGWA-47 (2630257001) and DUP-1 (2630257006) were qualified as estimated (J) for Radium-228 as the field RPD exceeded QC criteria (51.92% above limit of 25).

Atlantic Coast Consulting, Inc. reviewed the laboratory data from the Plant Yates Ash Pond-1 sampled March 17, 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 – Plant Yates Ash Pond-1

Sample Summary Table – March 2020

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6010D, 6020B)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
30257	YGWA-47	3/17/2020	2630257001	GW		X	X	X	X
30257	YGWC-44	3/17/2020	2630257002	GW		X	X	X	X
30257	YGWC-45	3/17/2020	2630257003	GW		X	X	X	X
30257	YGWC-46	3/17/2020	2630257004	GW		X	X	X	X
30257	EB-1-3-17-20	3/17/2020	2630257005	WQ	EB	X	X	X	X
30257	DUP-1	3/17/2020	2630257006	GW	FD (YGWA-47)	X	X	X	X
30257	FB-1-3-17-20	3/17/2020	2630257007	WQ	FB	X	X	X	X

Abbreviations:
 EB – Equipment Blank
 FB – Field Blank
 FD – Field Duplicate
 GW – Groundwater
 QC – Quality Control
 TDS – Total Dissolved Solids
 WQ – Water Quality Control

TABLE 2

Georgia Power Company – Plant Yates Ash Pond-1

Qualifier Summary Table – March 2020

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
30527	YGWA-47	Radium-228			J	RPD exceeds field goal
30527	DUP-1	Radium-228			J	RPD exceeds field goal

Abbreviations:

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

Qualifiers:

J – Estimated Result
 ND – Non-Detect Result

March 2020

Semiannual Event



April 06, 2020

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 18, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Atlanta, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring
kevin.herring@pacelabs.com
(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Monte Jones, ACC
Kristen Jurinko
Matt Malone, Atlantic Coast Consulting
Betsy McDaniel, Atlantic Coast Consulting
Chris Parker, Atlantic Coast Consulting
Evan Perry, Atlantic Coast Consulting
Lauren Petty, Southern Company Services, Inc.
Ryan Walker



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: PLANT YATES ASH POND 1

Pace Project No.: 2630257

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

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SAMPLE SUMMARY

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2630257001	YGWA-47	Water	03/17/20 10:18	03/18/20 17:00
2630257002	YGWC-44	Water	03/17/20 11:40	03/18/20 17:00
2630257003	YGWC-45	Water	03/17/20 15:25	03/18/20 17:00
2630257004	YGWC-46	Water	03/17/20 13:16	03/18/20 17:00
2630257005	EB-1-3-17-20	Water	03/17/20 12:15	03/18/20 17:00
2630257006	DUP-1	Water	03/17/20 00:00	03/18/20 17:00
2630257007	FB-1-3-17-20	Water	03/17/20 15:50	03/18/20 17:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630257001	YGWA-47	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	8	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630257002	YGWC-44	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	8	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630257003	YGWC-45	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	8	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630257004	YGWC-46	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	8	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630257005	EB-1-3-17-20	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	8	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630257006	DUP-1	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	8	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630257007	FB-1-3-17-20	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	8	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-GA = Pace Analytical Services - Atlanta, GA

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: PLANT YATES ASH POND 1

Pace Project No.: 2630257

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
2630257001	YGWA-47					
	Field pH	5.57	Std. Units		03/23/20 09:08	
EPA 6010D	Calcium	14.8	mg/L	1.0	03/25/20 19:54	
EPA 6020B	Barium	0.035	mg/L	0.010	03/25/20 18:36	
EPA 6020B	Boron	0.023J	mg/L	0.10	03/25/20 18:36	
EPA 6020B	Cobalt	0.0017J	mg/L	0.0050	03/25/20 18:36	
EPA 6020B	Lithium	0.0046J	mg/L	0.030	03/25/20 18:36	
SM 2540C	Total Dissolved Solids	165	mg/L	10.0	03/23/20 18:12	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	03/22/20 02:00	
EPA 300.0 Rev 2.1 1993	Sulfate	71.6	mg/L	1.0	03/22/20 02:00	
2630257002	YGWC-44					
	Field pH	5.90	Std. Units		03/23/20 09:08	
EPA 6010D	Calcium	31.9	mg/L	1.0	03/25/20 16:12	M1
EPA 6020B	Barium	0.099	mg/L	0.010	03/26/20 16:20	
EPA 6020B	Boron	0.61	mg/L	0.10	03/26/20 16:20	
EPA 6020B	Cobalt	0.0040J	mg/L	0.0050	03/26/20 16:20	
EPA 6020B	Lithium	0.013J	mg/L	0.030	03/26/20 16:20	
EPA 6020B	Thallium	0.000080J	mg/L	0.0010	03/26/20 16:20	
SM 2540C	Total Dissolved Solids	283	mg/L	10.0	03/23/20 18:12	
EPA 300.0 Rev 2.1 1993	Chloride	14.0	mg/L	1.0	03/22/20 02:56	
EPA 300.0 Rev 2.1 1993	Sulfate	121	mg/L	3.0	03/22/20 10:27	
2630257003	YGWC-45					
	Field pH	6.69	Std. Units		03/23/20 09:08	
EPA 6010D	Calcium	54.8	mg/L	1.0	03/25/20 16:26	
EPA 6020B	Barium	0.061	mg/L	0.010	03/26/20 16:43	
EPA 6020B	Boron	0.37	mg/L	0.10	03/26/20 16:43	
EPA 6020B	Cobalt	0.00081J	mg/L	0.0050	03/26/20 16:43	
EPA 6020B	Lithium	0.014J	mg/L	0.030	03/26/20 16:43	
EPA 6020B	Molybdenum	0.0016J	mg/L	0.010	03/26/20 16:43	
SM 2540C	Total Dissolved Solids	391	mg/L	10.0	03/23/20 18:12	
EPA 300.0 Rev 2.1 1993	Chloride	4.6	mg/L	1.0	03/22/20 03:11	
EPA 300.0 Rev 2.1 1993	Fluoride	0.076J	mg/L	0.30	03/22/20 03:11	
EPA 300.0 Rev 2.1 1993	Sulfate	161	mg/L	3.0	03/22/20 10:41	
2630257004	YGWC-46					
	Field pH	5.99	Std. Units		03/23/20 09:08	
EPA 6010D	Calcium	70.4	mg/L	1.0	03/25/20 16:37	
EPA 6020B	Barium	0.022	mg/L	0.010	03/26/20 16:49	
EPA 6020B	Boron	1.3	mg/L	0.10	03/26/20 16:49	
EPA 6020B	Cadmium	0.00012J	mg/L	0.0025	03/26/20 16:49	
EPA 6020B	Cobalt	0.022	mg/L	0.0050	03/26/20 16:49	
EPA 6020B	Lithium	0.0071J	mg/L	0.030	03/26/20 16:49	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	03/26/20 16:49	
SM 2540C	Total Dissolved Solids	733	mg/L	10.0	03/23/20 18:12	
EPA 300.0 Rev 2.1 1993	Chloride	24.8	mg/L	1.0	03/25/20 11:10	
EPA 300.0 Rev 2.1 1993	Sulfate	439	mg/L	9.0	03/25/20 14:26	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: PLANT YATES ASH POND 1

Pace Project No.: 2630257

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630257005	EB-1-3-17-20					
EPA 6010D	Calcium	0.24J	mg/L	1.0	03/25/20 16:41	
EPA 6020B	Boron	0.0068J	mg/L	0.10	03/26/20 16:55	
2630257006	DUP-1					
EPA 6010D	Calcium	14.9	mg/L	1.0	03/25/20 16:45	
EPA 6020B	Barium	0.037	mg/L	0.010	03/26/20 17:00	
EPA 6020B	Boron	0.027J	mg/L	0.10	03/26/20 17:00	
EPA 6020B	Cobalt	0.0016J	mg/L	0.0050	03/26/20 17:00	
EPA 6020B	Lithium	0.0045J	mg/L	0.030	03/26/20 17:00	
SM 2540C	Total Dissolved Solids	141	mg/L	10.0	03/23/20 18:12	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	03/25/20 11:38	
EPA 300.0 Rev 2.1 1993	Sulfate	72.0	mg/L	1.0	03/25/20 11:38	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

Sample: YGWA-47		Lab ID: 2630257001		Collected: 03/17/20 10:18		Received: 03/18/20 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Atlanta, GA									
Field pH	5.57	Std. Units			1		03/23/20 09:08		
6010D MET ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA									
Calcium	14.8	mg/L	1.0	0.14	1	03/24/20 18:06	03/25/20 19:54	7440-70-2	
6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA									
Arsenic	ND	mg/L	0.0050	0.00035	1	03/23/20 20:01	03/25/20 18:36	7440-38-2	
Barium	0.035	mg/L	0.010	0.00049	1	03/23/20 20:01	03/25/20 18:36	7440-39-3	
Boron	0.023J	mg/L	0.10	0.0049	1	03/23/20 20:01	03/25/20 18:36	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/23/20 20:01	03/25/20 18:36	7440-43-9	
Cobalt	0.0017J	mg/L	0.0050	0.00030	1	03/23/20 20:01	03/25/20 18:36	7440-48-4	
Lithium	0.0046J	mg/L	0.030	0.00078	1	03/23/20 20:01	03/25/20 18:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/23/20 20:01	03/25/20 18:36	7439-98-7	
Thallium	ND	mg/L	0.0010	0.000052	1	03/23/20 20:01	03/25/20 18:36	7440-28-0	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA									
Total Dissolved Solids	165	mg/L	10.0	10.0	1		03/23/20 18:12		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	4.1	mg/L	1.0	0.60	1		03/22/20 02:00	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/22/20 02:00	16984-48-8	
Sulfate	71.6	mg/L	1.0	0.50	1		03/22/20 02:00	14808-79-8	

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ANALYTICAL RESULTS

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

Sample: YGWC-44		Lab ID: 2630257002		Collected: 03/17/20 11:40		Received: 03/18/20 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Atlanta, GA									
Field pH	5.90	Std. Units			1		03/23/20 09:08		
6010D MET ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA									
Calcium	31.9	mg/L	1.0	0.14	1	03/24/20 18:00	03/25/20 16:12	7440-70-2	M1
6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA									
Arsenic	ND	mg/L	0.0050	0.00035	1	03/24/20 19:40	03/26/20 16:20	7440-38-2	
Barium	0.099	mg/L	0.010	0.00049	1	03/24/20 19:40	03/26/20 16:20	7440-39-3	
Boron	0.61	mg/L	0.10	0.0049	1	03/24/20 19:40	03/26/20 16:20	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/24/20 19:40	03/26/20 16:20	7440-43-9	
Cobalt	0.0040J	mg/L	0.0050	0.00030	1	03/24/20 19:40	03/26/20 16:20	7440-48-4	
Lithium	0.013J	mg/L	0.030	0.00078	1	03/24/20 19:40	03/26/20 16:20	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/24/20 19:40	03/26/20 16:20	7439-98-7	
Thallium	0.000080J	mg/L	0.0010	0.000052	1	03/24/20 19:40	03/26/20 16:20	7440-28-0	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA									
Total Dissolved Solids	283	mg/L	10.0	10.0	1		03/23/20 18:12		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	14.0	mg/L	1.0	0.60	1		03/22/20 02:56	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/22/20 02:56	16984-48-8	
Sulfate	121	mg/L	3.0	1.5	3		03/22/20 10:27	14808-79-8	

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ANALYTICAL RESULTS

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

Sample: YGWC-45		Lab ID: 2630257003		Collected: 03/17/20 15:25		Received: 03/18/20 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	6.69	Std. Units			1		03/23/20 09:08		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	54.8	mg/L	1.0	0.14	1	03/24/20 18:00	03/25/20 16:26	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Arsenic	ND	mg/L	0.0050	0.00035	1	03/24/20 19:40	03/26/20 16:43	7440-38-2	
Barium	0.061	mg/L	0.010	0.00049	1	03/24/20 19:40	03/26/20 16:43	7440-39-3	
Boron	0.37	mg/L	0.10	0.0049	1	03/24/20 19:40	03/26/20 16:43	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/24/20 19:40	03/26/20 16:43	7440-43-9	
Cobalt	0.00081J	mg/L	0.0050	0.00030	1	03/24/20 19:40	03/26/20 16:43	7440-48-4	
Lithium	0.014J	mg/L	0.030	0.00078	1	03/24/20 19:40	03/26/20 16:43	7439-93-2	
Molybdenum	0.0016J	mg/L	0.010	0.00095	1	03/24/20 19:40	03/26/20 16:43	7439-98-7	
Thallium	ND	mg/L	0.0010	0.000052	1	03/24/20 19:40	03/26/20 16:43	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	391	mg/L	10.0	10.0	1		03/23/20 18:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	4.6	mg/L	1.0	0.60	1		03/22/20 03:11	16887-00-6	
Fluoride	0.076J	mg/L	0.30	0.050	1		03/22/20 03:11	16984-48-8	
Sulfate	161	mg/L	3.0	1.5	3		03/22/20 10:41	14808-79-8	

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ANALYTICAL RESULTS

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

Sample: YGWC-46		Lab ID: 2630257004		Collected: 03/17/20 13:16		Received: 03/18/20 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Atlanta, GA									
Field pH	5.99	Std. Units			1		03/23/20 09:08		
6010D MET ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA									
Calcium	70.4	mg/L	1.0	0.14	1	03/24/20 18:00	03/25/20 16:37	7440-70-2	
6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA									
Arsenic	ND	mg/L	0.0050	0.00035	1	03/24/20 19:40	03/26/20 16:49	7440-38-2	
Barium	0.022	mg/L	0.010	0.00049	1	03/24/20 19:40	03/26/20 16:49	7440-39-3	
Boron	1.3	mg/L	0.10	0.0049	1	03/24/20 19:40	03/26/20 16:49	7440-42-8	
Cadmium	0.00012J	mg/L	0.0025	0.00011	1	03/24/20 19:40	03/26/20 16:49	7440-43-9	
Cobalt	0.022	mg/L	0.0050	0.00030	1	03/24/20 19:40	03/26/20 16:49	7440-48-4	
Lithium	0.0071J	mg/L	0.030	0.00078	1	03/24/20 19:40	03/26/20 16:49	7439-93-2	
Molybdenum	0.0015J	mg/L	0.010	0.00095	1	03/24/20 19:40	03/26/20 16:49	7439-98-7	
Thallium	ND	mg/L	0.0010	0.000052	1	03/24/20 19:40	03/26/20 16:49	7440-28-0	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA									
Total Dissolved Solids	733	mg/L	10.0	10.0	1		03/23/20 18:12		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	24.8	mg/L	1.0	0.60	1		03/25/20 11:10	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/25/20 11:10	16984-48-8	
Sulfate	439	mg/L	9.0	4.5	9		03/25/20 14:26	14808-79-8	

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ANALYTICAL RESULTS

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

Sample: EB-1-3-17-20		Lab ID: 2630257005		Collected: 03/17/20 12:15		Received: 03/18/20 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA							
Calcium	0.24J	mg/L	1.0	0.14	1	03/24/20 18:00	03/25/20 16:41	7440-70-2	
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA							
Arsenic	ND	mg/L	0.0050	0.00035	1	03/24/20 19:40	03/26/20 16:55	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/24/20 19:40	03/26/20 16:55	7440-39-3	
Boron	0.0068J	mg/L	0.10	0.0049	1	03/24/20 19:40	03/26/20 16:55	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/24/20 19:40	03/26/20 16:55	7440-43-9	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/24/20 19:40	03/26/20 16:55	7440-48-4	
Lithium	ND	mg/L	0.030	0.00078	1	03/24/20 19:40	03/26/20 16:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/24/20 19:40	03/26/20 16:55	7439-98-7	
Thallium	ND	mg/L	0.0010	0.000052	1	03/24/20 19:40	03/26/20 16:55	7440-28-0	
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA							
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/23/20 18:12		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	ND	mg/L	1.0	0.60	1		03/25/20 11:24	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/25/20 11:24	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/25/20 11:24	14808-79-8	

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ANALYTICAL RESULTS

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

Sample: DUP-1		Lab ID: 2630257006		Collected: 03/17/20 00:00		Received: 03/18/20 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA							
Calcium	14.9	mg/L	1.0	0.14	1	03/24/20 18:00	03/25/20 16:45	7440-70-2	
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA							
Arsenic	ND	mg/L	0.0050	0.00035	1	03/24/20 19:40	03/26/20 17:00	7440-38-2	
Barium	0.037	mg/L	0.010	0.00049	1	03/24/20 19:40	03/26/20 17:00	7440-39-3	
Boron	0.027J	mg/L	0.10	0.0049	1	03/24/20 19:40	03/26/20 17:00	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/24/20 19:40	03/26/20 17:00	7440-43-9	
Cobalt	0.0016J	mg/L	0.0050	0.00030	1	03/24/20 19:40	03/26/20 17:00	7440-48-4	
Lithium	0.0045J	mg/L	0.030	0.00078	1	03/24/20 19:40	03/26/20 17:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/24/20 19:40	03/26/20 17:00	7439-98-7	
Thallium	ND	mg/L	0.0010	0.000052	1	03/24/20 19:40	03/26/20 17:00	7440-28-0	
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA							
Total Dissolved Solids	141	mg/L	10.0	10.0	1		03/23/20 18:12		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	4.1	mg/L	1.0	0.60	1		03/25/20 11:38	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/25/20 11:38	16984-48-8	
Sulfate	72.0	mg/L	1.0	0.50	1		03/25/20 11:38	14808-79-8	

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ANALYTICAL RESULTS

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

Sample: FB-1-3-17-20		Lab ID: 2630257007		Collected: 03/17/20 15:50	Received: 03/18/20 17:00	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA							
Calcium	ND	mg/L	1.0	0.14	1	03/24/20 18:00	03/25/20 17:45	7440-70-2	
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA							
Arsenic	ND	mg/L	0.0050	0.00035	1	03/24/20 19:40	03/26/20 17:26	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/24/20 19:40	03/26/20 17:26	7440-39-3	
Boron	ND	mg/L	0.10	0.0049	1	03/24/20 19:40	03/26/20 17:26	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/24/20 19:40	03/26/20 17:26	7440-43-9	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/24/20 19:40	03/26/20 17:26	7440-48-4	
Lithium	ND	mg/L	0.030	0.00078	1	03/24/20 19:40	03/26/20 17:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/24/20 19:40	03/26/20 17:26	7439-98-7	
Thallium	ND	mg/L	0.0010	0.000052	1	03/24/20 19:40	03/26/20 17:26	7440-28-0	
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA							
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/23/20 18:13		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	ND	mg/L	1.0	0.60	1		03/25/20 11:52	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/25/20 11:52	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/25/20 11:52	14808-79-8	

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QUALITY CONTROL DATA

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

QC Batch: 44880	Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A	Analysis Description: 6010D MET
	Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630257001

METHOD BLANK: 206473 Matrix: Water
Associated Lab Samples: 2630257001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.14	03/25/20 17:48	

LABORATORY CONTROL SAMPLE: 206474

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.99J	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 206475 206476

Parameter	Units	206475		206476		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	26.4	1	1	27.0	27.6	62	113	75-125	2	20 M1

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QUALITY CONTROL DATA

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

QC Batch: 44881 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630257002, 2630257003, 2630257004, 2630257005, 2630257006, 2630257007

METHOD BLANK: 206477 Matrix: Water
Associated Lab Samples: 2630257002, 2630257003, 2630257004, 2630257005, 2630257006, 2630257007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.14	03/25/20 16:05	

LABORATORY CONTROL SAMPLE: 206478

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 206479 206480

Parameter	Units	2630257002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	31.9	1	1	33.2	33.9	123	195	75-125	2	20	M1

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QUALITY CONTROL DATA

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

QC Batch: 44862	Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A	Analysis Description: 6020B MET
	Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630257001

METHOD BLANK: 206398 Matrix: Water
Associated Lab Samples: 2630257001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	0.00035	03/25/20 15:45	
Barium	mg/L	ND	0.010	0.00049	03/25/20 15:45	
Boron	mg/L	ND	0.10	0.0049	03/25/20 15:45	
Cadmium	mg/L	ND	0.0025	0.00011	03/25/20 15:45	
Cobalt	mg/L	ND	0.0050	0.00030	03/25/20 15:45	
Lithium	mg/L	ND	0.030	0.00078	03/25/20 15:45	
Molybdenum	mg/L	ND	0.010	0.00095	03/25/20 15:45	
Thallium	mg/L	ND	0.0010	0.000052	03/25/20 15:45	

LABORATORY CONTROL SAMPLE: 206399

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.094	94	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.099	99	80-120	
Molybdenum	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 206400 206401

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		2630125013	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	% Rec					
Arsenic	mg/L	ND	0.1	0.1	0.096	0.099	96	99	75-125	3	20		
Barium	mg/L	0.0095J	0.1	0.1	0.11	0.11	98	99	75-125	0	20		
Boron	mg/L	0.0070J	1	1	1.1	1.1	106	106	75-125	1	20		
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20		
Lithium	mg/L	0.00095J	0.1	0.1	0.11	0.11	105	107	75-125	2	20		
Molybdenum	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	1	20		
Thallium	mg/L	0.000059J	0.1	0.1	0.098	0.10	98	100	75-125	2	20		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

QC Batch: 44893 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630257002, 2630257003, 2630257004, 2630257005, 2630257006, 2630257007

METHOD BLANK: 206538 Matrix: Water
Associated Lab Samples: 2630257002, 2630257003, 2630257004, 2630257005, 2630257006, 2630257007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	0.00035	03/26/20 16:09	
Barium	mg/L	ND	0.010	0.00049	03/26/20 16:09	
Boron	mg/L	ND	0.10	0.0049	03/26/20 16:09	
Cadmium	mg/L	ND	0.0025	0.00011	03/26/20 16:09	
Cobalt	mg/L	ND	0.0050	0.00030	03/26/20 16:09	
Lithium	mg/L	ND	0.030	0.00078	03/26/20 16:09	
Molybdenum	mg/L	ND	0.010	0.00095	03/26/20 16:09	
Thallium	mg/L	ND	0.0010	0.000052	03/26/20 16:09	

LABORATORY CONTROL SAMPLE: 206539

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.1	110	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lithium	mg/L	0.1	0.11	106	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 206540 206541

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		2630257002 Result	Spike Conc.	2630257002 Result	Spike Conc.							
Arsenic	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Barium	mg/L	0.099	0.1	0.1	0.20	0.19	102	95	75-125	3	20	
Boron	mg/L	0.61	1	1	1.6	1.6	97	98	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	3	20	
Cobalt	mg/L	0.0040J	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Lithium	mg/L	0.013J	0.1	0.1	0.11	0.11	94	97	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Thallium	mg/L	0.000080J	0.1	0.1	0.096	0.095	95	95	75-125	0	20	

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QUALITY CONTROL DATA

Project: PLANT YATES ASH POND 1

Pace Project No.: 2630257

QC Batch:	44831	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630257001, 2630257002, 2630257003, 2630257004, 2630257005, 2630257006, 2630257007

LABORATORY CONTROL SAMPLE: 206292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	363	91	84-108	

SAMPLE DUPLICATE: 206293

Parameter	Units	2630255001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	185	199	7	10	

SAMPLE DUPLICATE: 206294

Parameter	Units	2630257006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	141	146	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

QC Batch: 531787 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 2630257001, 2630257002, 2630257003

METHOD BLANK: 2839333 Matrix: Water
Associated Lab Samples: 2630257001, 2630257002, 2630257003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/21/20 19:14	
Fluoride	mg/L	ND	0.10	0.050	03/21/20 19:14	
Sulfate	mg/L	ND	1.0	0.50	03/21/20 19:14	

LABORATORY CONTROL SAMPLE: 2839334

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.5	101	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	49.7	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839335 2839336

Parameter	Units	2630143002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
Chloride	mg/L	ND	50	50	52.4	53.0	105	106	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	100	100	90-110	0	10	
Sulfate	mg/L	ND	50	50	51.4	52.0	103	104	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839337 2839338

Parameter	Units	2630255001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
Chloride	mg/L	4.8	50	50	57.5	58.2	105	107	90-110	1	10	
Fluoride	mg/L	0.053J	2.5	2.5	2.6	2.6	101	102	90-110	2	10	
Sulfate	mg/L	98.6	50	50	138	136	78	74	90-110	2	10 M1	

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QUALITY CONTROL DATA

Project: PLANT YATES ASH POND 1
Pace Project No.: 2630257

QC Batch: 532144 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 2630257004, 2630257005, 2630257006, 2630257007

METHOD BLANK: 2840728 Matrix: Water
Associated Lab Samples: 2630257004, 2630257005, 2630257006, 2630257007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/25/20 08:22	
Fluoride	mg/L	ND	0.10	0.050	03/25/20 08:22	
Sulfate	mg/L	ND	1.0	0.50	03/25/20 08:22	

LABORATORY CONTROL SAMPLE: 2840729

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.7	103	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2840730 2840731

Parameter	Units	92470599002		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result						
Chloride	mg/L	50.8	50	50	50	101	102	101	103	90-110	1	10	
Fluoride	mg/L	0.31	2.5	2.5	2.5	2.9	2.9	103	106	90-110	2	10	
Sulfate	mg/L	ND	50	50	50	51.0	51.6	101	102	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2840732 2840733

Parameter	Units	92470474001		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result						
Chloride	mg/L	31100	50	50	50	27800	34100	-6580	6100	90-110	20	10 M6,R1	
Fluoride	mg/L	ND	2.5	2.5	2.5	ND	ND	0	0	90-110		10 M1	
Sulfate	mg/L	ND	50	50	50	566J	631J	-354	-224	90-110		10 M6	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: PLANT YATES ASH POND 1

Pace Project No.: 2630257

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT YATES ASH POND 1

Pace Project No.: 2630257

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2630257001	YGWA-47				
2630257002	YGWC-44				
2630257003	YGWC-45				
2630257004	YGWC-46				
2630257001	YGWA-47	EPA 3010A	44880	EPA 6010D	44899
2630257002	YGWC-44	EPA 3010A	44881	EPA 6010D	44898
2630257003	YGWC-45	EPA 3010A	44881	EPA 6010D	44898
2630257004	YGWC-46	EPA 3010A	44881	EPA 6010D	44898
2630257005	EB-1-3-17-20	EPA 3010A	44881	EPA 6010D	44898
2630257006	DUP-1	EPA 3010A	44881	EPA 6010D	44898
2630257007	FB-1-3-17-20	EPA 3010A	44881	EPA 6010D	44898
2630257001	YGWA-47	EPA 3005A	44862	EPA 6020B	44868
2630257002	YGWC-44	EPA 3005A	44893	EPA 6020B	44900
2630257003	YGWC-45	EPA 3005A	44893	EPA 6020B	44900
2630257004	YGWC-46	EPA 3005A	44893	EPA 6020B	44900
2630257005	EB-1-3-17-20	EPA 3005A	44893	EPA 6020B	44900
2630257006	DUP-1	EPA 3005A	44893	EPA 6020B	44900
2630257007	FB-1-3-17-20	EPA 3005A	44893	EPA 6020B	44900
2630257001	YGWA-47	SM 2540C	44831		
2630257002	YGWC-44	SM 2540C	44831		
2630257003	YGWC-45	SM 2540C	44831		
2630257004	YGWC-46	SM 2540C	44831		
2630257005	EB-1-3-17-20	SM 2540C	44831		
2630257006	DUP-1	SM 2540C	44831		
2630257007	FB-1-3-17-20	SM 2540C	44831		
2630257001	YGWA-47	EPA 300.0 Rev 2.1 1993	531787		
2630257002	YGWC-44	EPA 300.0 Rev 2.1 1993	531787		
2630257003	YGWC-45	EPA 300.0 Rev 2.1 1993	531787		
2630257004	YGWC-46	EPA 300.0 Rev 2.1 1993	532144		
2630257005	EB-1-3-17-20	EPA 300.0 Rev 2.1 1993	532144		
2630257006	DUP-1	EPA 300.0 Rev 2.1 1993	532144		
2630257007	FB-1-3-17-20	EPA 300.0 Rev 2.1 1993	532144		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Company: GA Power Address: Atlanta, GA	Section B Required Project Information: Report To: SCS Contacts Copy To: ACC Contacts
Section C Invoice Information: Attention: Southern Co. Company Name: Address:	Purchase Order No.: Project Name: Plant Yates Ash Pond 1 Project Number:
P.O. Box: Reference: Project Manager: Kevin Herring Pace Profile #: 2918-13	Requested Due Date/AT: to Day

Section D Required Client Information Valid Matrix Codes MATRIX CODE (see valid codes to left) SAMPLE TYPE (G=GRAB C=COMP) DATE TIME COLLECTED SAMPLE TEMP AT COLLECTION # OF CONTAINERS Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other Analysis Test Y/N TDS Chloride/Fluoride/Sulfate 300.0 App. III - Detect Metals 6010/6020 PAC 226/228 Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N) REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER CCR Site Location STATE: GA
---	---

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	Analysis Test	Y/N	TDS	Chloride/Fluoride/Sulfate 300.0	App. III - Detect Metals 6010/6020	PAC 226/228	Residual Chlorine (Y/N)	
1	Y6WA-47	WT G	G	3-17-20	10:18				5	2	3								X	X	X	X	X		
2	Y6WC-44	WT G	G	3-17-20	11:40				5	2	3								X	X	X	X	X		
3	Y6WC-45	WT G	G	3-17-20	15:25				5	2	3								X	X	X	X	X		
4	Y6WC-46	WT G	G	3-17-20	13:16				5	2	3								X	X	X	X	X		
5	EB-1-3-17-20	WT G	G	3-17-20	12:15				5	2	3								X	X	X	X	X		
6	D-9-1	WT G	G	3-17-20	-				5	2	3								X	X	X	X	X		
7	EB-1-3-17-20	WT G	G	3-17-20	15:50				5	2	3								X	X	X	X	X		
8									5	2	3								X	X	X	X	X		
9									5	2	3								X	X	X	X	X		
10									5	2	3								X	X	X	X	X		
11									5	2	3								X	X	X	X	X		
12									5	2	3								X	X	X	X	X		

ADDITIONAL COMMENTS Note when the last sample for the project has been taken. Last sample at 1550 on 3/17/20 Reimbursed by / Affiliation: ACC Date: 3-18-20 Time: 17:00 Accepted by / Affiliation: [Signature] Date: 3/17/20 Time:	SAMPLE CONDITIONS Pace Project No./ Lab ID: 2630257 pH= 5.57 pH= 5.90 pH= 6.69 pH= 5.99 pH= pH= pH=
---	--

SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: Ryan Walker SIGNATURE of SAMPLER: [Signature]	DATE Signed (MM/DD/YY): 3/17/20 Temp in °C Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)
--	---

Sample Condition Upon Receipt

FACE ANALYTICAL

Client Name: G.A. Burt Project # _____

Counter: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no

Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used: 214 53

Cooler Temperature: _____

Temp should be above freezing to 6°C

Biological Tissue is Frozen: Yes No

Type of Ice: Mel Blue None Other

Samples on ice, cooling process has begun

Date and initials of person examining contents: 2/18/2006

Chain of Custody Present: Yes No N/A

Chain of Custody Filled Out: Yes No N/A

Chain of Custody Relinquished: Yes No N/A

Sampler Name & Signature on COC: Yes No N/A

Samples Arrived within Hold Time: Yes No N/A

Short Hold Time Analysis (<7hr): Yes No N/A

Rush Turn Around Time Requested: Yes No N/A

Sufficient Volume: Yes No N/A

Correct Containers Used: Yes No N/A

Pace Containers Used: Yes No N/A

Containers Intact: Yes No N/A

Filtered volume received for Dissolved tests: Yes No N/A

Sample Labels match COC: Yes No N/A

-Includes date/time/ID/Analysis Matrix: Yes No N/A

All containers needing preservation have been checked: Yes No N/A

All containers needing preservation are found to be in compliance with EPA recommendation: Yes No N/A

exceptions: VOA, coliform, TOC, O&G, WI-DRO (water): Yes No N/A

Samples checked for dechlorination: Yes No N/A

Headspace in VOA Vials (>6mm): Yes No N/A

Trip Blank Present: Yes No N/A

Trip Blank Custody Seals Present: Yes No N/A

Pace Trip Blank Lot # (if purchased): _____

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<7hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for Dissolved tests:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/Analysis Matrix:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
All containers needing preservation have been checked:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
All containers needing preservation are found to be in compliance with EPA recommendation:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	17.
Samples checked for dechlorination:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	18.
Headspace in VOA Vials (>6mm):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	19.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	20.
Trip Blank Custody Seals Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	21.
Pace Trip Blank Lot # (if purchased):	_____	22.

Field Data Required? Y / N

Client Notification/ Resolution: _____

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (ie out of hold, incorrect preservative, out of temp, incorrect containers)

Document Name: Bottle Identification Form (BIF)
Document No.: _____
Issuing Authority: Face Carolina's Quality Office
Page 1 of 1
Document issued: March 14, 2019

Project # _____

* Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation
 * Bottom half of box is to list number of bottle

Exemptions: VOA, Coliform, TOC, Oil and Grease, DRD/BD15 (water), DOC, LUG

Matrix	Item#	1	2	3	4	5	6	7	8	9	10	11	12
	BP2U-125 ml Plastic Unpreserved (N/A)												
	BP3U-250 ml Plastic Unpreserved (N/A)												
	BP2U-500 ml Plastic Unpreserved (N/A)												
	BP3U-1 liter Plastic Unpreserved (N/A)												
	BP4C-125 ml Plastic H2SO4 (pH < 2) (Cl-)												
	BP3M-250 ml plastic HNO3 (pH < 2)												
	BP4Z-125 ml Plastic 2N Acetate & NaOH (pH > 12) (Cl-)												
	BP4C-125 ml Plastic NaOH (pH > 12) (Cl-)												
	WGFU-Wide-mouthed Glass Jar Unpreserved												
	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)												
	AG1H-1 liter Amber HCl (pH < 2)												
	AG3U-250 ml Amber Unpreserved (N/A) (Cl-)												
	AG1S-1 liter Amber H2SO4 (pH < 2)												
	AG3S-250 ml Amber H2SO4 (pH < 2)												
	AG3M(DG3A)-250 ml Amber NH4Cl (N/A)(Cl-)												
	DG9H-40 ml VOA HCl (N/A)												
	VG9T-40 ml VOA Na2S2O3 (N/A)												
	VG9U-40 ml VOA Ump (N/A)												
	DG9P-40 ml VOA H3PO4 (N/A)												
	VOAK (6 vials per kit)-5035 kit (N/A)												
	V/GK (3 vials per kit)-VPH/Gas kit (N/A)												
	SP5T-125 ml Sterile Plastic (N/A - lab)												
	SP2T-250 ml Sterile Plastic (N/A - lab)												
	BP3A-250 ml Plastic (NH2)2SO4 (pH > 9)												
	AG0U-100 ml Amber Unpreserved vials (N/A)												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Unit. Out of field, incorrect preservative, out of temp, incorrect containers.

April 10, 2020

Mr. Joju Abraham
Georgia Power
2480 Maner Road
Atlanta, GA 30339

RE: Project: 2630257
Pace Project No.: 30355814

Dear Mr. Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 20, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 2630257
Pace Project No.: 30355814

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 2630257
Pace Project No.: 30355814

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2630257001	YGWA-47	Water	03/17/20 10:18	03/20/20 09:55
2630257002	YGWC-44	Water	03/17/20 11:40	03/20/20 09:55
2630257003	YGWC-45	Water	03/17/20 15:25	03/20/20 09:55
2630257004	YGWC-46	Water	03/17/20 13:16	03/20/20 09:55
2630257005	EB-1-3-17-20	Water	03/17/20 12:15	03/20/20 09:55
2630257006	DUP-1	Water	03/17/20 00:01	03/20/20 09:55
2630257007	FB-1-3-17-20	Water	03/17/20 15:50	03/20/20 09:55

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 2630257
Pace Project No.: 30355814

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630257001	YGWA-47	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
2630257002	YGWC-44	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
2630257003	YGWC-45	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
2630257004	YGWC-46	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
2630257005	EB-1-3-17-20	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
2630257006	DUP-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
2630257007	FB-1-3-17-20	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630257
Pace Project No.: 30355814

Sample: YGWA-47		Lab ID: 2630257001	Collected: 03/17/20 10:18	Received: 03/20/20 09:55	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.899 ± 0.249 (0.213) C:91% T:NA	pCi/L	03/25/20 19:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.318 ± 0.487 (1.05) C:74% T:84%	pCi/L	04/08/20 12:27	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.22 ± 0.736 (1.26)	pCi/L	04/10/20 12:52	7440-14-4	

Sample: YGWC-44		Lab ID: 2630257002	Collected: 03/17/20 11:40	Received: 03/20/20 09:55	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.891 ± 0.255 (0.234) C:87% T:NA	pCi/L	03/25/20 19:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.479 ± 0.434 (0.889) C:65% T:87%	pCi/L	04/08/20 12:27	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.37 ± 0.689 (1.12)	pCi/L	04/10/20 12:52	7440-14-4	

Sample: YGWC-45		Lab ID: 2630257003	Collected: 03/17/20 15:25	Received: 03/20/20 09:55	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	1.32 ± 0.322 (0.234) C:90% T:NA	pCi/L	03/25/20 19:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.123 ± 0.442 (0.993) C:63% T:90%	pCi/L	04/08/20 12:27	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.44 ± 0.764 (1.23)	pCi/L	04/10/20 12:52	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630257
Pace Project No.: 30355814

Sample: YGWC-46		Lab ID: 2630257004	Collected: 03/17/20 13:16	Received: 03/20/20 09:55	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	1.05 ± 0.274 (0.209) C:91% T:NA	pCi/L	03/25/20 19:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.692 ± 0.474 (0.913) C:61% T:90%	pCi/L	04/08/20 16:03	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.74 ± 0.748 (1.12)	pCi/L	04/10/20 12:52	7440-14-4	

Sample: EB-1-3-17-20		Lab ID: 2630257005	Collected: 03/17/20 12:15	Received: 03/20/20 09:55	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.180 ± 0.138 (0.248) C:94% T:NA	pCi/L	03/25/20 19:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.702 ± 0.491 (0.952) C:59% T:93%	pCi/L	04/08/20 16:03	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.882 ± 0.629 (1.20)	pCi/L	04/10/20 12:52	7440-14-4	

Sample: DUP-1		Lab ID: 2630257006	Collected: 03/17/20 00:01	Received: 03/20/20 09:55	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.931 ± 0.272 (0.308) C:95% T:NA	pCi/L	03/25/20 19:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.541 ± 0.428 (0.847) C:65% T:90%	pCi/L	04/08/20 16:03	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.47 ± 0.700 (1.16)	pCi/L	04/10/20 12:52	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630257
Pace Project No.: 30355814

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: FB-1-3-17-20 Lab ID: 2630257007 Collected: 03/17/20 15:50 Received: 03/20/20 09:55 Matrix: Water PWS: Site ID: Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.380 ± 0.162 (0.215) C:100% T:NA	pCi/L	03/25/20 19:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.346 ± 0.488 (1.05) C:64% T:88%	pCi/L	04/08/20 16:03	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.726 ± 0.650 (1.27)	pCi/L	04/10/20 12:52	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630257
Pace Project No.: 30355814

QC Batch: 389350	Analysis Method: EPA 9315
QC Batch Method: EPA 9315	Analysis Description: 9315 Total Radium
	Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630257001, 2630257002, 2630257003, 2630257004, 2630257005, 2630257006, 2630257007

METHOD BLANK: 1886055 Matrix: Water

Associated Lab Samples: 2630257001, 2630257002, 2630257003, 2630257004, 2630257005, 2630257006, 2630257007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.497 ± 0.178 (0.190) C:94% T:NA	pCi/L	03/25/20 19:28	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630257
Pace Project No.: 30355814

QC Batch:	389352	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 2630257001, 2630257002, 2630257003, 2630257004, 2630257005, 2630257006, 2630257007

METHOD BLANK: 1886060 Matrix: Water

Associated Lab Samples: 2630257001, 2630257002, 2630257003, 2630257004, 2630257005, 2630257006, 2630257007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.677 ± 0.348 (0.601) C:74% T:90%	pCi/L	04/08/20 12:59	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 2630257
Pace Project No.: 30355814

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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Chain of Custody

Samples were sent directly to the Subcontracting Laboratory.

Workorder: 2630257

Workorder Name: PLANT YATES ASH POND 1

State Of Origin: GA

Cert. Needed: Yes

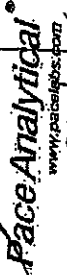
No:

Owner Received Date: 3/18/2020

Results Requested By: 4/4/2020

Kevin Herring
Pace Analytical Charlotte
9800 Kinsey Ave.
Suite 100
Huntersville, NC 28078
Phone (704)875-9092

Pace Analytical Pittsburgh
1638 Roseytown Road
Suites 2,3, & 4
Greensburg, PA 15601
Phone (724)850-5600



WO#: 30355814



30355814

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	CPH/ccc	3/19/2020 17:00	Emily	3-20-2020 09:55	
2					
3					

Sample ID	Sample Type	Sample Date/Time	Container	Volume	Temperature (°C)	Seal	Received on Ice	Y or N	Samples Intact	Y or N
1 YGWA-47	PS	3/17/2020 10:18	Water	2630257001	?	X	X	X	001	
2 YGWC-44	PS	3/17/2020 11:40	Water	2630257002	?	X	X	X	002	
3 YGWC-45	PS	3/17/2020 15:25	Water	2630257003	?	X	X	X	003	
4 YGWC-46	PS	3/17/2020 13:16	Water	2630257004	?	X	X	X	004	
5 EB-1-3-17-20	PS	3/17/2020 12:15	Water	2630257005	?	X	X	X	005	
6 DUP-1	PS	3/17/2020 00:00	Water	2630257006	?	X	X	X	006	
7 FB-1-3-17-20	PS	3/17/2020 15:50	Water	2630257007	?	X	X	X	007	

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 3/25/2020
Worklist: 53053
Matrix: DW

Method Blank Assessment	
MB Sample ID	1886055
MB concentration:	0.497
M/B Counting Uncertainty:	0.162
MB MDC:	0.190
MB Numerical Performance Indicator:	6.00
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	
LCSD (Y or N)?	N
LCS53053	LCS053063
Count Date:	3/25/2020
Spike I.D.:	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.049
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.502
Target Conc. (pCi/L, g, F):	4.768
Uncertainty (Calculated):	0.057
Result (pCi/L, g, F):	5.170
LCSD Counting Uncertainty (pCi/L, g, F):	0.808
Numerical Performance Indicator:	0.92
Percent Recovery:	107.98%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass
Upper % Recovery Limits:	125%
Lower % Recovery Limits:	75%

Duplicate Sample Assessment	
Sample I.D.:	2630257001
Duplicate Sample I.D.:	2630257001DUP
Sample Result (pCi/L, g, F):	0.899
Sample Result Counting Uncertainty (pCi/L, g, F):	0.213
Sample Duplicate Result (pCi/L, g, F):	0.966
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.355
Are sample and/or duplicate results below RL?	See below ##
Duplicate Numerical Performance Indicator:	-0.318
Duplicate RPD:	7.20%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD 2
Sample Collection Date:	Sample I.D.:		
Sample MS I.D.:	Sample MS I.D.:		
Sample MSD I.D.:	Sample MSD I.D.:		
Spike I.D.:	Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):	MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):	MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):	MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):	MSD Spike Uncertainty (calculated):		
Sample Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Result:		
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result:		
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	MS Numerical Performance Indicator:		
MS Numerical Performance Indicator:	MS Numerical Performance Indicator:		
MS Percent Recovery:	MS Percent Recovery:		
MS Status vs Numerical Indicator:	MS Status vs Numerical Indicator:		
MS Status vs Recovery:	MS Status vs Recovery:		
MS/MSD Upper % Recovery Limits:	MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:	MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	Sample I.D.:
Sample MS I.D.:	Sample MS I.D.:
Sample MSD I.D.:	Sample MSD I.D.:
Sample Matrix Spike Result:	Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:	Duplicate Numerical Performance Indicator:
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	(Based on the Percent Recoveries) MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs RPD:
MS/MSD Duplicate Status vs RPD:	% RPD Limit:

KLB
3-26-2020
LAM3/26/20

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 3/25/2020
Worklist: 53053
Matrix: DW

Method Blank Assessment	
MB Sample ID	1886055
MB concentration:	0.497
MIB Counting Uncertainty:	0.162
MB MDC:	0.190
MB Numerical Performance Indicator:	6.00
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	
LCSD (Y or N)?	Y
LCSS3053	LCSD53053
3/26/2020	3/26/2020
19-033	19-033
24.049	24.049
Count Date:	
Spike I.D.:	
Decay Corrected Spike Concentration (pCi/mL):	0.10
Volume Used (mL):	0.520
Aliquot Volume (L, g, F):	4.788
Target Conc. (pCi/L, g, F):	0.057
Uncertainty (Calculated):	5.170
Result (pCi/L, g, F):	0.808
LCSLCSD Counting Uncertainty (pCi/L, g, F):	0.705
Numerical Performance Indicator:	-1.27
Percent Recovery:	107.98%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass
Upper % Recovery Limits:	125%
Lower % Recovery Limits:	75%

Duplicate Sample Assessment	
Sample I.D.:	LCSS3053
Duplicate Sample I.D.:	LCSD63053
Sample Result (pCi/L, g, F):	5.170
Sample Duplicate Result (pCi/L, g, F):	0.808
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	4.169
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.705
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	1.830
(Based on the LCSD Percent Recoveries) Duplicate RPD:	18.02%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD 2
Sample Collection Date:	Sample I.D.:		
Sample MS I.D.:	Sample MS I.D.:		
Sample MSD I.D.:	Sample MSD I.D.:		
Spike I.D.:	MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	Spike Volume Used in MS (mL):		
Spike Volume Used in MS (mL):	MS Aliquot (L, g, F):		
MS Aliquot (L, g, F):	MS Target Conc. (pCi/L, g, F):		
MSD Aliquot (L, g, F):	MSD Target Conc. (pCi/L, g, F):		
MSD Target Conc. (pCi/L, g, F):	MS Spike Uncertainty (calculated):		
MS Spike Uncertainty (calculated):	MSD Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):	Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Result:		
Sample Matrix Spike Result:	Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:		
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	MS Numerical Performance Indicator:		
MS Numerical Performance Indicator:	MSD Numerical Performance Indicator:		
MSD Numerical Performance Indicator:	MS Percent Recovery:		
MS Percent Recovery:	MS Status vs Numerical Indicator:		
MS Status vs Numerical Indicator:	MSD Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:	MS/MSD Upper % Recovery Limits:		
MS/MSD Upper % Recovery Limits:	MS/MSD Lower % Recovery Limits:		
MS/MSD Lower % Recovery Limits:			

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	Sample I.D.:
Sample MS I.D.:	Sample MS I.D.:
Sample MSD I.D.:	Sample MSD I.D.:
Sample Matrix Spike Result:	Sample Matrix Spike Result:
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:	Duplicate Numerical Performance Indicator:
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	(Based on the Percent Recoveries) MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:	MS/MSD Duplicate Status vs RPD:
% RPD Limit:	% RPD Limit:

VLS
3-26-20
AMS/26/20

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 3/30/2020
Worklist: 53054
Matrix: WT

Method Blank Assessment	
MB Sample ID	1886060
MB concentration:	0.677
M/B 2 Sigma CSU:	0.348
MB MDC:	0.601
MB Numerical Performance Indicator:	3.81
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment**

Laboratory Control Sample Assessment	
LCSID (Y or N)?	Y
LCS53054	4/8/2020
Count Date:	4/8/2020
Spike I.D.:	19-057
Decay Corrected Spike Concentration (pCi/mL):	34.561
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.809
Target Conc. (pCi/L, g, F):	4.274
Uncertainty (Calculated):	0.308
Result (pCi/L, g, F):	4.437
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.016
Numerical Performance Indicator:	0.33
Percent Recovery:	104.18%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass
Upper % Recovery Limits:	135%
Lower % Recovery Limits:	60%

Duplicate Sample Assessment	
Sample I.D.:	LCS53054
Duplicate Sample I.D.:	LCS53054
Sample Result (pCi/L, g, F):	4.437
Sample Duplicate Result (pCi/L, g, F):	1.012
Sample Duplicate Result (pCi/L, g, F):	4.432
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.016
Are sample and/or duplicate results below RL?:	NO
Duplicate Numerical Performance Indicator:	0.006
Duplicate (Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.35%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	38%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date: Sample I.D. Sample MS I.D. Sample MSD I.D. Spike I.D.: MS/MSD Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc. (pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc. (pCi/L, g, F): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated):		
Sample Result: Sample Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limits: MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D. Sample MS I.D. Sample MSD I.D. Sample Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F): Duplicate Numerical Performance Indicator: Duplicate (Based on the Percent Recoveries) MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:

** Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

One 4/10/20

January 17, 2020

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: PLANT YATES AP-1
Pace Project No.: 2627935

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on January 16, 2020. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring
kevin.herring@pacelabs.com
(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Kristen Jurinko
Matt Malone, Atlantic Coast Consulting
Betsy McDaniel, Atlantic Coast Consulting
Chris Parker, Atlantic Coast Consulting
Evan Perry, Atlantic Coast Consulting
Lauren Petty, Southern Company Services, Inc.
Ryan Walker



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: PLANT YATES AP-1
Pace Project No.: 2627935

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

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SAMPLE SUMMARY

Project: PLANT YATES AP-1

Pace Project No.: 2627935

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2627935001	YAMW-6	Water	01/15/20 12:20	01/16/20 16:30
2627935002	YAMW-7	Water	01/15/20 16:00	01/16/20 16:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: PLANT YATES AP-1
Pace Project No.: 2627935

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2627935001	YAMW-6	EPA 6020B	CSW	2
2627935002	YAMW-7	EPA 6020B	CSW	2

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: PLANT YATES AP-1

Pace Project No.: 2627935

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2627935001	YAMW-6					
EPA 6020B	Boron	0.41	mg/L	0.10	01/17/20 11:41	
EPA 6020B	Cobalt	0.00052J	mg/L	0.0050	01/17/20 11:41	
2627935002	YAMW-7					
EPA 6020B	Boron	3.2	mg/L	0.10	01/17/20 12:03	
EPA 6020B	Cobalt	0.00048J	mg/L	0.0050	01/17/20 12:03	

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ANALYTICAL RESULTS

Project: PLANT YATES AP-1

Pace Project No.: 2627935

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Sample: YAMW-6									
Lab ID: 2627935001									
Collected: 01/15/20 12:20 Received: 01/16/20 16:30 Matrix: Water									
6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Boron	0.41	mg/L	0.10	0.0049	1	01/16/20 17:25	01/17/20 11:41	7440-42-8	
Cobalt	0.00052J	mg/L	0.0050	0.00030	1	01/16/20 17:25	01/17/20 11:41	7440-48-4	

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ANALYTICAL RESULTS

Project: PLANT YATES AP-1

Pace Project No.: 2627935

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Sample: YAMW-7									
Lab ID: 2627935002									
Collected: 01/15/20 16:00 Received: 01/16/20 16:30 Matrix: Water									
6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Boron	3.2	mg/L	0.10	0.0049	1	01/16/20 17:25	01/17/20 12:03	7440-42-8	
Cobalt	0.00048J	mg/L	0.0050	0.00030	1	01/16/20 17:25	01/17/20 12:03	7440-48-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES AP-1

Pace Project No.: 2627935

QC Batch: 42057

Analysis Method: EPA 6020B

QC Batch Method: EPA 3005A

Analysis Description: 6020B MET

Associated Lab Samples: 2627935001, 2627935002

METHOD BLANK: 191417

Matrix: Water

Associated Lab Samples: 2627935001, 2627935002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.10	0.0049	01/17/20 11:29	
Cobalt	mg/L	ND	0.0050	0.00030	01/17/20 11:29	

LABORATORY CONTROL SAMPLE: 191418

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.91	91	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 191419 191420

Parameter	Units	2627935001		191420		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Boron	mg/L	0.41	1	1	1.4	97	97	75-125	1	20	
Cobalt	mg/L	0.00052J	0.1	0.1	0.098	97	95	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: PLANT YATES AP-1

Pace Project No.: 2627935

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT YATES AP-1

Pace Project No.: 2627935

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2627935001	YAMW-6	EPA 3005A	42057	EPA 6020B	42059
2627935002	YAMW-7	EPA 3005A	42057	EPA 6020B	42059

REPORT OF LABORATORY ANALYSIS

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CHAIN OF CUSTODY RECORD

Face Analytical

Face Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1

CLIENT NAME: Georgia Power

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd SE B10185
Atlanta, GA 30308

REPORT TO: Jolu Abraham
CC: PO #:

REQUESTED COMPLETION DATE: *2 DAY TAT*

PROJECT NAME/STATE: Plant Yates AP-1 / GA

PROJECT #:

Collection DATE	Collection TIME	MATRIX CODE*	C O P	G R A B	SAMPLE IDENTIFICATION
1/15/20	1220	6W	X		YAMW-6
1/15/20	1600	6W	X		YAMW-7

CONTAINER TYPE
PRESERVATION: 3

CONTAINERS
Boron, Cobolt

ANALYSIS REQUESTED

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, 56°C
A - AMBER GLASS	2 - H ₂ SO ₄ , 56°C
G - CLEAR GLASS	3 - HNO ₃
V - VOA VIAL	4 - NaOH, 56°C
S - STERILE	5 - NaOH/ZnAc, 56°C
O - OTHER	6 - Na ₂ S ₂ O ₈ , 56°C
	7 - 56°C not frozen

*MATRIX CODES:
DW - DRINKING WATER S - SOIL
WW - WASTEWATER SL - SLUDGE
GW - GROUNDWATER SD - SOLID
SW - SURFACE WATER A - AIR
ST - STORM WATER L - LIQUID
W - WATER P - PRODUCT

REMARKS/ADDITIONAL INFORMATION
* 2 DAY TAT ↓

SAMPLED BY: *Paul* DATE/TIME: *see above*
 RECEIVED BY: *AKC* DATE/TIME: *see above*
 RELINQUISHED BY: *AKC* DATE/TIME: *1-16-20 1630*
 DATE/TIME: *1/16/20 1630*
 SAMPLE SHIPPED VIA: UPS FED-EX USPS
 COURIER: *AKC* DATE/TIME: *1/16/20 1630*
 CLIENT: *AKC* OTHER: *FS*
 Tracking #: *2627935*

APP III

Yates Phase- Pond 1 - Blank COCs

WO#: 2627935



2627935

Sample Condition Upon Receipt

WO#: 2627935

PM: KH

Due Date: 01/20/20

CLIENT: 26-GR Power

Pace Analytical

Client Name: ACC

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used _____

Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature _____

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: _____

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7. 48hr TAT
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<input checked="" type="checkbox"/>	
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

3000 W28

Project Manager Review: _____

Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

YGWC-46A Sampling (July 2020)



July 13, 2020

Ms. Lauren Petty
Southern Co. Services
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: PLANT YATES GW
Pace Project No.: 92484808

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on July 07, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: PLANT YATES GW

Pace Project No.: 92484808

Pace Analytical Services Charlotte

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: PLANT YATES GW
Pace Project No.: 92484808

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92484808001	YGWC-46A (070620)	Water	07/06/20 18:00	07/07/20 12:55

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SAMPLE ANALYTE COUNT

Project: PLANT YATES GW
Pace Project No.: 92484808

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92484808001	YGWC-46A (070620)	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: PLANT YATES GW

Pace Project No.: 92484808

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
92484808001	YGWC-46A (070620)					
	pH	6.89	Std. Units		07/07/20 15:44	
EPA 6010D	Calcium	105	mg/L	1.0	07/07/20 17:14	M1
EPA 6020B	Arsenic	0.00079J	mg/L	0.0050	07/07/20 19:08	
EPA 6020B	Barium	0.048	mg/L	0.010	07/07/20 19:08	
EPA 6020B	Boron	2.0	mg/L	0.10	07/07/20 19:08	
EPA 6020B	Cobalt	0.0041J	mg/L	0.0050	07/07/20 19:08	
EPA 6020B	Lithium	0.011J	mg/L	0.030	07/07/20 19:08	
EPA 6020B	Molybdenum	0.0026J	mg/L	0.010	07/07/20 19:08	
EPA 6020B	Thallium	0.000073J	mg/L	0.0010	07/07/20 19:08	
SM 2450C-2011	Total Dissolved Solids	793	mg/L	10.0	07/07/20 14:28	
EPA 300.0 Rev 2.1 1993	Chloride	25.8	mg/L	1.0	07/08/20 11:52	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	07/08/20 11:52	M1
EPA 300.0 Rev 2.1 1993	Sulfate	385	mg/L	8.0	07/08/20 12:34	M6

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES GW
Pace Project No.: 92484808

Sample: YGWC-46A (070620) Lab ID: 92484808001 Collected: 07/06/20 18:00 Received: 07/07/20 12:55 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
pH	6.89	Std. Units			1		07/07/20 15:44		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	105	mg/L	1.0	0.14	1	07/07/20 14:00	07/07/20 17:14	7440-70-2	M1
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00027	1	07/07/20 13:38	07/07/20 19:08	7440-36-0	
Arsenic	0.00079J	mg/L	0.0050	0.00035	1	07/07/20 13:38	07/07/20 19:08	7440-38-2	
Barium	0.048	mg/L	0.010	0.00049	1	07/07/20 13:38	07/07/20 19:08	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	07/07/20 13:38	07/07/20 19:08	7440-41-7	
Boron	2.0	mg/L	0.10	0.0049	1	07/07/20 13:38	07/07/20 19:08	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	07/07/20 13:38	07/07/20 19:08	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	07/07/20 13:38	07/07/20 19:08	7440-47-3	
Cobalt	0.0041J	mg/L	0.0050	0.00030	1	07/07/20 13:38	07/07/20 19:08	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	07/07/20 13:38	07/07/20 19:08	7439-92-1	
Lithium	0.011J	mg/L	0.030	0.00078	1	07/07/20 13:38	07/07/20 19:08	7439-93-2	
Molybdenum	0.0026J	mg/L	0.010	0.00095	1	07/07/20 13:38	07/07/20 19:08	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	07/07/20 13:38	07/07/20 19:08	7782-49-2	
Thallium	0.000073J	mg/L	0.0010	0.000052	1	07/07/20 13:38	07/07/20 19:08	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00014	1	07/07/20 15:00	07/08/20 09:06	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	793	mg/L	10.0	10.0	1		07/07/20 14:28		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	25.8	mg/L	1.0	0.60	1		07/08/20 11:52	16887-00-6	
Fluoride	0.12	mg/L	0.10	0.050	1		07/08/20 11:52	16984-48-8	M1
Sulfate	385	mg/L	8.0	4.0	8		07/08/20 12:34	14808-79-8	M6

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES GW
Pace Project No.: 92484808

QC Batch: 551617	Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A	Analysis Description: 6010D ATL
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92484808001

METHOD BLANK: 2931905 Matrix: Water
Associated Lab Samples: 92484808001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.14	07/07/20 16:55	

LABORATORY CONTROL SAMPLE: 2931906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.98J	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2931907 2931908

Parameter	Units	2931907		2931908		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	105	1	1	106	105	140	25	75-125	1	20 M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES GW
Pace Project No.: 92484808

QC Batch: 551621 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92484808001

METHOD BLANK: 2931929 Matrix: Water
Associated Lab Samples: 92484808001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	07/07/20 18:57	
Arsenic	mg/L	ND	0.0050	0.00035	07/07/20 18:57	
Barium	mg/L	ND	0.010	0.00049	07/07/20 18:57	
Beryllium	mg/L	ND	0.0030	0.000074	07/07/20 18:57	
Boron	mg/L	ND	0.10	0.0049	07/07/20 18:57	
Cadmium	mg/L	ND	0.0025	0.00011	07/07/20 18:57	
Chromium	mg/L	ND	0.010	0.00039	07/07/20 18:57	
Cobalt	mg/L	ND	0.0050	0.00030	07/07/20 18:57	
Lead	mg/L	ND	0.0050	0.000046	07/07/20 18:57	
Lithium	mg/L	ND	0.030	0.00078	07/07/20 18:57	
Molybdenum	mg/L	ND	0.010	0.00095	07/07/20 18:57	
Selenium	mg/L	ND	0.010	0.0013	07/07/20 18:57	
Thallium	mg/L	ND	0.0010	0.000052	07/07/20 18:57	

LABORATORY CONTROL SAMPLE: 2931930

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	1.0	105	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2931931 2931932

Parameter	Units	92484808001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MS Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	2	20	
Arsenic	mg/L	0.00079J	0.1	0.1	0.10	0.10	103	100	75-125	3	20	

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QUALITY CONTROL DATA

Project: PLANT YATES GW

Pace Project No.: 92484808

Parameter	Units	2931931		2931932		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		92484808001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.048	0.1	0.1	0.15	0.14	99	90	75-125	7	20		
Beryllium	mg/L	ND	0.1	0.1	0.092	0.090	92	90	75-125	2	20		
Boron	mg/L	2.0	1	1	3.0	2.9	101	94	75-125	3	20		
Cadmium	mg/L	ND	0.1	0.1	0.098	0.097	98	97	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	105	100	75-125	6	20		
Cobalt	mg/L	0.0041J	0.1	0.1	0.10	0.098	98	94	75-125	4	20		
Lead	mg/L	ND	0.1	0.1	0.094	0.099	94	99	75-125	5	20		
Lithium	mg/L	0.011J	0.1	0.1	0.10	0.10	93	92	75-125	1	20		
Molybdenum	mg/L	0.0026J	0.1	0.1	0.11	0.11	105	105	75-125	0	20		
Selenium	mg/L	ND	0.1	0.1	0.098	0.098	98	97	75-125	1	20		
Thallium	mg/L	0.000073J	0.1	0.1	0.094	0.099	94	99	75-125	5	20		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES GW
Pace Project No.: 92484808

QC Batch: 551655 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92484808001

METHOD BLANK: 2932064 Matrix: Water
Associated Lab Samples: 92484808001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00014	07/08/20 09:01	

LABORATORY CONTROL SAMPLE: 2932065

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2932066 2932067

Parameter	Units	92484639007		2932067		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0025	0.0026	0.0025	98	97	75-125	2	20

SAMPLE DUPLICATE: 2932126

Parameter	Units	92484639012 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES GW
Pace Project No.: 92484808

QC Batch: 551606	Analysis Method: SM 2450C-2011
QC Batch Method: SM 2450C-2011	Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 92484808001	Laboratory: Pace Analytical Services - Peachtree Corners, GA

METHOD BLANK: 2931825 Matrix: Water
Associated Lab Samples: 92484808001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	07/07/20 13:47	

LABORATORY CONTROL SAMPLE: 2931826

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	404	101	84-108	

SAMPLE DUPLICATE: 2931827

Parameter	Units	92484566001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	596	568	5	10	

SAMPLE DUPLICATE: 2931958

Parameter	Units	92482102005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	508	509	0	10	1g,H1

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QUALITY CONTROL DATA

Project: PLANT YATES GW
Pace Project No.: 92484808

QC Batch: 551807 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92484808001

METHOD BLANK: 2932591 Matrix: Water
Associated Lab Samples: 92484808001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	07/08/20 11:24	
Fluoride	mg/L	ND	0.10	0.050	07/08/20 11:24	
Sulfate	mg/L	ND	1.0	0.50	07/08/20 11:24	

LABORATORY CONTROL SAMPLE: 2932592

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.7	99	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	51.2	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2932593 2932594

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92484808001	Result	Conc.	Conc.								
Chloride	mg/L	25.8	50	50	75.1	74.4	99	97	90-110	1	10		
Fluoride	mg/L	0.12	2.5	2.5	1.9	1.9	72	71	90-110	1	10	M1	
Sulfate	mg/L	385	50	50	430	427	88	84	90-110	1	10	M6	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: PLANT YATES GW

Pace Project No.: 92484808

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

- | | |
|----|--|
| 1g | The laboratory did not meet the method required hold time for this analysis due to reanalysis. The reanalysis was initiated by the client due to incongruencies with historical data for this site in the initial reporting of TDS. The reanalysis confirmed historical results. |
| H1 | Analysis conducted outside the EPA method holding time. |
| M1 | Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery. |
| M6 | Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution. |

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT YATES GW
Pace Project No.: 92484808

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92484808001	YGWC-46A (070620)				
92484808001	YGWC-46A (070620)	EPA 3010A	551617	EPA 6010D	551680
92484808001	YGWC-46A (070620)	EPA 3005A	551621	EPA 6020B	551671
92484808001	YGWC-46A (070620)	EPA 7470A	551655	EPA 7470A	551787
92484808001	YGWC-46A (070620)	SM 2450C-2011	551606		
92484808001	YGWC-46A (070620)	EPA 300.0 Rev 2.1 1993	551807		

REPORT OF LABORATORY ANALYSIS

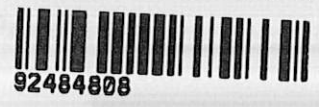
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Sample Condition Upon Receipt

WO#: 92484808

Client Name: GFA Power



Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____ Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used THR 230 Type of Ice: Blue None Samples on ice, cooling process has begun

Cooler Temperature 5.2 Biological Tissue is Frozen: Yes No Temp should be above freezing to 6°C

Proj. Due Date: _____ Proj. Name: _____

Date and Initials of person examining contents: KRW 7/7/20

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12. NO MATRIX PROVIDED ON COC
-Includes date/time/ID/Analysis Matrix: <u>WT</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)



Document Name:
Bottle Identification Form (BIF)
Document No.:
F-CAR-CS-043-Rev.00

Document Issued: March 14, 2019
Page 1 of 1
Issuing Authority:
Pace Carolinas Quality Office

Project #

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

♦Bottom half of box is to list number of bottle

Matrix	Item#	Matrix	Item#	Matrix	Item#	Matrix	Item#	Matrix	Item#	Matrix	Item#	Matrix	Item#	Matrix	Item#
	BP4U-125 mL Plastic Unpreserved (N/A) (C-)		BP3U-250 mL Plastic Unpreserved (N/A)		BP2U-500 mL Plastic Unpreserved (N/A)		BP1U-1 liter Plastic Unpreserved (N/A)		BP4S-125 mL Plastic H2SO4 (pH < 2) (C-)		BP3N-250 mL plastic HNO3 (pH < 2)		BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)		BP4C-125 mL Plastic NaOH (pH > 12) (C-)
	WGFU-Wide-mouthed Glass Jar Unpreserved		AG1U-1 liter Amber Unpreserved (N/A) (C-)		AG1H-1 liter Amber HCl (pH < 2)		AG3U-250 mL Amber Unpreserved (N/A) (C-)		AG1S-1 liter Amber H2SO4 (pH < 2)		AG3S-250 mL Amber H2SO4 (pH < 2)		AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(C-)		DG9H-40 mL VOA HCl (N/A)
	VG9T-40 mL VOA Na2S2O3 (N/A)		VG9U-40 mL VOA Unp (N/A)		DG9P-40 mL VOA H3PO4 (N/A)		VOAK (6 vials per kit)-5035 kit (N/A)		V/GK (3 vials per kit)-VPH/Gas kit (N/A)		SP5T-125 mL Sterile Plastic (N/A - lab)		SP2T-250 mL Sterile Plastic (N/A - lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)
	AG0U-100 mL Amber Unpreserved vials (N/A)		VSGU-20 mL Scribble vials (N/A)												

BPTN

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Client Information:

Company: Georgia Power
 Address: 1070 Bridge Mill Ave
 City: Marietta, GA 30114
 Phone: (770) 344-6526
 Fax:
 Project Name: Plant Yates GW
 Project #:

Section B

Required Project Information:

Report To: Dechy Steever
 Copy To:
 Purchase Order #:
 Project Name: Plant Yates GW
 Project #:

Section C

Invoice Information:

Attention:
 Company Name:
 Address:
 Pace Order:
 Pace Project Manager: Kevin Herring@pacelabs.com
 Pace Profile #: 10840

Page: 1 Of 1

Regulatory Agency:
 State / Location: GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique	MATRIX Drinking Water Waste Water Wastewater Surface Water Wastewater Other	CODE DWI WWI SWI OWI AWI OTI	COLLECTED		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	PRESERVATIVES	ANALYSES TEST	REQUESTED ANALYSIS (Y/N)	RESIDUAL CHLORINE (Y/N)		
				START DATE	END DATE	DATE	TIME						UNPRESERVED	H2SO4
1	YGAC -WEA (Stover)							5						

ADDITIONAL COMMENTS: PH = 6.89

REACQUIRED BY / AFFILIATION: *Bas / Arcis* DATE: 7/7 TIME: 1500

ACCEPTED BY / AFFILIATION: *K. W. [Signature]* DATE: 7/6 TIME: 1531

SAMPLER NAME AND SIGNATURE: *[Signature]* DATE SIGNED: 7/7

TEMP in C:
 Received on Ice (Y/N)
 Custody Sealed (Y/N)
 Cooler (Y/N)
 Samples Intact (Y/N)

APPENDIX B

Field Sampling Reports



Product Name: Low-Flow System

Date: 2019-08-20 10:31:08

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name Phase II-Pond 1
Site Name Plant Yates
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 59 ft

Pump placement from TOC 54 ft

Well Information:

Well ID YGWA-47
Well diameter 2 in
Well Total Depth 59.50 ft
Screen Length 10 ft
Depth to Water 33.85 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.7664 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 4.2 in
Total Volume Pumped 5.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:10:07	900.02	20.72	5.61	227.58	2.01	34.20	3.94	53.98
Last 5	10:15:07	1200.03	20.67	5.60	224.71	1.77	34.20	3.81	52.73
Last 5	10:20:07	1500.02	20.74	5.60	223.04	1.66	34.20	3.72	52.25
Last 5	10:25:07	1800.02	20.92	5.59	222.43	1.81	34.20	3.67	52.16
Last 5	10:30:07	2100.02	21.35	5.58	223.74	1.55	34.20	3.66	51.94
Variance 0			0.07	-0.00	-1.68			-0.09	-0.48
Variance 1			0.18	-0.01	-0.61			-0.05	-0.09
Variance 2			0.44	-0.01	1.31			-0.01	-0.22

Notes

Sunny, Sample time-1030

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-20 13:46:25

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name Phase II-Pond 1
Site Name Plant Yates
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 90 ft

Pump placement from TOC 85 ft

Well Information:

Well ID YGWC-44
Well diameter 2 in
Well Total Depth 90 ft
Screen Length 10 ft
Depth to Water 49.6 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 2.439678 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 14.4 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	13:25:15	1800.02	26.81	5.79	470.54	1.74	50.80	0.32	-37.78
Last 5	13:30:15	2100.02	26.96	5.79	474.37	2.39	50.80	0.28	-36.04
Last 5	13:35:15	2400.02	27.84	5.78	471.96	1.11	50.80	0.25	-34.26
Last 5	13:40:15	2700.02	28.01	5.78	470.71	1.28	50.80	0.24	-32.12
Last 5	13:45:15	3000.02	27.51	5.78	466.92	1.52	50.80	0.23	-29.82
Variance 0			0.87	-0.00	-2.40			-0.03	1.78
Variance 1			0.17	-0.00	-1.25			-0.01	2.14
Variance 2			-0.50	0.00	-3.79			-0.01	2.30

Notes

Sunny, Sample time-1345, FB-1-8-20-19 here at 1330

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-20 11:38:52

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name Phase II-Pond 1
Site Name Plant Yates
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 74 ft

Pump placement from TOC 69 ft

Well Information:

Well ID YGWC-45
Well diameter 2 in
Well Total Depth 74 ft
Screen Length 10 ft
Depth to Water 22.79 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 2.09218 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 8.5 in
Total Volume Pumped 5.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:15:04	900.02	25.14	6.40	582.64	2.22	23.50	0.68	2.55
Last 5	11:20:04	1200.02	24.91	6.35	583.02	1.90	23.50	0.43	6.52
Last 5	11:25:04	1500.02	25.45	6.39	584.25	2.00	23.50	0.34	8.36
Last 5	11:30:04	1800.02	25.65	6.44	585.27	1.77	23.50	0.32	8.82
Last 5	11:35:04	2100.02	25.70	6.48	585.12	1.57	23.50	0.28	7.74
Variance 0			0.54	0.04	1.23			-0.08	1.84
Variance 1			0.20	0.05	1.02			-0.02	0.47
Variance 2			0.05	0.04	-0.15			-0.04	-1.08

Notes

Sunny, Sample time- 1135

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-21 09:45:54

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name Phase II-Pond 1
Site Name Plant Yates
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 83 ft

Pump placement from TOC 78 ft

Well Information:

Well ID YGWC-46
Well diameter 2 in
Well Total Depth 83. ft
Screen Length 10 ft
Depth to Water 48.03 ft

Pumping Information:

Final Pumping Rate 180 mL/min
Total System Volume 2.287648 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 7.8 in
Total Volume Pumped 6.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	09:20:01	600.03	21.67	5.86	996.88	0.57	48.80	0.72	55.68
Last 5	09:25:01	900.03	21.58	5.83	1002.81	0.77	48.90	0.59	58.49
Last 5	09:30:01	1200.03	21.85	5.82	1010.20	0.92	48.90	0.49	59.04
Last 5	09:35:01	1500.03	21.88	5.82	1018.80	0.57	48.90	0.33	59.61
Last 5	09:45:03	2102.02	22.30	5.82	1018.89	0.44	48.90	0.25	59.60
Variance 0			0.27	-0.00	7.39			-0.10	0.55
Variance 1			0.03	-0.01	8.60			-0.16	0.57
Variance 2			0.42	-0.00	0.09			-0.07	-0.01

Notes

Sunny, Sample time 0945, DUP-1 here

Grab Samples

WELL CONDITION SUMMARY



ATLANTIC COAST
CONSULTING, INC.

Site: Plant Yates - Phase 2 Facilities

Personnel: _____

Date(s): _____

Page: 1 of 2

Well ID	Protective Casing	Well Casing	Label	Bollards	Lock	Well Pad	Weep Hole	Vent Hole	Notes
YGWA-47	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-36	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-42	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-43	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-44	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-45	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-46	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-49	<input type="checkbox"/> OK <input type="checkbox"/> Damaged	<input type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
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WELL CONDITION SUMMARY



ATLANTIC COAST
CONSULTING, INC.

Site: Plant Yates - Phase 2 Facilities

Personnel: _____

Date(s): _____

Page: 2 of 2

Well ID	Protective Casing	Well Casing	Label	Bollards	Lock	Well Pad	Weep Hole	Vent Hole	Notes
PZ-37 PZ-37	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Y6WC-38 PZ-38	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Y6WA-39 PZ-39	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Sit on Pad
Y6WA-40 PZ-40	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Y6WC-41 PZ-41	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
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WELL CONDITION SUMMARY



ATLANTIC COAST
CONSULTING, INC.

Site: Plant Yates - Ash Ponds

Personell: _____

Date(s): _____

Page: 1 of 5

Well ID	Protective Casing	Well Casing	Label	Bollards	Lock	Well Pad	Weep Hole	Vent Hole	Notes
YAMW-1	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-1I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-1D	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-2I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-3I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-3D	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
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YGWA-5I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-5D	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-6S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-6I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

WELL CONDITION SUMMARY



ATLANTIC COAST
CONSULTING, INC.

Site: Plant Yates - Ash Ponds

Personnel: _____

Date(s): _____

Page: 2 of 5

Well ID	Protective Casing	Well Casing	Label	Bollards	Lock	Well Pad	Weep Hole	Vent Hole	Notes
YGWA-14S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>Pad covered in silt</i>
YGWA-17S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-18S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-18I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-20S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-21I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWA-30I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-23S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-24S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-26S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

WELL CONDITION SUMMARY



ATLANTIC COAST
CONSULTING, INC.

Site: Plant Yates - Ash Ponds

Personell: _____

Date(s): _____

Page: 3 of 5

Well ID	Protective Casing	Well Casing	Label	Bollards	Lock	Well Pad	Weep Hole	Vent Hole	Notes
YGWC-261	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-275	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-271	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-285	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-281	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-291	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
YGWC-335	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-01S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-03S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-04S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

WELL CONDITION SUMMARY



Site: Plant Yates - Ash Ponds

Personell: _____

Date(s): _____

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Well ID	Protective Casing	Well Casing	Label	Bollards	Lock	Well Pad	Weep Hole	Vent Hole	Notes
PZ-05S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-06D	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-07S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-07I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-08S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-08I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-09S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-09I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-10S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-10I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

WELL CONDITION SUMMARY



ATLANTIC COAST
CONSULTING, INC.

Site: Plant Yates - Ash Ponds

Personell: _____

Date(s): _____

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Well ID	Protective Casing	Well Casing	Label	Bollards	Lock	Well Pad	Weep Hole	Vent Hole	Notes
PZ-13S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-13I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-14I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Miss label, label corrected Pul core in sit
PZ-16S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-16I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-24I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-25S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-25I	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-31S	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-35	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-48	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Product Name: Low-Flow System

Date: 2019-10-08 12:35:36

Project Information:

Operator Name Taylor Goble
Company Name ACC
Project Name Pond 1
Site Name Plant Yates
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 60 ft

Pump placement from TOC 55 ft

Well Information:

Well ID YGWA-47
Well diameter 2 in
Well Total Depth 59.50 ft
Screen Length 10 ft
Depth to Water 35.63 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.6691639 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 10 in
Total Volume Pumped 4.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	12:14:21	600.02	19.86	6.05	219.40	1.55	36.18	4.23	116.51
Last 5	12:19:21	899.93	19.32	5.77	219.40	1.39	36.24	3.86	100.65
Last 5	12:24:21	1199.93	19.11	5.68	219.16	1.22	36.29	3.70	92.73
Last 5	12:29:21	1499.93	19.04	5.65	220.37	1.28	36.34	3.68	88.31
Last 5	12:34:21	1799.93	18.99	5.59	221.35	1.22	36.40	3.66	86.92
Variance 0			-0.22	-0.09	-0.24			-0.16	-7.92
Variance 1			-0.06	-0.03	1.21			-0.02	-4.42
Variance 2			-0.06	-0.06	0.98			-0.02	-1.39

Notes

Sampled at 1234. Rainy 78 degrees

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-08 14:08:37

Project Information:

Operator Name Taylor Goble
Company Name ACC
Project Name Pond 1
Site Name Plant Yates
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 90 ft

Pump placement from TOC 85 ft

Well Information:

Well ID YGWC-44
Well diameter 2 in
Well Total Depth 90.00 ft
Screen Length 10 ft
Depth to Water 50.68 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.9587458 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 14 in
Total Volume Pumped 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	13:47:06	1200.02	25.19	5.90	471.27	0.77	51.61	1.42	-48.16
Last 5	13:52:08	1502.02	25.55	5.86	471.93	1.23	51.75	0.96	-34.23
Last 5	13:57:09	1803.02	25.87	5.84	473.11	0.98	51.82	0.79	-19.63
Last 5	14:02:09	2103.02	26.33	5.83	472.37	1.54	51.90	0.73	-7.60
Last 5	14:07:09	2403.05	25.78	5.84	470.04	2.01	52.01	0.69	0.99
Variance 0			0.32	-0.02	1.18			-0.17	14.60
Variance 1			0.46	-0.01	-0.74			-0.05	12.03
Variance 2			-0.55	0.00	-2.33			-0.04	8.59

Notes

Sampled at 1407. Sunny 79 degrees

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 10:24:28

Project Information:

Operator Name Taylor Goble
Company Name ACC
Project Name Pond 1
Site Name Plant Yates
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 70 ft

Pump placement from TOC 65 ft

Well Information:

Well ID YGWC-45
Well diameter 2 in
Well Total Depth 74.00 ft
Screen Length 10 ft
Depth to Water 22.94 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.7656912 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 13 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	10:03:30	900.02	19.35	6.57	566.71	3.15	23.78	1.40	22.12
Last 5	10:08:30	1200.02	19.32	6.48	569.07	2.26	23.84	1.24	26.34
Last 5	10:13:31	1501.02	19.29	6.49	570.56	2.17	23.92	1.22	24.53
Last 5	10:18:31	1801.02	19.32	6.52	572.40	1.88	24.00	1.08	21.00
Last 5	10:23:31	2100.95	19.29	6.55	573.15	1.72	24.10	1.10	17.15
Variance 0			-0.03	0.01	1.48			-0.03	-1.81
Variance 1			0.03	0.03	1.85			-0.14	-3.53
Variance 2			-0.03	0.03	0.75			0.02	-3.86

Notes

Sampled at 1023. Cloudy 70 degrees

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-09 12:23:44

Project Information:

Operator Name Taylor Goble
Company Name ACC
Project Name Pond 1
Site Name Plant Yates
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 84 ft

Pump placement from TOC 79 ft

Well Information:

Well ID YGWC-46
Well diameter 2 in
Well Total Depth 83.60 ft
Screen Length 10 ft
Depth to Water 48.29 ft

Pumping Information:

Final Pumping Rate 180 mL/min
Total System Volume 0.9008295 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 14 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	12:02:26	901.02	20.84	6.13	1006.14	1.07	48.98	0.96	-11.05
Last 5	12:07:26	1201.02	20.76	6.02	1006.34	1.55	49.11	0.69	2.93
Last 5	12:12:26	1501.02	20.79	5.98	1005.72	1.28	49.20	0.61	8.50
Last 5	12:17:27	1802.02	20.80	5.97	1006.92	1.11	49.31	0.58	10.97
Last 5	12:22:27	2102.02	20.79	5.96	1006.30	1.23	49.44	0.49	11.96
Variance 0			0.03	-0.04	-0.62			-0.08	5.57
Variance 1			0.00	-0.02	1.19			-0.03	2.47
Variance 2			-0.00	-0.01	-0.62			-0.09	0.99

Notes

Sampled at 1222. Cloudy 75 degrees. Duplicate 1 here

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 10:19:53

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Yates
Site Name Plant Yates - Pond 1
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 465016
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 59 ft

Pump placement from TOC 55 ft

Well Information:

Well ID YGWA-47
Well diameter 2 in
Well Total Depth 59.50 ft
Screen Length 10 ft
Depth to Water 32.56 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.9595111 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 8 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	09:58:23	600.03	16.82	5.55	315.36	8.60	33.20	1.93	127.92
Last 5	10:03:23	900.03	16.83	5.55	317.71	7.14	33.20	1.81	120.68
Last 5	10:08:23	1200.03	16.84	5.54	317.26	4.96	33.20	1.79	115.60
Last 5	10:13:23	1500.03	16.91	5.56	313.94	4.71	33.20	1.77	113.78
Last 5	10:18:24	1801.03	16.89	5.57	316.25	2.95	33.20	1.76	110.38
Variance 0			0.02	-0.00	-0.45			-0.02	-5.08
Variance 1			0.07	0.01	-3.32			-0.02	-1.82
Variance 2			-0.02	0.01	2.31			-0.01	-3.41

Notes

Sampled at 10:18. Cloudy, 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 11:41:35

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Yates
Site Name Plant Yates - Pond 1
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 465016
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 90 ft

Pump placement from TOC 85 ft

Well Information:

Well ID YGWC-44
Well diameter 2 in
Well Total Depth 90.00 ft
Screen Length 10 ft
Depth to Water 48.35 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.258746 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 25 in
Total Volume Pumped 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 25
Last 5	11:20:58	900.03	17.01	5.92	515.99	4.33	49.90	0.88	3.52
Last 5	11:25:58	1200.03	17.13	5.90	517.35	3.51	50.10	0.73	20.25
Last 5	11:30:58	1500.03	17.18	5.90	516.26	3.33	50.20	0.58	27.55
Last 5	11:35:58	1800.03	17.27	5.90	514.74	2.17	50.30	0.54	33.52
Last 5	11:40:59	2101.03	17.27	5.90	514.86	2.74	50.40	0.50	37.44
Variance 0			0.05	-0.01	-1.09			-0.15	7.31
Variance 1			0.09	-0.00	-1.52			-0.05	5.96
Variance 2			0.00	0.00	0.12			-0.04	3.92

Notes

Sampled at 11:40. Cloudy, 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 15:26:10

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Yates
Site Name Plant Yates - Pond 1
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 465016
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 74 ft

Pump placement from TOC 69 ft

Well Information:

Well ID YGWC-45
Well diameter 2 in
Well Total Depth 74.00 ft
Screen Length 10 ft
Depth to Water 21.07 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.104302 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 22 in
Total Volume Pumped 11.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 25
Last 5	15:05:26	3900.04	17.89	6.69	653.15	5.18	22.90	0.27	1.50
Last 5	15:10:26	4200.04	17.91	6.70	651.45	5.48	22.90	0.32	1.97
Last 5	15:15:26	4500.04	17.88	6.69	650.70	5.64	22.90	0.30	3.04
Last 5	15:20:26	4800.04	17.89	6.70	651.13	5.17	22.90	0.30	3.14
Last 5	15:25:26	5100.04	17.85	6.69	650.36	4.93	22.90	0.27	4.02
Variance 0			-0.03	-0.02	-0.75			-0.01	1.07
Variance 1			0.01	0.01	0.43			-0.00	0.10
Variance 2			-0.04	-0.00	-0.76			-0.03	0.89

Notes

Sampled at 15:25. Cloudy, 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 13:16:55

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Yates
Site Name Plant Yates - Pond 1
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 465016
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 83 ft

Pump placement from TOC 78 ft

Well Information:

Well ID YGWC-46
Well diameter 2 in
Well Total Depth 83.60 ft
Screen Length 10 ft
Depth to Water 46.04 ft

Pumping Information:

Final Pumping Rate 180 mL/min
Total System Volume 1.191177 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 14 in
Total Volume Pumped 5.15 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 25
Last 5	12:56:04	1200.03	18.32	6.02	1129.61	4.11	47.10	0.49	35.98
Last 5	13:01:04	1500.03	18.37	6.00	1126.46	2.91	47.20	0.40	45.34
Last 5	13:06:04	1800.03	18.45	6.00	1126.28	2.75	47.20	0.37	51.79
Last 5	13:11:04	2100.03	18.47	5.99	1121.38	2.56	47.20	0.35	56.84
Last 5	13:16:04	2400.03	18.52	5.99	1121.84	2.30	47.20	0.34	60.18
Variance 0			0.08	-0.00	-0.18			-0.03	6.45
Variance 1			0.03	-0.01	-4.90			-0.01	5.05
Variance 2			0.05	-0.01	0.46			-0.01	3.34

Notes

Sampled at 13:16. Cloudy, 60's.

Grab Samples

Well Inspection Form - Well Inspection Criteria

Date: 3/16/20
Staff: H. Auld

1 - Location/Identification

- a Is the well visible and accessible?
- b Is the well properly identified with the correct well ID?
- c Does the well require protection from traffic?
- d Is the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)

2 - Protective Outer Casing

- a Is the protective casing free from apparent damage?
- b Is the casing free of degradation or deterioration?
- c Does the casing have a functioning weep hole?
- d Is the annular space between casings filled with pea gravel or sand?
- e Is the well locked, and is the lock in good working condition?

3 - Surface Pad

- a Is the well pad in good condition? (Not cracked or broken)
- b Does the well pad provide adequate surface seal and stability to the well?
- c Is the well pad in complete contact with the protective casing?
- d Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal burrows, and does not move when stepped on)
- e Is the pad surface clean? (Not covered by soil or debris)

4 - Internal Well Casing

- a Does the well cap prevent entry of foreign material into the well?
- b Is the casing free of kinks or bends, or any obstruction from foreign objects ?
- c Does the PVC casing move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction?

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

- a Achieve the objectives of the facility Ground Water Monitoring Program?
- b Comply with the applicable regulatory requirements?

Well Inspection Form - Corrective Actions & Summary

Well ID

Y6WC-36	Deficiency Noted: <i>Vegetation overgrowing well pad</i>
	Action Taken: <i>Clean off well/pad</i>
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
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	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:

Well ID

Corrective Action Still Needed

	Deficiency Noted:
	Deficiency Noted:
	Deficiency Noted:
	Deficiency Noted:
	Deficiency Noted:

Summary

Initials: *HA*

All monitoring wells are in good condition and any needed repairs have been made

Initials:

Further corrective action is still needed - see list above

Staff: *H. Auld*

Signature: *H. Auld*
CR

Date: *3/16/26*

Well Inspection Form - Well Condition Log

Date: 3/16/20

Initials: HA

Well ID	Good Condition All Criteria Met	Deficiencies	Corrective Action Taken	Corrective Action Still Needed
YAMW-2	✓			
YAMW-3	✓			
YAMW-4	✓			
YAMW-5	✓			
YAMW-6	✓			
YAMW-7	✓			
YGWA-39	✓			
YGWA-40	✓			
YGWA-47	✓			
YGWC-36			✓	
YGWC-38	✓			
YGWC-41	✓			
YGWC-42	✓			
YGWC-43	✓			
YGWC-44	✓			
YGWC-45	✓			
YGWC-46	✓			
YGWC-49	✓			
PZ-37	✓			
PZ-51	✓			

Check all appropriate boxes above. On the following page, provide details for any deficiencies and corrective actions taken. If any repairs could not be made, list them in the corrective actions still needed table.

APPENDIX C

Well Installation Report



Georgia Power Company
Plant Yates – AP-1
Newnan, Georgia
Coweta County

Groundwater Monitoring Well
Installation Report



ATLANTIC COAST
CONSULTING, INC.

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Cover Sheet

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Professional Geologist Certification

I, Evan B. Perry, certify that I am a qualified groundwater scientist as demonstrated by a Georgia state registered professional geologist certification. I have sufficient training and experience in groundwater hydrology and related fields to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that the data in this report have been prepared by me or a subordinate working under my direction.



Evan B. Perry, P.G.
Georgia P.G. Registration Number 1744

1.0 Introduction

Plant Yates is located at 708 Dyer Road, on the east bank of the Chattahoochee River in Coweta County, Georgia near the Coweta and Carroll County line, approximately 8 miles northwest of the city of Newnan and 13 miles southeast of the city of Carrollton. Plant Yates occupies approximately 2,400 acres. Plant Yates, once a coal fired, power generation facility, was converted to natural-gas-combustion turbines. The aerial extent of Ash Pond 1 is 23.44 acres. The unit has been closed by removal. The objective of this report is to document the installation of two new downgradient groundwater monitoring network wells, YGWC-46A and YGWC-52 and the abandonment of former locations YGWC-46 and YAMW-7. Figure 1, Plant Yates AP-1 Well Location Map, depicts the configuration of AP-1 and the location of the monitoring wells.

2.0 Drilling and Well Installation

The groundwater monitoring system is designed and installed according to accepted industry standards and following guidelines within the Manual for Groundwater Monitoring (GA EPD, 1991). The location and depths of the monitoring wells were selected based on the characterization of site-specific hydrogeologic conditions by a qualified professional engineer and geologist. The installation date, location, elevation, screen interval, and designation for YGWC-46A and YGWC-52 are provided in the following sections. A well location map is shown on Figure 1. Boring and Well Construction logs for YGWC-46A and YGWC-52, are included in Appendix A, Boring and Well Construction Logs.

2.1 Drilling Method

Groundwater monitoring wells were installed by Cascade Environmental, LP and SCS Civil Field Services. Drilling was completed using roto sonic drilling techniques.

2.2 Screened Interval

Groundwater wells YGWC-46A and YGWC-52 are screened in shallow bedrock and constructed with 10 feet of screen. The screened interval for YGWC-46A is at approximately the same elevation and in the same lithology as former location YGWC-46.

2.3 Well Casing and Screens

The wells are constructed of 2-inch diameter ASTM Schedule 40 PVC casing affixed to a pre-packed dual-wall slotted PVC screen. The casing and pre-packed screen arrived pre-cleaned and packaged by the manufacturer. Well construction materials are sufficiently durable to resist chemical and physical degradation and not interfere with the quality of groundwater samples. Casing and screen sections are flush-threaded. Solvent or glue was not used to construct the wells. Casing and screen sections are flush-threaded. Wells were constructed in accordance with accepted industry standards and following guidelines within the Manual for Groundwater Monitoring (GA EPD, 1991).

2.4 Well Intake Design

The wells were designed and constructed to: (1) allow sufficient groundwater flow to the well for sampling; (2) minimize the passage of formation materials (turbidity) into the wells; and (3) ensure sufficient structural integrity to prevent collapse of the well. The well is screened using 0.010-inch

slotted PVC pre-packed dual-wall well screen. The well screen is 10 feet nominal length. The pre-packed dual-wall well screens combines a centralized inner well screen, a void for site-specific filter sand pack, and an outer conductor screen in one integrated unit. Based on the nature of deposits, the screen will retain at least 90 percent of the filter pack and 40 percent of the formation.

2.5 Filter Pack

A filter pack sand size #1A was used. This size sand is a 14-30 sieve range, medium fine well-rounded quartz (silica) sand with a uniformity coefficient of 1.6. Filter pack material was placed within the pre-packed dual-wall well screens and in the annular space between the outside of the pre-pack screen and borehole wall to ensure an adequate thickness of filter pack material between the well and the formation. Filter pack material placed in the annular space outside of the well screen extends approximately 2 feet above the top of the screens. No bridging occurred during filter pack placement.

After placing the filter pack, the wells were pumped to ensure settlement of the filter pack, prior to installing the annular seal. The depth of top of filter pack was measured and recorded in the well construction log provided in Appendix A.

2.6 Annular Seal

A minimum of two feet of hydrated sodium bentonite overlies the filter pack. A cement and bentonite grout mix of 94/6 cement/bentonite was used as the annular sealant above the bentonite seal. The grout mixture was placed using the tremie method. A cement apron 4-feet by 4-feet by 4-inches was poured around each well. The pad is mounded slightly outward to direct surface drainage away from the well.

2.7 Cap and Protective Casing

The well risers are fitted with a locking cap and a lockable cover. A one-quarter inch vent hole in the PVC riser pipe provides an avenue for the escape of gas. The protective cap guards the casing from damage and the locking cap serves as a security device to prevent well tampering. Bollards were installed around the four corners of the concrete pad to protect the well.

Wells are clearly marked with signs with the proper designation. A weep hole was drilled in the outer protective casing near the bottom above the concrete pad. Pea gravel was placed inside the protective casing between the riser pipe and the outer casing. Wells are clearly marked with the proper well identification number on the stand-up casing.

3.0 Well Development

The assessment monitoring wells were developed using a combination of surging and pumping to (1) restore the natural hydraulic conductivity of the formation, and (2) to remove fine-grained sediment to ensure low-turbidity groundwater samples. The well was alternately surged and purged until visually clear of particulates. Turbidity, pH, temperature, and conductivity measurements, ORP and DO were made to ensure that each well was fully developed. The development form is included in Appendix B, Well Development Form. All equipment and tubing placed in the wells was decontaminated or new.

4.0 Well Abandonment

Two wells (YAMW-7 and YGWC-46) were abandoned during field operations. The screened intervals were filled with coated bentonite pellets. Placement of bentonite was monitored with a tag line to verify placement and that no bridging occurred. The remainder of the pipe was filled with a bentonite grout slurry with tremie pipe progressing from the bottom to the top. The depths to bottom of the well casings and depths to water were measured prior to abandonment. Documentation for the well abandonments is included in Appendix C.

5.0 Survey

The assessment monitoring well locations and top of casing (TOC) elevations were surveyed by Arcadis. Northings and eastings are in feet relative to Georgia State Plane West NAD83. Elevations are referenced in feet NAVD88. A Georgia Registered Land Surveyor certified report for Plant Yates is provided in Appendix D. Monitoring wells and piezometers associated with AP-1 are provided in Exhibit 2 of the report.

6.0 General References

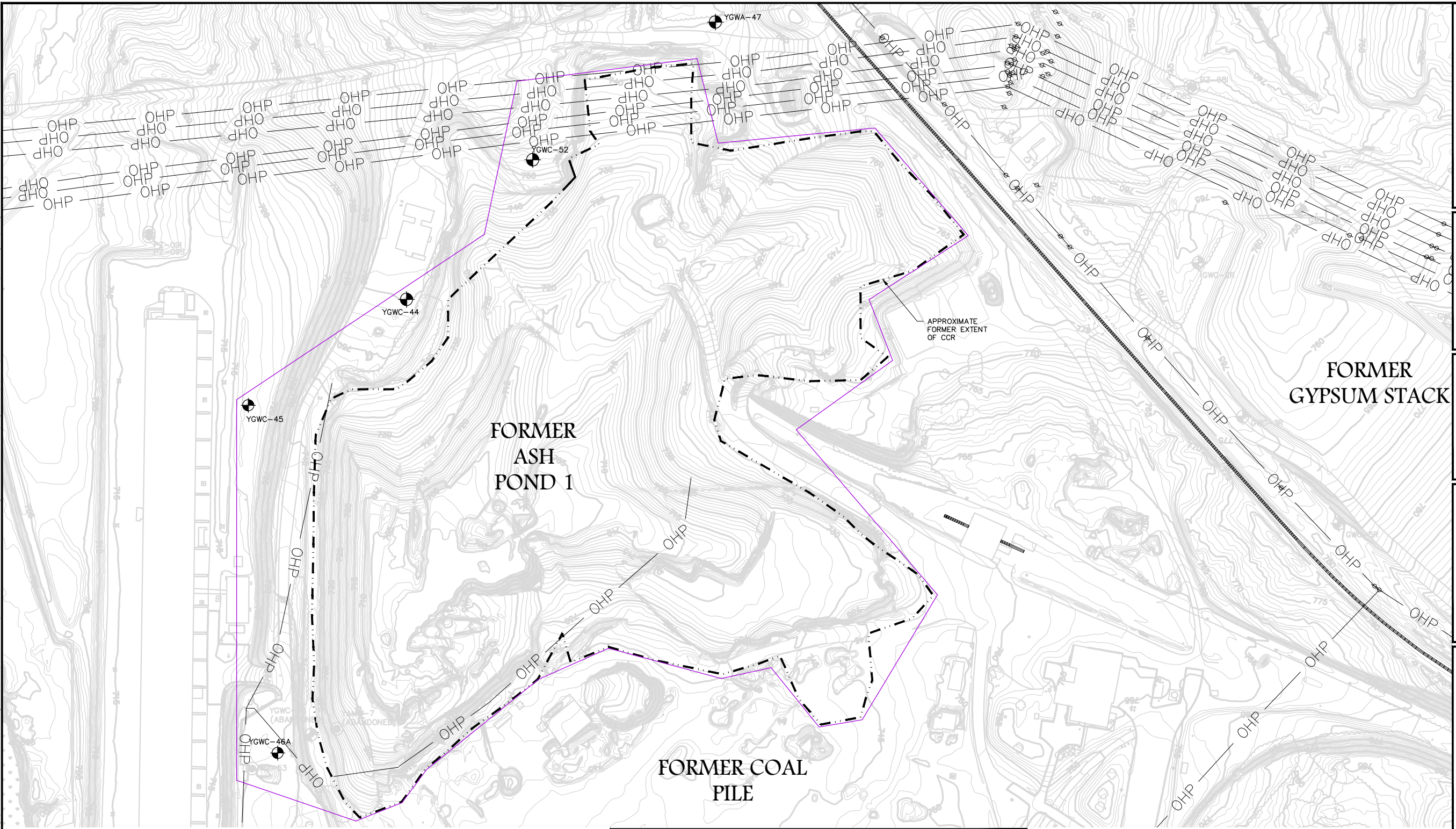
Georgia Environmental Protection Division, Georgia Department of Natural Resources. Manual for Groundwater Monitoring, September 1991.

FIGURE

\\atlantia\Projects\Industrial\054-Southern Company\10-Groundwater Consulting Services\Plant Yates\2020 AP-1 Network Monitoring Well Installation (May-June)\DWG\054-107-999-AP1 (GWP Figure).dwg 2020-07-17 EVAN PERRY



ATLANTIC COAST CONSULTING, INC.
 1150 Northmeadow Pkwy
 Suite 100
 Roswell, GA 30076
 o 770.594.5998
 www.atlcc.net



PROJECT:
 PLANT YATES
 ASH POND 1

708 DYER ROAD
 NEWNAN, GEORGIA

REVISIONS
 1. Revised CCR Limits 06/19/2020

Drawn by: MM Checked by: EP

PROJECT NUMBER:
 1054-110
 June 2020

MONITORING WELL NETWORK
 FIGURE 1

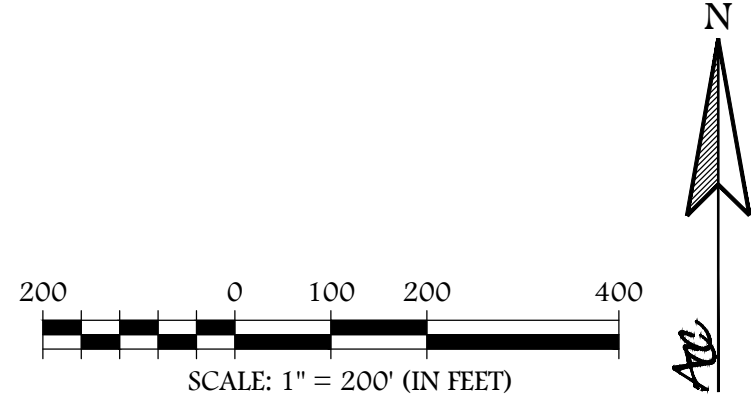
GROUNDWATER MONITORING WELLS							
WELL NAME	NORTHING	EASTING	WELL DEPTH (FT BTOC)	TOP OF CASING ELEVATION	WELL SCREEN ELEVATION	DEPTH TO GROUND-WATER (FT BTOC)	GROUNDWATER ELEVATION
YGWA-47	1262411.84	2071818.05	59.50	758.22	699.5 - 709.5	32.58	725.64
YGWC-44	1261874.34	2071219.39	90.00	758.35	670.0 - 680.0	48.42	709.93
YGWC-45	1261668.95	2070912.60	74.00	719.36	646.5 - 656.5	21.03	698.33
YGWC-46A	1260994.59	2070970.30	73.73	733.04	662.3 - 672.3	NA	NA
YGWC-52	1262145.22	2071464.36	82.01	755.86	676.6 - 686.6	NA	NA

FT BTOC = FEET BELOW TOP OF CASING. ELEVATION DATA ARE FEET NAVD88.
 DEPTHS TO GROUNDWATER MEASURED MARCH 16, 2020.
 NA = NOT AVAILABLE (WELL INSTALLED MAY - JUNE 2020)

NOTE:
 TOPOGRAPHIC SURVEY DATED MAY 26, 2017.

LEGEND:

EX. PROMINENT CONTOUR	PROMINENT CONTOUR
EX. INTERMEDIATE CONTOUR	INTERMEDIATE CONTOUR
GROUNDWATER CONTOUR	GROUNDWATER WELL
RAILROAD TRACK	FORMER LIMITS OF WASTE DISPOSAL
WETLANDS	PERMIT BOUNDARY



APPENDICES

APPENDIX A

BORING AND WELL CONSTRUCTION LOGS

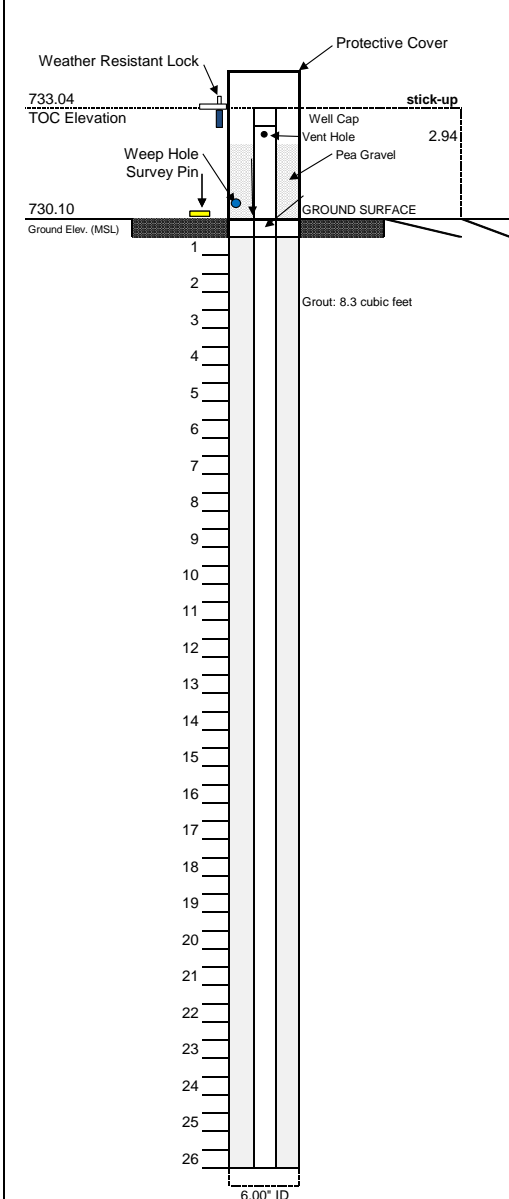


ATLANTIC COAST CONSULTING, INC.

YGWC-46A

BORING ID

PROJECT:	Plant Yates	PROJECT NO.:	I054-110
TOTAL DEPTH:	70.79 ft. BGS	SITE LOCATION:	Newnan, Georgia
DATE BEGIN:	1-Jun-2020	DRILLER:	Issac Young
DATE COMPLETE:	2-Jun-2020	RIG TYPE:	T-300 Rotosonic
INSTALLED BY:	Cascade	METHOD:	Rotosonic
SUPERVISED BY:	Jordan Berisford		
WATER 1ST ENCOUNTERED:	NA		
WATER AFTER 48 HOURS:	40.86' BTOC		



Northing: 1260994.59
 Easting: 2070970.30
SURFACE COMPLETION:
 4"x4" Aluminum Protective Casing
 4"x4"x4" Concrete Pad
 Weather Resistant Lock
 Survey Pin
SOIL DESCRIPTION
 0-13' Hydrovac. No observable cuttings

Core Photos

13'-20' (SM) Silty Sand
 Light Grey (10YR 7/2), soft, moist, non-cohesive, non-plastic, well sorted

 20'-24' (SM) Silty Sand
 Pale brown (2.5Y 7/3), dry, soft, non-plastic, non-cohesive, trace brittle micaceous rock

 24'-29' (SM) Silty Sand
 Same as above, increase in brittle micaceous rock (5-10%) fine- coarse gravel, poorly sorted, sub-angular



MATERIALS:

GROUT: MANUFACTURER:		Bentonite Grout AquaGuard
BENTONITE SEAL: MANUFACTURER:		3/8" Bentonite Pellets Pel-Plug
FILTER PACK SAND: MANUFACTURER:		20/30 Mesh Southern Products
WELL SCREEN: MANUFACTURER: SLOT SIZE:		Sch. 40 - 2" PVC Campbell Monoflex 0.010-Inch Slot
WELL CASING: MANUFACTURER:		Sch. 40 - 2" PVC Campbell Monoflex

Soil Descriptions from Unified Soil Classification System

BTOC - Below Top of Casing
 ID - Inside Diameter; OD - Outside Diameter
 MSL - Mean Sea Level
 BGS - Below Ground Surface

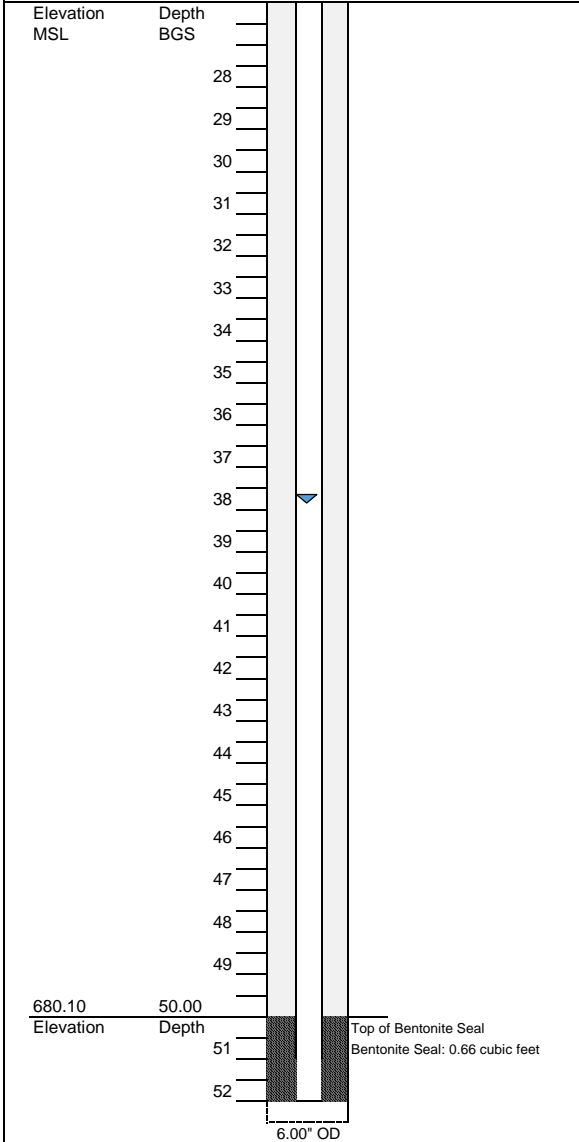


ATLANTIC COAST CONSULTING, INC.

YGWC-46A

BORING ID

PROJECT:	Plant Yates	PROJECT NO.:	1054-110
TOTAL DEPTH:	70.79 ft. BGS	SITE LOCATION:	Newnan, Georgia
DATE BEGIN:	1-Jun-2020	DRILLER:	Issac Young
DATE COMPLETE:	2-Jun-2020	RIG TYPE:	T-300 Rotosonic
INSTALLED BY:	Cascade	METHOD:	Rotosonic
SUPERVISED BY:	Jordan Berisford		
WATER 1ST ENCOUNTERED:	NA		
WATER AFTER 48 HOURS:	40.86' BTOC		



29'-39'
 No sample collected, rods became stuck and the drillers had to flush the rods to get them released. Samples lost while flushing rods.

39'-46'
 Very hard competent rock. Geniss banding-no schist, little fractures, no iron staining present (5/7)

46'-49'
 same as above, increase fractures, a little iron staining present. (3/3) schist present

49'- 53'
 Same as above (4/5)



MATERIALS:

GROUT:		Bentonite Grout
MANUFACTURER:		AquaGuard
BENTONITE SEAL:		3/8" Bentonite Pellets
MANUFACTURER:		Pel-Plug
FILTER PACK SAND:		20/30 Mesh
MANUFACTURER:		Southern Products
WELL SCREEN:		Sch. 40 - 2" PVC
MANUFACTURER:		Silver-Line
SLOT SIZE:		0.010-Inch Slot
WELL CASING:		Sch. 40 - 2" PVC
MANUFACTURER:		Silver-Line

TOC - Top of Casing
 ID - Inside Diameter; OD - Outside Diameter
 MSL - Mean Sea Level
 BGS - Below Ground Surface



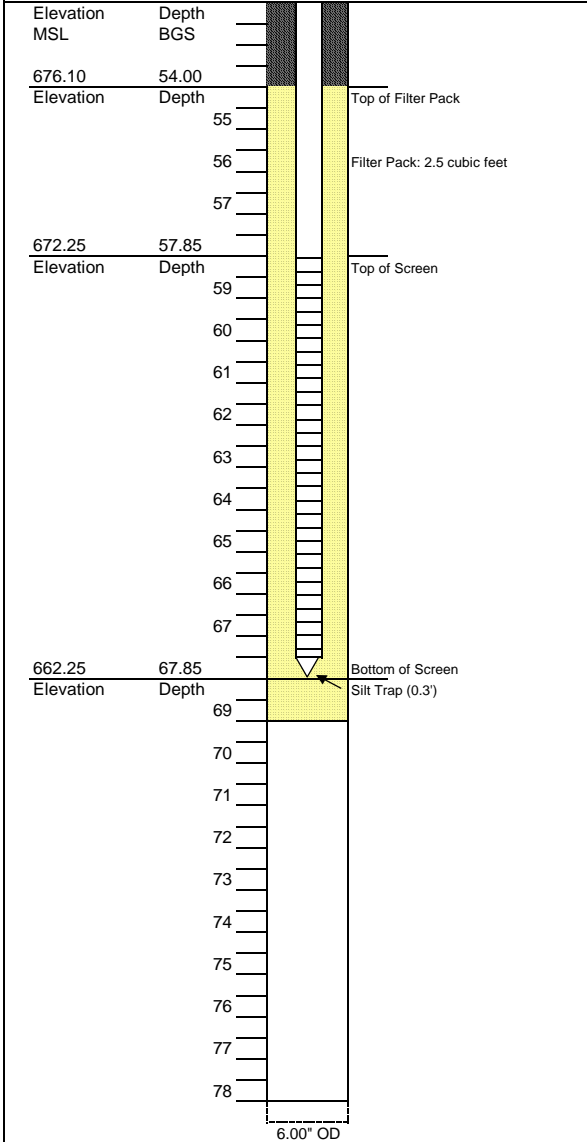
ATLANTIC COAST CONSULTING, INC.

YGWC-46A

BORING ID

PROJECT:	Plant Yates	PROJECT NO.:	I054-110
TOTAL DEPTH:	70.79 ft. BGS	SITE LOCATION:	Newnan, Georgia
DATE BEGIN:	1-Jun-2020	DRILLER:	Issac Young
DATE COMPLETE:	2-Jun-2020	RIG TYPE:	T-300 Rotosonic
INSTALLED BY:	Cascade	METHOD:	Rotosonic
SUPERVISED BY:	Jordan Berisford		

WATER 1ST ENCOUNTERED: NA
WATER AFTER 48 HOURS: 40.86' BTOC



53'-59'
Slightly fractured banded gniess, no iron staining present (6/6)

59'-65'
Increased fractured gniess/schist, no iron staining present
pyrite present in rock (3/6)

65'-66'
Well fractured rock, iron staining present, pyrite present in rock (1/1)

66'-69'
Hard competent gniess/schist, decrease in fractures, pyrite present
in rock, no iron staining (3/3)



Boring Terminated at 69' BGS

MATERIALS:

GROUT:		Bentonite Grout
MANUFACTURER:		AquaGuard
BENTONITE SEAL:		3/8" Bentonite Pellets
MANUFACTURER:		Pel-Plug
FILTER PACK SAND:		20/30 Mesh
MANUFACTURER:		Southern Products
WELL SCREEN:		Sch. 40 - 2" PVC
MANUFACTURER:		Silver-Line
SLOT SIZE:		0.010-Inch Slot
WELL CASING:		Sch. 40 - 2" PVC
MANUFACTURER:		Silver-Line

TOC - Top of Casing
 ID - Inside Diameter; OD - Outside Diameter
 MSL - Mean Sea Level
 BGS - Below Ground Surface



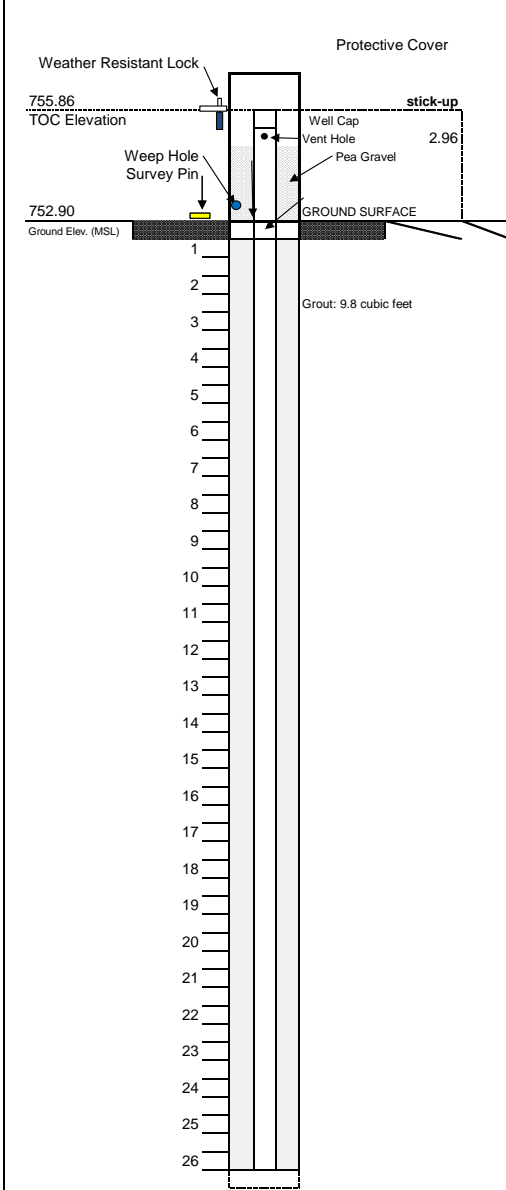
ATLANTIC COAST CONSULTING, INC.

YGWC-52

BORING ID

PROJECT: Plant Yates
 TOTAL DEPTH: 79.05 ft. BTOC
 DATE BEGIN: 27-May-2020
 DATE COMPLETE: 28-May-2020
 INSTALLED BY: Cascade
 SUPERVISED BY: Jordan Berisford
 WATER 1ST ENCOUNTERED: NA
 WATER AFTER 48 HOURS: 35.67' BTOC

PROJECT NO.: I054-110
 SITE LOCATION: Newnan, Georgia
 DRILLER: Isaac Young
 RIG TYPE: T-300 Rotosonic
 METHOD: Rotosonic



Northing: 1262145.22
 Easting: 2071464.36

SURFACE COMPLETION:
 4"x4" Aluminum Protective Casing
 4"x4"x4" Concrete Pad
 Weather Resistant Lock
 Survey Pin

SOIL DESCRIPTION
 0-12' Hydrovac. No observable cuttings

Core Photos

12'-14' (CL) Lean Clay
 Light red (2.5YR 6/8), dry, mica present (~25%), soft, cohesive
 low-medium plasticity, saprolite, trace sand

14'-15' (ML) Silt
 Red (2.5 YR 5/8), mica (~40%), saprolite, cohesive, low plasticity

15'-16' (ML) Silt
 Yellowish red (5YR 5/8), same as above

16'-17' (SM) Silty Sand
 very pale brown (10YR 8/3), dry, cohesive, high plasticity

17'-19' (ML) Sandy Silt with Gravel
 Yellowish red (5YR 5/8), fine-coarse grained sand, fine coarse gravel,
 poorly sorted, well graded, low plasticity

19'-24' (CL) Clean Clay
 Yellowish red (5YR 5/6), cohesive, medium plasticity, mica (30-40%)

24'-27' (ML) Silt
 Pale brown (2.5Y 8/2), dry, non-cohesive, non-plastic



MATERIALS:

GROUT:		Bentonite Grout
MANUFACTURER:		AquaGuard
BENTONITE SEAL:		3/8" Bentonite Pellets
MANUFACTURER:		Pel-Plug
FILTER PACK SAND:		20/30 Mesh
MANUFACTURER:		Southern Products
WELL SCREEN:		Sch. 40 - 2" PVC
MANUFACTURER:		Campbell Monoflex
SLOT SIZE:		0.010-Inch Slot
WELL CASING:		Sch. 40 - 2" PVC
MANUFACTURER:		Campbell Monoflex

Soil Descriptions from Unified Soil Classification System

BTOC - Below Top of Casing
 ID - Inside Diameter; OD - Outside Diameter
 MSL - Mean Sea Level
 BGS - Below Ground Surface



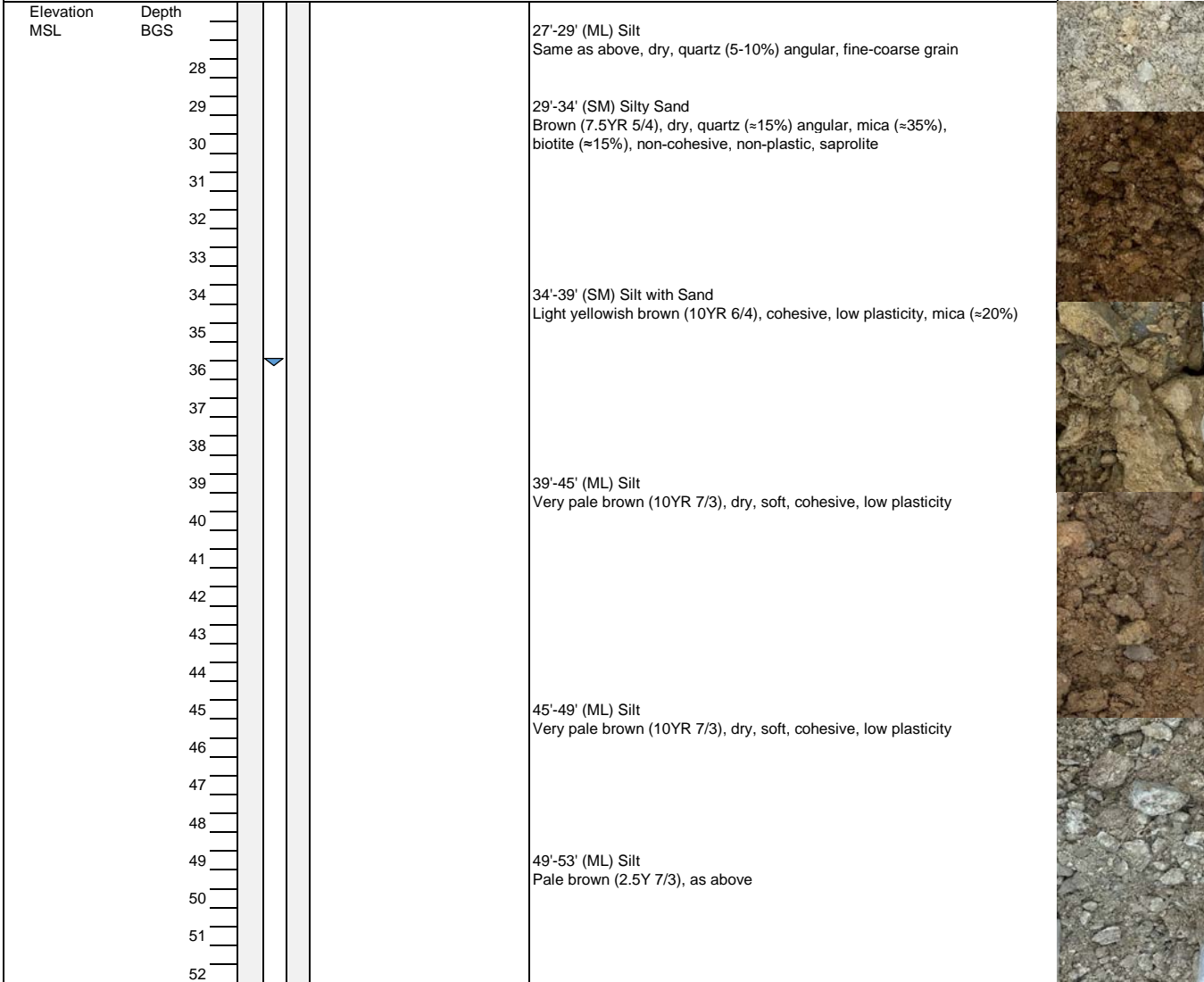
ATLANTIC COAST CONSULTING, INC.

YGWC-52

BORING ID

PROJECT:	Plant Yates	PROJECT NO.:	I054-110
TOTAL DEPTH:	79.05 ft. BTOC	SITE LOCATION:	Newnan, Georgia
DATE BEGIN:	27-May-2020	DRILLER:	Isaac Young
DATE COMPLETE:	28-May-2020	RIG TYPE:	T-300 Rotosonic
INSTALLED BY:	Cascade	METHOD:	Rotosonic
SUPERVISED BY:	Jordan Berisford		
WATER 1ST ENCOUNTERED:	NA		
WATER AFTER 48 HOURS:	35.67' BTOC		

Core Photos



6.00" OD

MATERIALS:

GROUT:		Bentonite Grout
MANUFACTURER:		AquaGuard
BENTONITE SEAL:		3/8" Bentonite Pellets
MANUFACTURER:		Pel-Plug
FILTER PACK SAND:		20/30 Mesh
MANUFACTURER:		Southern Products
WELL SCREEN:		Sch. 40 - 2" PVC
MANUFACTURER:		Silver-Line
SLOT SIZE:		0.010-Inch Slot
WELL CASING:		Sch. 40 - 2" PVC
MANUFACTURER:		Silver-Line

TOC - Top of Casing
 ID - Inside Diameter; OD - Outside Diameter
 MSL - Mean Sea Level
 BGS - Below Ground Surface



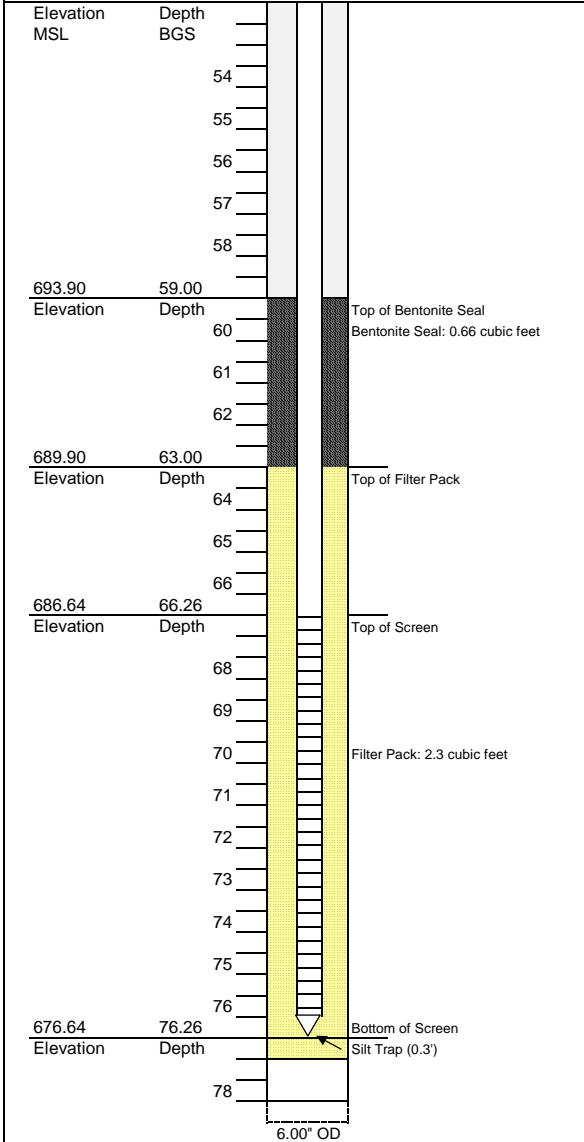
ATLANTIC COAST CONSULTING, INC.

YGWC-52

BORING ID

PROJECT:	Plant Yates	PROJECT NO.:	I054-110
TOTAL DEPTH:	79.05 ft. BTOC	SITE LOCATION:	Newnan, Georgia
DATE BEGIN:	27-May-2020	DRILLER:	Issac Young
DATE COMPLETE:	28-May-2020	RIG TYPE:	T-300 Rotosonic
INSTALLED BY:	Cascade	METHOD:	Rotosonic
SUPERVISED BY:	Jordan Berisford		

WATER 1ST ENCOUNTERED: NA
 WATER AFTER 48 HOURS: 35.67' BTOC



53'-55' (SP) Poorly Graded Sand
 Pale brown (2.5Y 7/3), non-plastic, non-cohesive, soft, well sorted

55'-59' (SP) Poorly Graded Sand
 Pale brown (2.5Y 8/3), non-plastic, non-cohesive, soft, well sorted

59'-61' (ML) Sandy Silt with Gravel
 Pale brown (2.5Y 8/3), low plasticity, cohesive

61'-63' (SW-SM) Well Graded Sand with Silt and Gravel
 Non-plastic, non-cohesive, moderately sorted, sub-angular gravel quartz well graded

63'-69' fractured rock, gneiss with iron staining present

69'-77' fractured metamorphic pegmatite (Unakite) containing epidote, feldspar, and quartz



Boring Terminated at 77' BGS

MATERIALS:

GROUT:		Bentonite Grout
MANUFACTURER:		AquaGuard
BENTONITE SEAL:		3/8" Bentonite Pellets
MANUFACTURER:		Pel-Plug
FILTER PACK SAND:		20/30 Mesh
MANUFACTURER:		Southern Products
WELL SCREEN:		Sch. 40 - 2" PVC
MANUFACTURER:		Silver-Line
SLOT SIZE:		0.010-Inch Slot
WELL CASING:		Sch. 40 - 2" PVC
MANUFACTURER:		Silver-Line

TOC - Top of Casing
 ID - Inside Diameter; OD - Outside Diameter
 MSL - Mean Sea Level
 BGS - Below Ground Surface

APPENDIX B

WELL DEVELOPMENT FORMS

Atlantic Coast Consulting, Inc. Well Development Field Record

Job Name: Plant Yates AP-1 Drilling Job No. I054-110 Well No. YGWC-46A

Developed By: Jordan Berisford Date of Installation 06-01-2020 Sheet 1 of 1

Started Dev.* 06-04-2020 / 0830 Completed Dev. 06-04-2020 / 1400
Date / Time Date / Time

W.L. Before Dev. 37.92 / 06-03-2020 / 1310 After Dev. 51.92 / 06-04-2020 / 1055
BTOC / Date / Time BTOC / Date / Time

Well Depth: Before Dev. 73.73 BTOC After Dev. 73.73 BTOC Well Dia. 2 In.

Standing Water Column (H) 32.88 (Ft.) Standing Well Volume 5.26 Gal.

Screen Length 10 (ft.)

Date / Time	Volume Removed (gals.)	Field Parameters						Remarks	
		Spec. Cond. (umhos/cm)	Temp. (°C)	pH (s.u.)	Turbidity (NTU)	DO (mg/L)	ORP (mV)		
06-04-20/0930	50.7	906	22.3	7.32	122	2.5	28	Surged well with pump	
06-04-20/0935	52.0	907	22.4	7.31	16	2.4	38		
06-04-20/0940	53.3	909	22.5	7.30	8.04	2.3	39		
06-04-20/0945	54.6	906	2.9	7.30	7.74	2.2	29		
06-04-20/0950	55.9	904	23.0	7.30	7.17	2.1	39		
06-04-20/0955	57.2	904	23.0	7.29	102	2.0	39	Surged well with pump	
06-04-20/1000	58.5	906	23.0	7.28	15	1.9	39		
06-04-20/1005	59.8	905	23.0	7.27	7.19	1.8	40		
06-04-20/1010	61.1	905	23.1	7.27	7.01	1.7	40		
06-04-20/1015	62.4	907	23.3	7.25	6.73	1.6	40		
06-04-20/1020	63.7	907	23.4	7.25	6.69	1.6	40		
06-04-20/1030	66.3	909	23.3	7.24	5.24	1.4	32		
06-04-20/1035	67.6	909	23.4	7.23	4.52	1.3	40		
06-04-20/1040	68.9	911	23.6	7.23	3.29	1.3	33		
		Total Volume Removed (gal.): 68.9							

Development Method: Surged pump Q ≈ 0.26 gpm (pre-development); surge blockers and foot valve, Q ≈ 0.26 gpm

The well was pre-developed on 06-03-2020 for 2.25 hours at a rate of 0.26 gpm

Notes:

Low-Flow Test Report:

Test Date / Time: 6/4/2020 9:25:18 AM

Project: Plant Yates - AP 1

Operator Name: J. Berisford

Location Name: YGWC-46A Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 60.8 ft bgs Total Depth: 70.8 ft bgs Initial Depth to Water: 37.92 ft	Pump Type: Whale Pump Tubing Type: Poly Pump Intake From TOC: 65 ft Flow Cell Volume: 90 ml Final Flow Rate: 1000 ml/min Final Draw Down: 22.48 ft Volume Removed: 68.9 Gallons	Instrument Used: Aqua TROLL 400 Serial Number: 714344
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Test Notes:

Sunny, 80s, pre-development on 6-3-2020

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
6/4/2020 9:25 AM	00:00	7.33 pH	22.31 °C	902.44 µS/cm	2.66 mg/L		39.8 mV	59.70 ft	1000 ml/min
6/4/2020 9:30 AM	05:00	7.32 pH	22.35 °C	906.60 µS/cm	2.54 mg/L	122.00 NTU	28.3 mV	59.80 ft	1000 ml/min
6/4/2020 9:35 AM	10:00	7.31 pH	22.44 °C	907.03 µS/cm	2.42 mg/L	16.00 NTU	38.5 mV	59.80 ft	1000 ml/min
6/4/2020 9:40 AM	15:00	7.30 pH	22.59 °C	909.30 µS/cm	2.37 mg/L	8.04 NTU	39.1 mV	59.80 ft	1000 ml/min
6/4/2020 9:45 AM	20:00	7.30 pH	22.98 °C	906.16 µS/cm	2.24 mg/L	7.74 NTU	29.8 mV	59.90 ft	1000 ml/min
6/4/2020 9:50 AM	25:00	7.30 pH	23.05 °C	904.17 µS/cm	2.17 mg/L	7.17 NTU	39.3 mV	59.90 ft	1000 ml/min
6/4/2020 9:55 AM	30:00	7.29 pH	23.06 °C	904.48 µS/cm	2.03 mg/L	102.00 NTU	39.8 mV	59.90 ft	1000 ml/min
6/4/2020 10:00 AM	35:00	7.28 pH	23.07 °C	906.99 µS/cm	1.96 mg/L	15.00 NTU	39.7 mV	60.00 ft	1000 ml/min
6/4/2020 10:05 AM	40:00	7.27 pH	23.09 °C	905.10 µS/cm	1.85 mg/L	7.19 NTU	40.1 mV	60.00 ft	1000 ml/min
6/4/2020 10:10 AM	45:00	7.27 pH	23.15 °C	905.15 µS/cm	1.78 mg/L	7.01 NTU	40.4 mV	60.00 ft	1000 ml/min
6/4/2020 10:15 AM	50:00	7.25 pH	23.37 °C	907.28 µS/cm	1.68 mg/L	6.73 NTU	40.4 mV	60.00 ft	1000 ml/min
6/4/2020 10:20 AM	55:00	7.25 pH	23.42 °C	907.16 µS/cm	1.61 mg/L	6.69 NTU	40.5 mV	60.30 ft	1000 ml/min
6/4/2020 10:25 AM	01:00:00	7.24 pH	23.34 °C	909.46 µS/cm	1.49 mg/L	5.24 NTU	32.4 mV	60.30 ft	1000 ml/min
6/4/2020 10:30 AM	01:05:00	7.23 pH	23.45 °C	906.80 µS/cm	1.39 mg/L	5.05 NTU	40.8 mV	60.40 ft	1000 ml/min
6/4/2020 10:35 AM	01:10:00	7.23 pH	23.40 °C	909.46 µS/cm	1.37 mg/L	4.52 NTU	41.1 mV	60.40 ft	1000 ml/min

6/4/2020 10:40 AM	01:15:00	7.23 pH	23.63 °C	911.67 μ S/cm	1.32 mg/L	3.29 NTU	33.1 mV	60.40 ft	1000 ml/min
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Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 6/3/2020 11:30:07 AM

Project: Plant Yates - AP 1

Operator Name: J. Berisford

Location Name: YGWC-52 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 69.02 ft bgs Total Depth: 79.02 ft bgs Initial Depth to Water: 35.67 ft	Pump Type: Whale Pump Tubing Type: Poly Pump Intake From TOC: 75 ft Flow Cell Volume: 90 ml Final Flow Rate: 3000 ml/min Final Draw Down: 13.3 ft Volume Removed: 192 Gallons	Instrument Used: Aqua TROLL 400 Serial Number: 714344
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Test Notes:

Pre pre-development before starting reading, sunny, 80s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
6/3/2020 11:30 AM	00:00	6.16 pH	18.26 °C	434.35 µS/cm	0.77 mg/L	35.00 NTU	1.6 mV	48.97 ft	3,000.0 ml/min
6/3/2020 11:35 AM	05:00	6.16 pH	18.22 °C	432.20 µS/cm	0.77 mg/L	4.10 NTU	-10.6 mV	48.97 ft	3,000.0 ml/min
6/3/2020 11:40 AM	10:00	6.18 pH	18.21 °C	440.69 µS/cm	0.76 mg/L	3.43 NTU	3.1 mV	48.97 ft	3,000.0 ml/min
6/3/2020 11:45 AM	15:00	6.18 pH	18.16 °C	439.27 µS/cm	0.77 mg/L	4.02 NTU	2.4 mV	48.97 ft	3,000.0 ml/min
6/3/2020 11:50 AM	20:00	6.18 pH	18.07 °C	437.16 µS/cm	0.77 mg/L	3.55 NTU	2.6 mV	48.97 ft	3,000.0 ml/min
6/3/2020 11:55 AM	25:00	6.19 pH	18.20 °C	438.14 µS/cm	0.77 mg/L	3.59 NTU	2.5 mV	48.97 ft	3,000.0 ml/min
6/3/2020 12:00 PM	30:00	6.18 pH	18.17 °C	436.85 µS/cm	0.78 mg/L	4.05 NTU	2.5 mV	48.97 ft	3,000.0 ml/min

Samples

Sample ID:	Description:
------------	--------------

APPENDIX C

WELL ABANDONMENT FORMS



ATLANTIC COAST CONSULTING, INC.
 630 Colonial Park Drive
 Suite 110
 Roswell, GA 30075
 o 770.594.5998
 f 770.594.5967
 www.aticc.net

Well Abandonment Documentation Form

General Information

Project Name	Plant Yates AP-1	Inspector	Jordan Berisford	Well Id.	YGWC-46
Project Number	I054-110	Weather	Sunny	Sheet	1 of 1
Drilling Company	Cascade	Temperature	75° F	Started	5/28/2020
Client Name	Georgia Power	Driller	Isaac Young	Completed	5/28/2020

Well Construction Information

Well Depth (ft)	83.35'	Screen Type	Schedule 40 PVC	Grout Type	Bentonite grout
Well Casing Dia.	2" L.F. 73.35'	Slot Size (in.)	0.010" Slotted	End Cap/Sump	0.3" Silt Trap
Casing Type	Schedule 40 PVC	Pack Type & Size	#1 Type Sand	Protective	4"x4" Aluminum
Joint Type	Flush Threaded	Seal Type	Bentonite chips and pellets	Casing	casing
Well Screen Dia.	2" L.F. 10'			Well Pad Size	4'x4'x4"

Abandonment Procedures and Volumes

Expected Grout Volume = 1.3ft³	Actual Grout Volume = 1.4ft³
Grout Mixture: ~16 lbs Portland/water	
Note: DTW - 46.91' BTOC	TD - 83.35' BTOC

- Drillers filled the well in place with coated pellets up to 62.17' BGS.
- Drillers grouted to ground surface with a bentonite grout slurry from the bottom up to ground surface using tremie pipe.
- Removed bollards, well casing and well pad
- Grouted back to the surface and covered the area with soil

Notes:

No obstruction noted.

Removed pump prior to abandonment; sealed and stored in a new trash bag and placed in the conex on site.

APPENDIX D
WELL SURVEY DATA

Mr. Joju Abraham
Southern Company
Environmental Solutions
241 Ralph McGill Blvd, NE
Atlanta, Georgia 30308

Arcadis U.S., Inc.
1210 Premier Drive
Suite 200
Chattanooga
Tennessee 37421
Tel 423 756 7193
Fax 423 756 7197
www.arcadis-us.com

Subject:
Monitoring Well and Piezometer Surveys
Plant Yates, 708 Dyer Road, Newnan, Georgia

Date:
June 29, 2020

Dear Mr. Abraham:

Contact:
Cory Williams, PLS

Attached is a copy of the reports for the Monitoring Well and Piezometer Surveys for the Phase I and Phase II Sites at Plant Yates. The Phase I and Phase II sites surveyed include the following specific areas:

Phone:
919.415.2348

- AMA, Ash Management Area
- AP-1, Former Ash Pond 1
- AP-2, Ash Pond 2
- Gypsum Landfill

Email:
cory.williams@arcadis.com

We appreciate the opportunity to work with Georgia Power and look forward to working with you in the future. If you need additional information, please feel free to contact me.

Our ref:
30054533

Sincerely,

Arcadis U.S., Inc.



A. Cory Williams, PLS
Survey Department Manager

Attachments

Copies:
Geoffrey Gay, PE
Rick Helmadollar, PE
A. Lee Robertson IV, PLS

DESCRIPTION AND SCOPE

The task included performing horizontal and vertical field survey locations of the existing well networks (including all monitoring wells and piezometers). The Arcadis field survey team obtained horizontal and vertical locations for the top of the well casing (TOC) and surveyed the nail located on the concrete pad around the well. Where no nail was present, the field crew surveyed the top of the concrete well pad. The Arcadis field team utilized a combination of Leica GS16 Global Positioning System (GPS) with traditional Leica MS60 Robotic Total Station field survey equipment and methods to obtain horizontal locations of the TOC and/or nail or top of the concrete well pad. All horizontal field survey locations are relative to the Georgia State Plane Coordinate System, West Zone, NAD1983, US Survey Feet. All horizontal locations meet or exceed an accuracy level of 0.50 foot. All vertical field survey locations were obtained from a level loop, performed with the Leica DNA03 digital level. Next, we began from a benchmark set, by utilizing GPS Static Session with an OPUS solution and subsequently verified via the eGPS RTN Network and ran through all well and piezometer locations to close on the beginning benchmark to confirm accuracy. All vertical elevations are referenced to NAVD1988, US Survey Feet and meet an accuracy standard of 0.01 foot.

See the attached exhibits detailing the Monitoring Well and Piezometer surveyed locations for each Phase I and Phase II site.

SUMMARY

The field survey crew performed the survey in June 2020 with the findings or observations summarized below:

- The ground elevation survey location was taken adjacent to the concrete base point (PK, Disk or Chiseled X). Note that at some locations, the concrete base was buried under soil; consequently, the ground elevation is higher than the concrete base point location.
- The horizontal location for monitoring well GWC-6R at the Gypsum Landfill is approximately +/-51 feet southeasterly of the provided coordinate location as detailed in “Georgia Power Company Plant Yates, Private Industrial Landfill, Permit No. 038-014D (I), Replacement Monitoring Well GWC-6R Certification, ES1703”, dated July 2010. See attached Photograph Log.

Monitoring Well Summary

Site	Monitoring Wells	Piezometers
AMA = Ash Management Area	25	8
AP-1 = Former Ash Pond 1	5	5
AP-2 = Ash Pond 2	14	8
Gypsum Landfill	7	0

CERTIFICATION

I, A. Lee Robertson IV, being a Georgia Licensed Professional Land Surveyor, in accordance with the Georgia Board of Professional Engineers and Land Surveyors do hereby certify that the information contained herein is true and correct and has been prepared in accordance with generally accepted good land survey practices under my supervision, and the data is reliable to a horizontal accuracy of 0.5 foot and an elevational accuracy of 0.01 foot for each surveyed point.

FINAL REVIEW:

A. Lee Robertson IV

DATE: June 29, 2020

A. Lee Robertson IV, ARM, PLS, PSM
1301 Riverplace Blvd., Suite 700
Jacksonville, FL 32207
904.493.8589

EXHIBIT 1



Plant Yates – AMA Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWA-4I	Casing	784.21	1254436.68	2075455.62	33° 26' 47.432" N	84° 53' 29.831" W
	Disk	782.00	1254436.75	2075456.65		
	Ground	781.9				
YGWA-5I	Casing	784.54	1254399.95	2076218.86	33° 26' 47.122" N	84° 53' 20.821" W
	Disk	782.21	1254400.71	2076219.39		
	Ground	782.1				
YGWA-5D	Casing	784.53	1254396.67	2076223.63	33° 26' 47.089" N	84° 53' 20.764" W
	Disk	782.16	1254397.45	2076224.30		
	Ground	781.9				
YGWA-17S	Casing	783.05	1257602.79	2076758.31	33° 27' 18.846" N	84° 53' 14.717" W
	PK Nail	780.14	1257603.70	2076758.38		
	Ground	780.2				
YGWA-18S	Casing	790.57	1257116.05	2077015.25	33° 27' 14.048" N	84° 53' 11.644" W
	PK Nail	787.69	1257116.98	2077015.60		
	Ground	787.6				
YGWA-18I	Casing	790.57	1257090.05	2077015.82	33° 27' 13.791" N	84° 53' 11.635" W
	PK Nail	787.90	1257094.38	2077023.55		
	Ground	787.9				
YGWA-20S	Casing	767.12	1255531.55	2077410.37	33° 26' 58.399" N	84° 53' 06.851" W
	PK Nail	764.41	1255531.12	2077409.22		
	Ground	764.6				
YGWA-21I	Casing	783.70	1255538.27	2076768.14	33° 26' 58.421" N	84° 53' 14.432" W
	PK Nail	780.62	1255537.44	2076768.81		
	Ground	780.8				
YGWC-23S	Casing	764.91	1256366.93	2074734.07	33° 27' 06.479" N	84° 53' 38.506" W
	PK Nail	761.74	1256367.40	2074734.44		
	Ground	762.0				
YGWC-24SA	Casing	765.00	1258907.98	2073924.81	33° 27' 31.563" N	84° 53' 48.268" W
	PK Nail	762.08	1258909.02	2073924.05		
	Ground	762.0				
YGWC-36	Casing	739.61	1258514.02	2073770.14	33° 27' 27.654" N	84° 53' 50.061" W
	PK Nail	737.04	1258513.74	2073771.01		
	Ground	736.9				
YGWC-49	Casing	782.73	1259375.23	2074337.51	33° 27' 36.214" N	84° 53' 43.435" W
	PK Nail	780.11	1259375.91	2074337.14		
	Ground	780.1				

EXHIBIT 1



Plant Yates – AMA Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWA-6S	Casing	782.47	1260484.87	2074786.49	33° 27' 47.223" N	84° 53' 38.227" W
	Disk	780.06	1260485.50	2074785.70		
	Ground	779.8				
YGWA-6I	Casing	782.73	1260490.02	2074790.49	33° 27' 47.275" N	84° 53' 38.181" W
	Disk	780.36	1260490.74	2074789.66		
	Ground	780.2				
YAMW-1	Casing	743.83	1258602.12	2073814.55	33° 27' 28.529" N	84° 53' 49.543" W
	PK Nail	741.11	1258602.93	2073815.29		
	Ground	740.9				
PZ-04S	Casing	784.25	1254442.86	2075454.20	33° 26' 47.493" N	84° 53' 29.848" W
	Disk	781.94	1254443.16	2075455.15		
	Ground	781.8				
PZ-05S	Casing	784.64	1254404.42	2076211.43	33° 26' 47.165" N	84° 53' 20.909" W
	Disk	782.31	1254405.12	2076212.12		
	Ground	782.2				
PZ-06D	Casing	782.02	1260480.15	2074782.68	33° 27' 47.176" N	84° 53' 38.272" W
	Disk	779.65	1260480.84	2074782.04		
	Ground	779.5				
PZ-24IA	Casing	764.65	1258910.76	2073930.07	33° 27' 31.591" N	84° 53' 48.206" W
	PK Nail	761.89	1258911.68	2073929.64		
	Ground	761.8				
PZ-35	Casing	743.81	1258593.16	2073805.60	33° 27' 28.440" N	84° 53' 49.649" W
	PK Nail	741.09	1258593.85	2073806.06		
	Ground	740.9				
PZ-48	Casing	779.83	1259868.04	2074528.00	33° 27' 41.103" N	84° 53' 41.228" W
	PK Nail	777.29	1259868.75	2074527.27		
	Ground	777.2				
YGWA-39	Casing	818.19	1255717.13	2073865.58	33° 26' 59.990" N	84° 53' 48.702" W
	PK Nail	815.58	1255717.96	2073865.39		
	Ground	815.6				
YGWA-40	Casing	815.73	1255791.95	2073431.34	33° 27' 00.700" N	84° 53' 53.833" W
	PK Nail	813.45	1255792.83	2073431.58		
	Ground	813.5				

EXHIBIT 1



Plant Yates – AMA Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWC-38	Casing	799.69	1256108.38	2074446.80	33° 27' 03.901" N	84° 53' 41.875" W
	PK Nail	797.24	1256108.41	2074446.02		
	Ground	797.1				
YGWC-41	Casing	803.92	1256510.62	2073274.41	33° 27' 07.799" N	84° 53' 55.745" W
	PK Nail	801.23	1256509.74	2073274.29		
	Ground	801.1				
YGWC-42	Casing	797.86	1256882.87	2073326.52	33° 27' 11.486" N	84° 53' 55.161" W
	PK Nail	795.34	1256881.68	2073326.58		
	Ground	795.1				
YGWC-43	Casing	744.96	1257547.41	2073199.65	33° 27' 18.052" N	84° 53' 56.714" W
	PK Nail	742.50	1257546.78	2073200.55		
	Ground	742.3				
PZ-37	Casing	760.78	1256471.14	2074699.59	33° 27' 07.508" N	84° 53' 38.922" W
	PK Nail	758.10	1256471.89	2074700.06		
	Ground	758.0				
PZ-51	Casing	744.30	1257595.80	2073182.55	33° 27' 18.529" N	84° 53' 56.920" W
	PK Nail	741.23	1257595.53	2073181.53		
	Ground	741.3				
YAMW-2	Casing	781.04	1256780.59	2072924.89	33° 27' 10.446" N	84° 53' 59.893" W
	PK Nail	777.81	1256781.38	2072926.79		
	Ground	777.9				
YAMW-3	Casing	796.05	1256915.25	2073345.21	33° 27' 11.808" N	84° 53' 54.943" W
	PK Nail	792.98	1256914.96	2073344.24		
	Ground	793.2				
YAMW-4	Casing	805.59	1256532.64	2073280.71	33° 27' 08.018" N	84° 53' 55.673" W
	PK Nail	802.60	1256532.72	2073281.78		
	Ground	802.6				
YAMW-5	Casing	788.90	1256140.21	2074486.69	33° 27' 04.219" N	84° 53' 41.407" W
	PK Nail	785.87	1256139.54	2074487.44		
	Ground	785.9				

Notes:

NAD83(2011) coordinates established by utilizing eGPS VRS & OPUS Solutions

Elevations derived from Arcadis BM#1 (El. 758.24)

Elevations & coordinates are U.S. Survey feet

EXHIBIT 2



Plant Yates – AP-1 Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWA-47	Casing	758.22	1262411.84	2071818.05	33° 28' 06.081" N	84° 54' 13.428" W
	PK Nail	755.73	1262410.74	2071817.99		
	Ground	755.6				
YGWC-44	Casing	758.35	1261874.34	2071219.39	33° 28' 00.721" N	84° 54' 20.449" W
	PK Nail	755.7	1261874.44	2071218.47		
	Ground	755.5				
YGWC-45	Casing	719.36	1261668.95	2070912.60	33° 27' 58.667" N	84° 54' 24.053" W
	PK Nail	716.72	1261668.87	2070911.87		
	Ground	716.5				
YGWC-52	Casing	755.86	1262145.22	2071464.36	33° 28' 03.418" N	84° 54' 17.580" W
	PK Nail	752.99	1262144.65	2071465.21		
	Ground	752.9				
YGWC-46A	Casing	733.04	1260994.59	2070970.30	33° 27' 52.000" N	84° 54' 23.316" W
	PK Nail	730.16	1260994.40	2070971.40		
	Ground	730.1				
PZ-09S	Casing	712.08	1262003.49	2070720.43	33° 28' 01.963" N	84° 54' 26.350" W
	Disk	709.90	1262003.23	2070721.54		
	Ground	709.8				
PZ-09I	Casing	712.13	1261995.81	2070720.09	33° 28' 01.887" N	84° 54' 26.353" W
	Disk	709.92	1261995.51	2070721.11		
	Ground	709.8				
PZ-10S	Casing	700.43	1260802.29	2070552.32	33° 27' 50.068" N	84° 54' 28.233" W
	Disk	698.02	1260802.21	2070553.31		
	Ground	698.1				
PZ-10I	Casing	700.25	1260809.64	2070551.98	33° 27' 50.068" N	84° 54' 28.233" W
	Disk	697.96	1260809.55	2070552.97		
	Ground	697.8				
PZ-53	Casing	732.90	1260964.50	2070920.38	33° 27' 51.698" N	84° 54' 23.902" W
	PK Nail	729.99	1260964.35	2070921.22		
	Ground	729.9				

Notes:

NAD83(2011) coordinates established by utilizing eGPS VRS & OPUS Solutions

Elevations derived from Arcadis BM#1 (El. 758.24)

Elevations & coordinates are U.S. Survey feet

EXHIBIT 3



Plant Yates – AP-2 Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWA-1I	Casing	836.60	1256876.13	2070097.91	33° 27' 11.193" N	84° 54' 33.266" W
	Disk	834.33	1256876.76	2070098.84		
	Ground	834.3				
YGWA-1D	Casing	837.25	1256867.34	2070104.61	33° 27' 11.106" N	84° 54' 33.186" W
	Disk	835.04	1256868.01	2070105.52		
	Ground	834.9				
YGWA-2I	Casing	866.25	1256144.08	2070790.49	33° 27' 03.999" N	84° 54' 25.030" W
	Disk	864.2	1256144.35	2070791.29		
	Ground	864.0				
YGWA-3I	Casing	796.55	1256405.20	2072024.20	33° 27' 06.669" N	84° 54' 10.492" W
	Disk	794.34	1256405.65	2072025.23		
	Ground	794.0				
YGWA-3D	Casing	796.78	1256399.94	2072026.21	33° 27' 06.617" N	84° 54' 10.468" W
	Disk	794.39	1256400.26	2072027.12		
	Ground	794.1				
YGWA-14S	Casing	748.76	1257828.64	2072537.24	33° 27' 20.788" N	84° 54' 04.555" W
	Disk	746.58	1257829.68	2072537.61		
	Ground	746.8				
YGWA-30I	Casing	762.58	1258421.86	2071107.11	33° 27' 26.556" N	84° 54' 21.485" W
	PK Nail	759.95	1258421.69	2071106.13		
	Ground	760.1				
YGWC-26S	Casing	716.28	1259734.66	2070615.87	33° 27' 39.510" N	84° 54' 27.393" W
	PK Nail	713.17	1259734.57	2070614.87		
	Ground	713.1				
YGWC-26I	Casing	715.91	1259725.79	2070613.56	33° 27' 39.422" N	84° 54' 27.420" W
	PK Nail	713.21	1259725.80	2070612.71		
	Ground	713.1				
YGWC-27S	Casing	716.52	1259417.12	2070454.17	33° 27' 36.357" N	84° 54' 29.275" W
	PK Nail	713.27	1259416.33	2070454.96		
	Ground	713.0				
YGWC-28S	Casing	717.95	1259218.37	2070322.23	33° 27' 34.381" N	84° 54' 30.816" W
	PK Nail	715.09	1259217.72	2070323.07		
	Ground	715.0				
YGWC-28I	Casing	717.93	1259226.47	2070328.27	33° 27' 34.462" N	84° 54' 30.745" W
	PK Nail	715.06	1259225.93	2070329.06		
	Ground	715.0				

EXHIBIT 3



Plant Yates – AP-2 Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWC-29I	Casing	717.39	1258974.06	2070203.26	33° 27' 31.956" N	84° 54' 32.199" W
	PK Nail	714.94	1258973.51	2070203.93		
	Ground	714.8				
PZ-01S	Casing	836.84	1256871.97	2070101.24	33° 27' 11.152" N	84° 54' 33.226" W
	Disk	834.73	1256874.29	2070101.35		
	Ground	834.5				
PZ-03S	Casing	796.39	1256410.86	2072021.63	33° 27' 06.725" N	84° 54' 10.523" W
	Disk	794.31	1256411.38	2072022.63		
	Ground	794.0				
PZ-13S	Casing	807.79	1257849.98	2069810.25	33° 27' 20.807" N	84° 54' 36.743" W
	Disk	805.59	1257848.97	2069810.38		
	Ground	805.5				
PZ-13I	Casing	807.62	1257850.30	2069817.10	33° 27' 20.811" N	84° 54' 36.662" W
	Disk	805.42	1257849.17	2069817.19		
	Ground	805.4				
PZ-14I	Casing	749.06	1257826.16	2072542.59	33° 27' 20.764" N	84° 54' 04.492" W
	Disk	746.84	1257827.25	2072543.09		
	Ground	747.2				
PZ-25S	Casing	766.60	1258856.99	2073497.99	33° 27' 31.029" N	84° 53' 53.301" W
	PK Nail	763.77	1258857.85	2073498.45		
	Ground	763.8				
PZ-25I	Casing	766.38	1258860.75	2073491.10	33° 27' 31.065" N	84° 53' 53.383" W
	PK Nail	763.69	1258861.69	2073491.62		
	Ground	763.8				
PZ-31S	Casing	738.62	1258313.70	2072820.25	33° 27' 25.606" N	84° 54' 01.256" W
	PK Nail	736.04	1258312.79	2072820.01		
	Ground	735.9				

Notes:

NAD83(2011) coordinates established by utilizing eGPS VRS & OPUS Solutions

Elevations derived from Arcadis BM#1 (El. 758.24)

Elevations & coordinates are U.S. Survey feet

EXHIBIT 4



Plant Yates – Gypsum Landfill Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
GWA-2	Casing	805.62	1261383.11	2073509.98	33° 27' 56.021" N	84° 53' 53.370" W
	Bolt	803.25	1261383.21	2073507.93		
	Ground	803.1				
GWC-1R	Casing	773.27	1261869.77	2073279.85	33° 28' 00.820" N	84° 53' 56.127" W
	Bolt	770.69	1261868.10	2073281.57		
	Ground	770.5				
GWC-2R	Casing	769.76	1261942.15	2072755.92	33° 28' 01.499" N	84° 54' 02.317" W
	Bolt	767.13	1261944.58	2072756.60		
	Ground	766.8				
GWC-3R	Casing	775.25	1261647.10	2072841.28	33° 27' 58.586" N	84° 54' 01.285" W
	Bolt	772.32	1261646.62	2072843.63		
	Ground	772.2				
GWC-4R	Casing	757.48	1262046.56	2072953.68	33° 28' 02.546" N	84° 53' 59.992" W
	Bolt	754.88	1262044.70	2072955.00		
	Ground	754.6				
GWC-5R	Casing	782.45	1261439.91	2073027.56	33° 27' 56.550" N	84° 53' 59.069" W
	Bolt	779.69	1261441.13	2073029.78		
	Ground	780.0				
GWC-6R	Casing	788.98	1261732.91	2073479.40	33° 27' 59.480" N	84° 53' 53.760" W
	Bolt	785.95	1261730.98	2073478.53		
	Ground	785.6				

Notes:

NAD83(2011) coordinates established by utilizing eGPS VRS & OPUS Solutions
 Elevations derived from Arcadis BM#1 (El. 758.24)
 Elevations & coordinates are U.S. Survey feet

PHOTOGRAPH LOG

Plant Yates – Monitoring Well and Piezometer Survey
June 2020



Photograph: 1

Description:
Staked Coordinate
Location for GWC-6R



Photograph: 2

Description:
From Staked Location
of GWC-6R to Found
Location of GWC-6R

PHOTOGRAPH LOG

Plant Yates – Monitoring Well and Piezometer Survey
June 2020



Photograph: 3

Description:
Existing Location of
GWC-6R

APPENDIX D

Historical Groundwater Analytical Data



Analyte	Units	YGWA-47	YGWA-47	YGWA-47	YGWA-47	YGWA-47	YGWA-47	YGWA-47	YGWA-47	YGWA-47	
		YGWA-47 (083016)	YGWA-47 (111416)	YGWA-47 (121516)	YGWA-47 (022417)	YGWA-47 (050817)	YGWA-47 (071117)	YGWA-47 (101017)	YGWA-47 (040218)	YGWA-47 (091918)	
		8/30/2016	11/14/2016	12/15/2016	2/24/2017	5/8/2017	7/11/2017	10/10/2017	4/2/2018	9/19/2018	
Appendix III	Boron	mg/l	0.0166 J	0.0166 J	NA	0.0145 J	0.0141 J	0.0131 J	0.0124 J	0.013 J	0.012 J
	Calcium	mg/l	20.9	18.6	NA	16.1	14.6	14.3	12.1	< 25	11.1 J
	Chloride	mg/l	5.2	6.4	NA	5.5	5.8	5.8	5.9	4.8	4
	Fluoride	mg/l	0.09 J	0.18 J	NA	0.05 J	0.03 J	0.07 J	< 0.3	< 0.3	< 0.3
	pH	SU	5.75	5.59	NA	5.49	5.58	5.58	5.49	6.3	5.48
	Sulfate	mg/l	160	150	NA	120	120	110	93	88.8	75
	Total Dissolved Solids	mg/l	319	280	NA	162	194	193	175	192	186
	Appendix IV	Antimony	mg/l	0.0028 J	< 0.003	NA	< 0.003	0.0004 J	0.0006 J	< 0.003	< 0.003
Arsenic		mg/l	< 0.005	< 0.005	NA	< 0.005	< 0.005	< 0.005	0.0007 J	< 0.005	0.00072 J
Barium		mg/l	0.0413	0.0383	NA	0.0351	0.0251	0.0233	0.0207	0.022	0.023
Beryllium		mg/l	< 0.003	< 0.003	NA	< 0.003	0.00007 J	< 0.003	< 0.003	< 0.003	0.000057 J
Cadmium		mg/l	0.0001 J	0.0001 J	NA	0.00009 J	0.0001 J	< 0.001	< 0.001	< 0.001	< 0.001
Chromium		mg/l	< 0.01	0.0093 J	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cobalt		mg/l	0.0073 J	0.0115	NA	0.0106	0.0099 J	0.0096 J	0.0036 J	< 0.01	0.0036 J
Lead		mg/l	< 0.005	< 0.005	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Lithium		mg/l	0.0061 J	0.0064 J	NA	0.0049 J	0.0053 J	0.0051 J	0.0043 J	0.0045 J	0.0043 J
Mercury		mg/l	< 0.0005	< 0.0005	NA	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000053 J
Molybdenum		mg/l	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Combined Radium - 226/228		pci/l	1.09	NA	< 1 U	< 0.504 U	< 0.455 U	< 0.471 U	< 0.649 U	< 0.512 U	< 0.789 U
Selenium		mg/l	0.0017 J	< 0.01	NA	0.0011 J	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Thallium		mg/l	< 0.001	< 0.001	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

Appendix D
Historical Groundwater Analytical Data
2020 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates AP-1

Analyte	Units	YGWA-47	YGWA-47	YGWA-47	YGWA-47	YGWC-44	YGWC-44	YGWC-44	YGWC-44	YGWC-44	
		YGWA-47 (032719)	YGWA-47 (082019)	YGWA-47 (100819)	YGWA-47 (031720)	YGWC-44 (083116)	YGWC-44 (111516)	YGWC-44 (022817)	YGWC-44 (050817)	YGWC-44 (071317)	
		3/27/2019	8/20/2019	10/8/2019	3/17/2020	8/31/2016	11/15/2016	2/28/2017	5/8/2017	7/13/2017	
Appendix III	Boron	mg/l	0.013 J	NA	0.012 J	0.023 J	0.541	0.706	0.623	0.69	0.649
	Calcium	mg/l	10.8 J	NA	9.7	14.8	27.3	27.8	26.4	29.9	30.2
	Chloride	mg/l	4.3	NA	4.4	4.1	13	14	12	13	13
	Fluoride	mg/l	0.081 J	< 0.3	0.034 J	< 0.050	< 0.3	0.12 J	0.07 J	0.04 J	< 0.3
	pH	SU	5.83	5.58	5.59	5.57	6.01	5.91	5.85	5.91	5.8
	Sulfate	mg/l	65.9	NA	52.3	71.6	150	150	130	150	150
	Total Dissolved Solids	mg/l	170	NA	172	165	332	356	483	296	345
	Appendix IV	Antimony	mg/l	NA	< 0.003	NA	NA	< 0.003	< 0.003	< 0.003	< 0.003
Arsenic		mg/l	NA	< 0.005	< 0.005	< 0.00035	< 0.005	< 0.005	0.0005 J	0.0006 J	< 0.005
Barium		mg/l	NA	0.024	0.025	0.035	0.126	0.115	0.121	0.125	0.106
Beryllium		mg/l	NA	< 0.003	NA	NA	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Cadmium		mg/l	NA	< 0.0025	< 0.0025	< 0.00011	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Chromium		mg/l	NA	< 0.01	NA	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cobalt		mg/l	NA	0.00092 J	0.0014 J	0.0017 J	0.0119	0.0033 J	0.0017 J	0.0018 J	0.0022 J
Lead		mg/l	NA	< 0.005	NA	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Lithium		mg/l	NA	0.0036 J	0.0036 J	0.0046 J	0.0115 J	0.0148 J	0.0124 J	0.0132 J	0.0124 J
Mercury		mg/l	NA	< 0.0005	NA	NA	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Molybdenum		mg/l	NA	< 0.01	< 0.01	< 0.00095	< 0.01	< 0.01	0.0005 J	< 0.01	< 0.01
Combined Radium - 226/228		pci/l	NA	2.44	1.72	1.22 U	2.15	< 0.676 U	< 0.241 U	< 0.508 U	< 0.77 U
Selenium		mg/l	NA	< 0.01	NA	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Thallium		mg/l	NA	0.000058 J	0.000084 J	< 0.000052	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

Analyte		Units	YGWC-44	YGWC-44	YGWC-44	YGWC-44	YGWC-44	YGWC-44	YGWC-44	YGWC-45	YGWC-45
			YGWC-44 (101017)	YGWC-44 (040418)	YGWC-44 (091918)	YGWC-44 (032719)	YGWC-44 (082019)	YGWC-44 (100819)	YGWC-44 (031720)	YGWC-45 (083116)	YGWC-45 (111416)
			10/10/2017	4/4/2018	9/19/2018	3/27/2019	8/20/2019	10/8/2019	3/17/2020	8/31/2016	11/14/2016
Appendix III	Boron	mg/l	0.603	0.66	0.66	0.57	NA	0.58	0.61	0.308	0.368
	Calcium	mg/l	27.2	30.1	29.2	27.9	NA	28.1	31.9	46.7	50.6
	Chloride	mg/l	14	13.4	14.2	14	NA	14.8	14.0	5.8	5.8
	Fluoride	mg/l	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.050	0.11 J	0.71
	pH	SU	5.76	5.77	5.77	6.1	5.78	5.84	5.90	7.15	6.96
	Sulfate	mg/l	140	137	137	146	NA	142	121	190	200
	Total Dissolved Solids	mg/l	311	313	326	302	NA	324	283	402	445
	Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	NA	< 0.003	NA	NA	< 0.003
Arsenic		mg/l	0.0007 J	< 0.005	0.00086 J	NA	0.00097 J	< 0.005	< 0.00035	< 0.005	< 0.005
Barium		mg/l	0.112	0.12	0.11	NA	0.1	0.098	0.099	0.0754	0.0701
Beryllium		mg/l	< 0.003	< 0.003	< 0.003	NA	< 0.003	NA	NA	< 0.003	< 0.003
Cadmium		mg/l	< 0.001	< 0.001	< 0.001	NA	< 0.0025	< 0.0025	< 0.00011	< 0.001	< 0.001
Chromium		mg/l	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA	NA	< 0.01	0.0061 J
Cobalt		mg/l	0.0017 J	< 0.01	0.0025 J	NA	0.002 J	0.0017 J	0.0040 J	0.0009 J	0.0009 J
Lead		mg/l	< 0.005	< 0.005	< 0.005	NA	< 0.005	NA	NA	< 0.005	< 0.005
Lithium		mg/l	0.0123 J	0.014 J	0.013 J	NA	0.013 J	0.012 J	0.013 J	0.0147 J	0.0175 J
Mercury		mg/l	< 0.0005	< 0.0005	0.00006 J	NA	< 0.0005	NA	NA	< 0.0005	< 0.0005
Molybdenum		mg/l	< 0.01	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.00095	0.0024 J	< 0.01
Combined Radium - 226/228		pci/l	1.43	< 0.325 U	< 0.386 U	NA	1.71	< 0.769 U	1.37	1.65	< 0.981 U
Selenium		mg/l	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA	NA	< 0.01	< 0.01
Thallium		mg/l	< 0.001	< 0.001	< 0.001	NA	< 0.001	< 0.001	0.000080 J	< 0.001	< 0.001

Analyte	Units	YGWC-45	YGWC-45	YGWC-45	YGWC-45	YGWC-45	YGWC-45	YGWC-45	YGWC-45	YGWC-45	
		YGWC-45 (022717)	YGWC-45 (050917)	YGWC-45 (071317)	YGWC-45 (101017)	YGWC-45 (040318)	YGWC-45 (091918)	YGWC-45 (032719)	YGWC-45 (082019)	YGWC-45 (100919)	
		2/27/2017	5/9/2017	7/13/2017	10/10/2017	4/3/2018	9/19/2018	3/27/2019	8/20/2019	10/9/2019	
Appendix III	Boron	mg/l	0.321	0.338	0.34	0.319	0.35	0.35	0.33	NA	0.35
	Calcium	mg/l	49.4	56	54.8	52.8	50.6	50.5	48.8	NA	47.9
	Chloride	mg/l	5	4.6	4.7	4.5	4.6	4.7	4.6	NA	5.1
	Fluoride	mg/l	0.22 J	0.2 J	0.11 J	0.39	< 0.3	< 0.3	0.18 J	< 0.3	< 0.3
	pH	SU	6.79	6.9	6.77	6.9	6.44	6.47	7.18	6.48	6.55
	Sulfate	mg/l	190	190	180	180	183	192	188	NA	183
	Total Dissolved Solids	mg/l	346	388	433	396	418	413	383	NA	432
	Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003
Arsenic		mg/l	< 0.005	< 0.005	< 0.005	0.0006 J	0.00061 J	0.00072 J	NA	0.00078 J	< 0.005
Barium		mg/l	0.0834	0.0779	0.0719	0.0708	0.068	0.064	NA	0.057	0.058
Beryllium		mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003	NA
Cadmium		mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.0025	< 0.0025
Chromium		mg/l	< 0.01	< 0.01	0.0006 J	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA
Cobalt		mg/l	0.001 J	0.0008 J	0.0009 J	0.0008 J	< 0.01	0.00081 J	NA	0.00071 J	0.0007 J
Lead		mg/l	< 0.005	0.0001 J	< 0.005	< 0.005	< 0.005	< 0.005	NA	< 0.005	NA
Lithium		mg/l	0.0135 J	0.0136 J	0.0129 J	0.015 J	0.014 J	0.012 J	NA	0.012 J	0.012 J
Mercury		mg/l	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000071 J	NA	< 0.0005	NA
Molybdenum		mg/l	0.0018 J	0.0015 J	0.0015 J	0.0015 J	< 0.01	< 0.01	NA	0.0011 J	0.0012 J
Combined Radium - 226/228		pci/l	< 0.528 U	1.4	< 0.611 U	1.47	1.53	< 0.839 U	NA	2.23	1.61
Selenium		mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA
Thallium		mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.001	< 0.001

Analyte	Units	YGWC-45	YGWC-46	YGWC-46	YGWC-46	YGWC-46	YGWC-46	YGWC-46	YGWC-46	YGWC-46	
		YGWC-45 (031720)	YGWC-46 (090116)	YGWC-46 (111616)	YGWC-46 (112816)	YGWC-46 (022717)	YGWC-46 (050817)	YGWC-46 (071317)	YGWC-46 (101117)	YGWC-46 (040418)	
		3/17/2020	9/1/2016	11/16/2016	11/28/2016	2/27/2017	5/8/2017	7/13/2017	10/11/2017	4/4/2018	
Appendix III	Boron	mg/l	0.37	2.12	2.03	NA	1.29	1.71	1.62	1.17	1.2
	Calcium	mg/l	54.8	96.8	107	NA	104	103	83.7	69	51.9
	Chloride	mg/l	4.6	37	37	NA	33	33	32	29	26.6
	Fluoride	mg/l	0.076 J	0.08 J	0.04 J	NA	0.05 J	0.004 J	0.35	< 0.3	< 0.3
	pH	SU	6.69	6.19	6.05	NA	6.01	6.1	6.07	5.93	6.01
	Sulfate	mg/l	161	770	780	NA	650	770	630	540	430
	Total Dissolved Solids	mg/l	391	1240	1220	NA	1060	1160	996	835	1470
	Appendix IV	Antimony	mg/l	NA	< 0.003	< 0.003	NA	< 0.003	< 0.003	< 0.003	< 0.003
Arsenic		mg/l	< 0.00035	< 0.005	< 0.005	NA	< 0.005	0.0007 J	0.0011 J	0.0011 J	0.00087 J
Barium		mg/l	0.061	0.0414	0.0365	NA	0.0326	0.0332	0.0365	0.0288	0.025
Beryllium		mg/l	NA	< 0.003	< 0.003	NA	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Cadmium		mg/l	< 0.00011	< 0.001	< 0.001	NA	< 0.001	0.0001 J	< 0.001	< 0.001	< 0.001
Chromium		mg/l	NA	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cobalt		mg/l	0.00081 J	0.0171	0.0145	NA	0.0161	0.0367	0.0265	0.0556	0.025
Lead		mg/l	NA	< 0.005	< 0.005	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Lithium		mg/l	0.014 J	0.0077 J	0.0075 J	NA	0.0084 J	0.0087 J	0.0104 J	0.0099 J	0.012 J
Mercury		mg/l	NA	< 0.0005	< 0.0005	NA	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Molybdenum		mg/l	0.0016 J	< 0.01	< 0.01	NA	< 0.01	0.0008 J	0.0015 J	0.002 J	0.0021 J
Combined Radium - 226/228		pci/l	1.44	2.28	< 0.639 U	0.996	< 0.617 U	0.949	1.41	< 0.856 U	0.974
Selenium		mg/l	NA	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Thallium		mg/l	< 0.000052	< 0.001	< 0.001	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

Analyte	Units	YGWC-46	YGWC-46	YGWC-46	YGWC-46	YGWC-46	YGWC-46A	YAMW-6	YAMW-7	
		YGWC-46 (091918)	YGWC-46 (032719)	YGWC-46 (082119)	YGWC-46 (100919)	YGWC-46 (031720)	YGWC-46A (070620)	YAMW-6 (011520)	YAMW-7 (011520)	
		9/19/2018	3/27/2019	8/21/2019	10/9/2019	3/17/2020	7/6/2020	1/15/2020	1/15/2020	
Appendix III	Boron	mg/l	1.2	0.89	NA	1.1	1.3	2.0	0.41	3.2
	Calcium	mg/l	51.9	54.2	NA	64.2	70.4	105	NA	NA
	Chloride	mg/l	26.5	20.9	NA	25	24.8	25.8	NA	NA
	Fluoride	mg/l	< 0.3	0.12 J	< 0.3	0.12 J	< 0.050	0.12	NA	NA
	pH	SU	6.09	6.2	5.82	5.96	5.99	6.89	7.17	8.22
	Sulfate	mg/l	395	437	NA	< 1	439	385	NA	NA
	Total Dissolved Solids	mg/l	702	641	NA	809	733	793	NA	NA
	Appendix IV	Antimony	mg/l	< 0.003	NA	< 0.003	NA	NA	<0.00027	NA
Arsenic		mg/l	0.0012 J	NA	0.00074 J	< 0.005	< 0.00035	0.00079 J	NA	NA
Barium		mg/l	0.03	NA	0.023	0.024	0.022	0.048	NA	NA
Beryllium		mg/l	< 0.003	NA	< 0.003	NA	NA	<0.000074	NA	NA
Cadmium		mg/l	< 0.001	NA	0.00012 J	< 0.0025	0.00012 J	<0.00011	NA	NA
Chromium		mg/l	< 0.01	NA	< 0.01	NA	NA	<0.00039	NA	NA
Cobalt		mg/l	0.042	NA	0.027	0.024	0.022	0.0041 J	0.00052 J	0.00048 J
Lead		mg/l	< 0.005	NA	< 0.005	NA	NA	<0.000046	NA	NA
Lithium		mg/l	0.011 J	NA	0.0076 J	0.0078 J	0.0071 J	0.011 J	NA	NA
Mercury		mg/l	0.00007 J	NA	< 0.0005	NA	NA	<0.00014	NA	NA
Molybdenum		mg/l	0.0039 J	NA	0.0012 J	0.0013 J	0.0015 J	0.0026 J	NA	NA
Combined Radium - 226/228		pci/l	< 1.15 U	NA	1.31	< 0.892 U	1.74	pending	NA	NA
Selenium		mg/l	< 0.01	NA	< 0.01	NA	NA	<0.0013	NA	NA
Thallium		mg/l	< 0.001	NA	< 0.001	< 0.001	< 0.000052	<0.000052	NA	NA

Notes:

1. Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.
 2. Appendix III = Indicator parameters evaluated during Detection Monitoring.
 3. Appendix IV = Parameters evaluated during Assessment Monitoring.
- Not analyzed for this constituent.
< Analyte was not detected above the laboratory reporting limit (RL) or method detection limit (MDL). Data prior to 2020 is reported to the RL.
NA = Not analyzed.

Laboratory Qualifiers:

- J = Estimated concentration above the method detection limit and below the reporting limit.
U - the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.

APPENDIX E

Statistical Analysis



March 2020

Semiannual Event



Appendix III Statistically Significant Increase Summary

Appendix III Parameter	Monitoring Wells	
	October 2019	March 2020
Boron	YGWC-44, YGWC-45, YGWC-46	YGWC-44, YGWC-45, YGWC-46
Calcium	YGWC-44, YGWC-45, YGWC-46	YGWC-45, YGWC-46
pH	YGWC-45, YGWC-46	
Chloride	YGWC-44, YGWC-46	YGWC-44, YGWC-46
Sulfate	YGWC-45	YGWC-45, YGWC-46
Total Dissolved Solids	YGWC-45, YGWC-46	YGWC-44, YGWC-45, YGWC-46

100% Non-Detects

Analysis Run 7/15/2020 10:49 AM View: 100% Nondetect
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Antimony (mg/L)

YGWC-44, YGWC-45, YGWC-46, YGWA-17S, YGWA-18S, YGWA-20S, YGWA-40, YGWA-5D, YGWA-5I, YGWA-30I, YGWA-3I

Arsenic (mg/L)

YGWA-17S, YGWA-20S, YGWA-40, YGWA-5I, YGWA-14S

Beryllium (mg/L)

YGWC-44, YGWC-45, YGWC-46, YGWA-18I, YGWA-21I, YGWA-39, YGWA-4I, YGWA-5D, YGWA-5I, GWA-2, YGWA-1D, YGWA-1I, YGWA-2I, YGWA-3D, YGWA-3I

Cadmium (mg/L)

YGWC-44, YGWC-45, YGWA-18I, YGWA-20S, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D, GWA-2, YGWA-1I, YGWA-2I, YGWA-30I

Chromium (mg/L)

YGWC-44, YGWC-46, YGWA-21I, YGWA-39, GWA-2, YGWA-14S

Cobalt (mg/L)

YGWA-17S, YGWA-18I, YGWA-20S, YGWA-40, YGWA-5I, YGWA-14S, YGWA-1D, YGWA-2I, YGWA-3D, YGWA-3I

Fluoride (mg/L)

YGWA-17S, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-40, YGWA-4I, YGWA-5I

Lead (mg/L)

YGWA-47, YGWC-44, YGWC-46, YGWA-21I, YGWA-4I, GWA-2, YGWA-1I, YGWA-2I, YGWA-30I, YGWA-3I

Lithium (mg/L)

YGWA-20S, YGWA-40, YGWA-14S

Mercury (mg/L)

YGWA-18I, YGWA-18S, YGWA-4I, YGWA-5D, YGWA-5I, YGWA-2I

Molybdenum (mg/L)

YGWA-47, YGWA-17S, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-40, YGWA-4I, YGWA-5I, GWA-2, YGWA-14S, YGWA-30I

Selenium (mg/L)

YGWC-44, YGWC-45, YGWC-46, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-5D, GWA-2, YGWA-1D, YGWA-1I, YGWA-2I, YGWA-30I, YGWA-3D, YGWA-3I

Thallium (mg/L)

YGWC-45, YGWC-46, YGWA-17S, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-21I, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D, YGWA-5I, YGWA-1D, YGWA-2I, YGWA-30I, YGWA-3I

Outlier Summary

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:05 PM

YGWC-45 Cobalt (mg/L)
YGWA-47 pH (S.U.)

4/2/2018	6.3 (o)
4/3/2018	<0.01 (o)

Appendix III - Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig. Bg	NBq Mean	Std. Dev.	%NDs	ND Adj.	TransformAlpha	Method
Boron (mg/L)	YGWC-44	0.16	n/a	3/17/2020	0.61	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-45	0.16	n/a	3/17/2020	0.37	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-46	0.16	n/a	3/17/2020	1.3	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-45	37	n/a	3/17/2020	54.8	Yes	255 n/a	n/a	1.176	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-46	37	n/a	3/17/2020	70.4	Yes	255 n/a	n/a	1.176	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-44	7.9	n/a	3/17/2020	14	Yes	255 n/a	n/a	0	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-46	7.9	n/a	3/17/2020	24.8	Yes	255 n/a	n/a	0	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-45	160	n/a	3/17/2020	161	Yes	255 n/a	n/a	5.882	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-46	160	n/a	3/17/2020	439	Yes	255 n/a	n/a	5.882	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-44	200	n/a	3/17/2020	283	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-45	200	n/a	3/17/2020	391	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-46	200	n/a	3/17/2020	733	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig. Bg	NBq Mean	Std. Dev.	%NDs	ND Adj.	TransformAlpha	Method
Boron (mg/L)	YGWC-44	0.16	n/a	3/17/2020	0.61	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-45	0.16	n/a	3/17/2020	0.37	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-46	0.16	n/a	3/17/2020	1.3	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-44	37	n/a	3/17/2020	31.9	No	255 n/a	n/a	1.176	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-45	37	n/a	3/17/2020	54.8	Yes	255 n/a	n/a	1.176	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-46	37	n/a	3/17/2020	70.4	Yes	255 n/a	n/a	1.176	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-44	7.9	n/a	3/17/2020	14	Yes	255 n/a	n/a	0	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-45	7.9	n/a	3/17/2020	4.6	No	255 n/a	n/a	0	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-46	7.9	n/a	3/17/2020	24.8	Yes	255 n/a	n/a	0	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Fluoride (mg/L)	YGWC-44	0.68	n/a	3/17/2020	0.3ND	No	296 n/a	n/a	68.24	n/a	n/a	0.00004923NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-45	0.68	n/a	3/17/2020	0.076J	No	296 n/a	n/a	68.24	n/a	n/a	0.00004923NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-46	0.68	n/a	3/17/2020	0.3ND	No	296 n/a	n/a	68.24	n/a	n/a	0.00004923NP Inter (NDs) 1 of 2
pH (S.U.)	YGWC-44	7.9	4.9	3/17/2020	5.9	No	308 n/a	n/a	0	n/a	n/a	0.00009847NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-45	7.9	4.9	3/17/2020	6.69	No	308 n/a	n/a	0	n/a	n/a	0.00009847NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-46	7.9	4.9	3/17/2020	5.99	No	308 n/a	n/a	0	n/a	n/a	0.00009847NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-44	160	n/a	3/17/2020	121	No	255 n/a	n/a	5.882	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-45	160	n/a	3/17/2020	161	Yes	255 n/a	n/a	5.882	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-46	160	n/a	3/17/2020	439	Yes	255 n/a	n/a	5.882	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-44	200	n/a	3/17/2020	283	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-45	200	n/a	3/17/2020	391	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-46	200	n/a	3/17/2020	733	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:14 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	YGWA-47 (bg)	-2.542	-39	-34	Yes	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-211 (bg)	2.207	53	48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-14S (bg)	-0.05271	-60	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-46	-5.006	-49	-34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.2868	59	48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-1.02	-56	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-28.7	-50	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-46	-177.7	-38	-34	Yes	11	9.091	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.2314	52	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-17.01	-35	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-4I (bg)	0.3067	53	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-4.378	-68	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.1217	55	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	18.82	41	38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.261	51	48	Yes	14	0	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:14 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-47 (bg)	-0.00122	-26	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-44	-0.02194	-10	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-45	0.01022	22	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-46	-0.3169	-32	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-17S (bg)	-0.0002523	-8	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-30	-48	No	14	78.57	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0003116	-11	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-5	-48	No	14	92.86	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-21I (bg)	-0.00632	-39	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-39 (bg)	0.002401	6	34	No	11	9.091	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.0315	-24	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	-15	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0006887	26	48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	0	-33	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-2 (bg)	0	9	38	No	12	58.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.002489	-37	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	-0.001025	-26	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-33	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	-26	-48	No	14	71.43	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-19	-48	No	14	85.71	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-13	-48	No	14	57.14	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-13	-48	No	14	92.86	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-2.542	-39	-34	Yes	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-45	-0.05415	-3	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-46	-15.18	-28	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.1071	40	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18I (bg)	0.01475	6	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.08778	-40	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-20S (bg)	0.1183	41	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	2.207	53	48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-39 (bg)	-0.23	-10	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-1.297	-28	-34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-4I (bg)	0.4896	40	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.47	-43	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5I (bg)	0.06941	26	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	3.705	38	38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-14S (bg)	-0.05271	-60	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	1.11	48	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1I (bg)	-0.1025	-37	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-2I (bg)	0.9579	31	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	-0.0134	-7	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3D (bg)	1.219	40	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.4381	18	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.5787	-26	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-44	0.4011	28	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-46	-5.006	-49	-34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.1415	47	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18I (bg)	0.03887	22	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18S (bg)	0.2113	30	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.2868	59	48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-21I (bg)	0	-3	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	-0.1659	-8	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.2865	17	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-4I (bg)	0.2116	33	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-1.02	-56	-48	Yes	14	0	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:14 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	YGWA-5I (bg)	0.0316	9	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	0.2398	32	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0	6	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	0	-11	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	0	-5	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.03701	-16	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	0	4	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.07067	-33	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.04953	-37	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-28.7	-50	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-45	-5.075	-22	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-46	-177.7	-38	-34	Yes	11	9.091	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.2314	52	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.2926	-34	-48	No	14	21.43	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.2179	-38	-48	No	14	14.29	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	12	48	No	14	57.14	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.3724	-11	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.919	-27	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-17.01	-35	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-4I (bg)	0.3067	53	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-4.378	-68	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.1217	55	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	18.82	41	38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-14S (bg)	0.3425	40	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.261	51	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1I (bg)	-0.1237	-7	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0	0	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.05321	-7	-48	No	14	14.29	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.7245	46	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3I (bg)	0.6413	31	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-47 (bg)	-13.31	-33	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-44	-13.82	-23	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-45	-2.053	-3	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-46	-146.1	-33	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-17S (bg)	5.544	21	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18I (bg)	-2.555	-12	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18S (bg)	6.215	22	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-20S (bg)	7.597	35	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-21I (bg)	24.57	43	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-39 (bg)	4.803	7	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-40 (bg)	-19.81	-27	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-4I (bg)	7.969	29	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5D (bg)	-15	-45	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5I (bg)	1.982	11	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-2 (bg)	12.21	15	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-14S (bg)	1.727	9	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1D (bg)	5.856	18	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1I (bg)	-0.6315	-3	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-2I (bg)	-3.471	-25	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-30I (bg)	4.021	23	48	No	14	14.29	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3D (bg)	4.214	14	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3I (bg)	1.372	6	48	No	14	0	n/a	n/a	0.01	NP

Tolerance Limit Summary Table

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/15/2020, 10:38 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Lim.Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg.N</u>	<u>Bg.Mean</u>	<u>Std.Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.0035	n/a	n/a	n/a	n/a	249	n/a	n/a	86.75	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0050	n/a	n/a	n/a	n/a	297	n/a	n/a	78.79	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.071	n/a	n/a	n/a	n/a	297	n/a	n/a	3.704	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0030	n/a	n/a	n/a	n/a	281	n/a	n/a	85.05	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	n/a	283	n/a	n/a	95.76	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.010	n/a	n/a	n/a	n/a	249	n/a	n/a	79.52	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.035	n/a	n/a	n/a	n/a	297	n/a	n/a	69.7	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.9	n/a	n/a	n/a	n/a	275	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	n/a	0.68	n/a	n/a	n/a	n/a	296	n/a	n/a	68.24	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	n/a	0.0050	n/a	n/a	n/a	n/a	251	n/a	n/a	88.84	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.030	n/a	n/a	n/a	n/a	276	n/a	n/a	28.99	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	n/a	0.00050	n/a	n/a	n/a	n/a	238	n/a	n/a	92.02	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.014	n/a	n/a	n/a	n/a	242	n/a	n/a	58.26	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	n/a	0.010	n/a	n/a	n/a	n/a	281	n/a	n/a	90.75	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.0010	n/a	n/a	n/a	n/a	251	n/a	n/a	96.41	n/a	n/a	NaN	NP Inter(NDs)

YATES ASH POND 1 GWPS					
Constituent Name	MCL	CCR-Rule Specified	Background Limit	Federal GWPS	State GWPS
Antimony, Total (mg/L)	0.006		0.0035	0.006	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01	0.01
Barium, Total (mg/L)	2		0.071	2	2
Beryllium, Total (mg/L)	0.004		0.003	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005	0.005
Chromium, Total (mg/L)	0.1		0.01	0.1	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.9	6.9	6.9
Fluoride, Total (mg/L)	4		0.68	4	4
Lead, Total (mg/L)		0.015	0.005	0.015	0.005
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03
Mercury, Total (mg/L)	0.002		0.0005	0.002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014
Selenium, Total (mg/L)	0.05		0.01	0.05	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002

**Grey cell indicates Background Limit is higher than MCL. or CCR Rule Specified Level*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Federal Confidence Intervals - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/15/2020, 10:42 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	YGWC-44	0.005	0.0006	0.01	No	11	0.003057	0.002235	54.55	None	No	0.006	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00061	0.01	No	11	0.003428	0.002181	63.64	None	No	0.006	NP (NDs)
Arsenic (mg/L)	YGWC-46	0.005	0.00074	0.01	No	11	0.002792	0.002119	45.45	None	No	0.006	NP (normality)
Barium (mg/L)	YGWC-44	0.1206	0.1034	2	No	11	0.112	0.01033	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.07581	0.06192	2	No	11	0.06886	0.008338	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46	0.03558	0.02496	2	No	11	0.03027	0.006372	0	None	No	0.01	Param.
Cadmium (mg/L)	YGWC-46	0.0025	0.00012	0.005	No	11	0.001849	0.001115	72.73	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-45	0.01	0.0006	0.1	No	9	0.008522	0.003239	77.78	None	No	0.002	NP (NDs)
Cobalt (mg/L)	YGWC-44	0.005	0.0017	0.035	No	11	0.003436	0.00301	9.091	None	No	0.006	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0009157	0.0007503	0.035	No	10	0.000833	0.00009274	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46	0.03821	0.01752	0.035	No	11	0.02786	0.01241	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.465	0.4145	6.9	No	11	0.9395	0.6301	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.722	0.8757	6.9	No	11	1.299	0.5079	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46	1.526	0.7762	6.9	No	12	1.151	0.4778	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-44	0.3	0.07	4	No	12	0.2442	0.1025	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-45	0.3097	0.09342	4	No	12	0.2663	0.1694	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-46	0.35	0.04	4	No	12	0.1887	0.1296	41.67	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-45	0.005	0.0001	0.015	No	9	0.004456	0.001633	88.89	None	No	0.002	NP (NDs)
Lithium (mg/L)	YGWC-44	0.01364	0.0121	0.04	No	11	0.01287	0.0009253	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.01511	0.01239	0.04	No	11	0.01375	0.001632	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-46	0.01029	0.007546	0.04	No	11	0.008918	0.001646	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0005	0.00006	0.002	No	9	0.0004511	0.0001467	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0005	0.000071	0.002	No	9	0.0004523	0.000143	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-46	0.0005	0.00007	0.002	No	9	0.0004522	0.0001433	88.89	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.01	0.1	No	11	0.009136	0.002864	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.01	0.0012	0.1	No	11	0.003873	0.003949	27.27	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-46	0.002279	0.001052	0.1	No	11	0.004027	0.003918	27.27	Kaplan-Meier	ln(x)	0.01	Param.
Thallium (mg/L)	YGWC-44	0.001	0.001	0.002	No	11	0.0009164	0.0002774	90.91	None	No	0.006	NP (NDs)

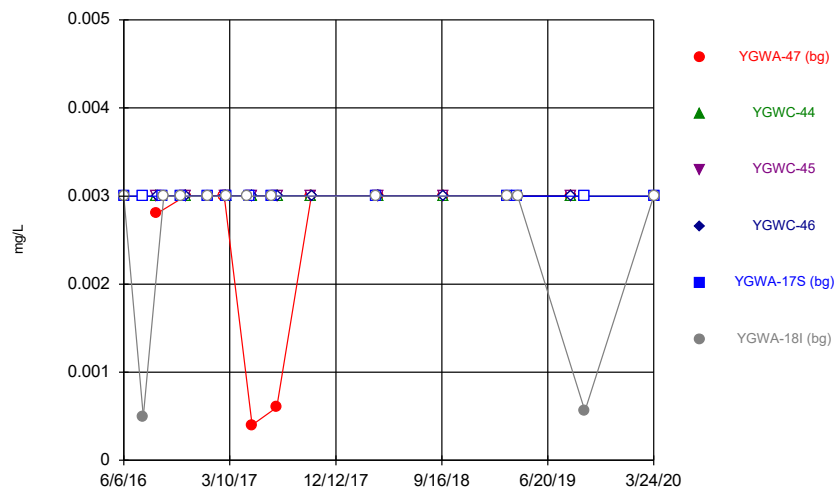
State Confidence Intervals - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/15/2020, 10:40 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	YGWC-44	0.005	0.0006	0.01	No	11	0.003057	0.002235	54.55	None	No	0.006	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00061	0.01	No	11	0.003428	0.002181	63.64	None	No	0.006	NP (NDs)
Arsenic (mg/L)	YGWC-46	0.005	0.00074	0.01	No	11	0.002792	0.002119	45.45	None	No	0.006	NP (normality)
Barium (mg/L)	YGWC-44	0.1206	0.1034	2	No	11	0.112	0.01033	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.07581	0.06192	2	No	11	0.06886	0.008338	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46	0.03558	0.02496	2	No	11	0.03027	0.006372	0	None	No	0.01	Param.
Cadmium (mg/L)	YGWC-46	0.0025	0.00012	0.005	No	11	0.001849	0.001115	72.73	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-45	0.01	0.0006	0.1	No	9	0.008522	0.003239	77.78	None	No	0.002	NP (NDs)
Cobalt (mg/L)	YGWC-44	0.005	0.0017	0.035	No	11	0.003436	0.00301	9.091	None	No	0.006	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0009157	0.0007503	0.035	No	10	0.000833	0.00009274	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46	0.03821	0.01752	0.035	No	11	0.02786	0.01241	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.465	0.4145	6.9	No	11	0.9395	0.6301	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.722	0.8757	6.9	No	11	1.299	0.5079	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46	1.526	0.7762	6.9	No	12	1.151	0.4778	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-44	0.3	0.07	4	No	12	0.2442	0.1025	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-45	0.3097	0.09342	4	No	12	0.2663	0.1694	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-46	0.35	0.04	4	No	12	0.1887	0.1296	41.67	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-45	0.005	0.0001	0.005	No	9	0.004456	0.001633	88.89	None	No	0.002	NP (NDs)
Lithium (mg/L)	YGWC-44	0.01364	0.0121	0.03	No	11	0.01287	0.0009253	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.01511	0.01239	0.03	No	11	0.01375	0.001632	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-46	0.01029	0.007546	0.03	No	11	0.008918	0.001646	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0005	0.00006	0.002	No	9	0.0004511	0.0001467	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0005	0.000071	0.002	No	9	0.0004523	0.000143	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-46	0.0005	0.00007	0.002	No	9	0.0004522	0.0001433	88.89	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.01	0.014	No	11	0.009136	0.002864	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.01	0.0012	0.014	No	11	0.003873	0.003949	27.27	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-46	0.002279	0.001052	0.014	No	11	0.004027	0.003918	27.27	Kaplan-Meier	ln(x)	0.01	Param.
Thallium (mg/L)	YGWC-44	0.001	0.001	0.002	No	11	0.0009164	0.0002774	90.91	None	No	0.006	NP (NDs)

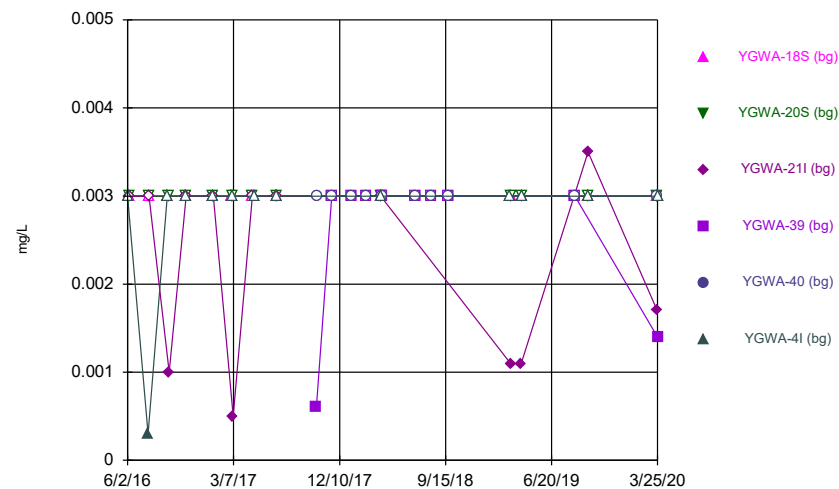
FIGURE A.

Time Series



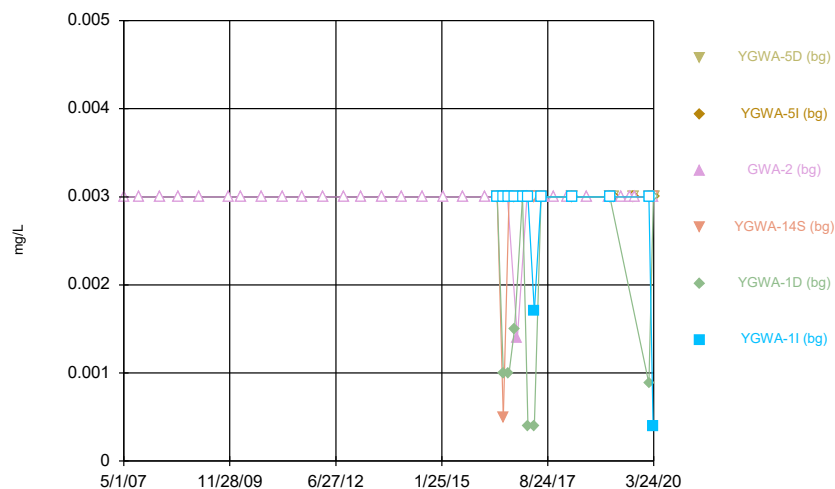
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



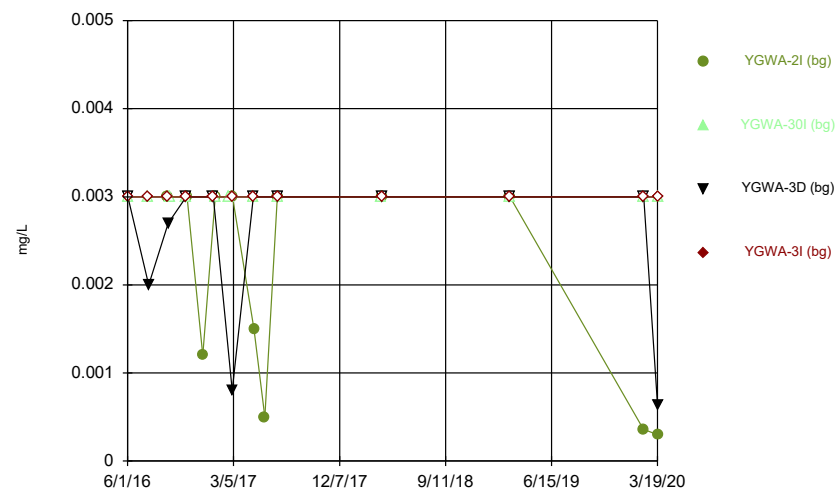
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



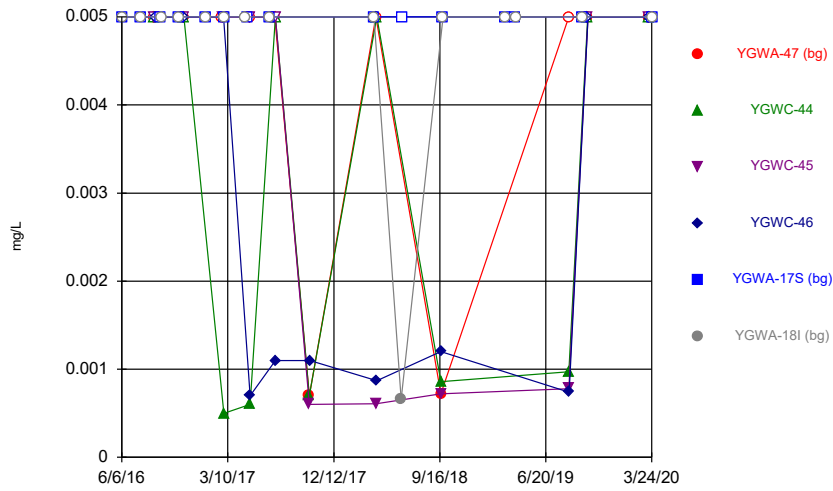
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



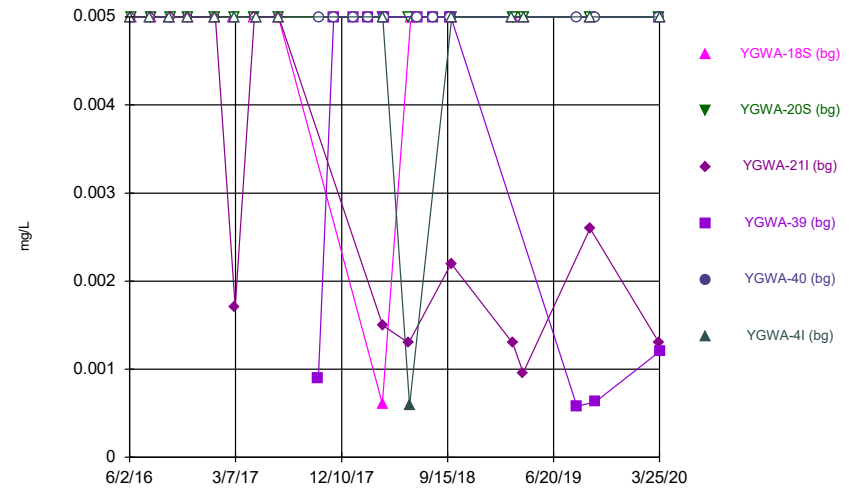
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



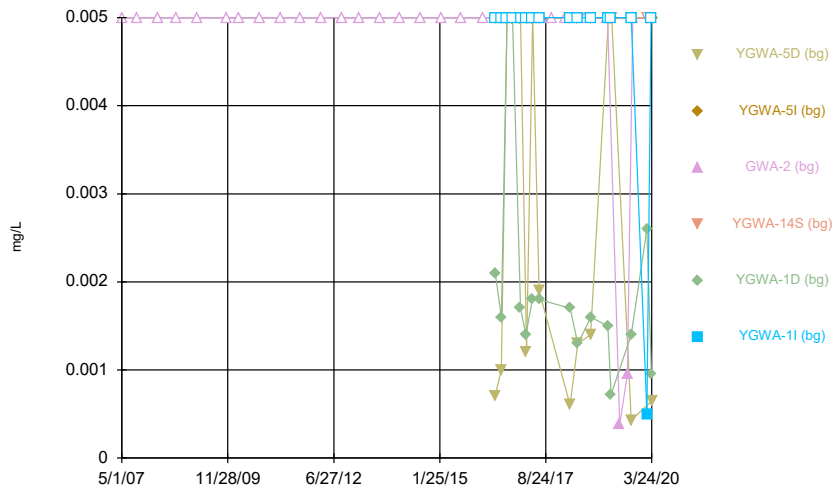
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Time Series



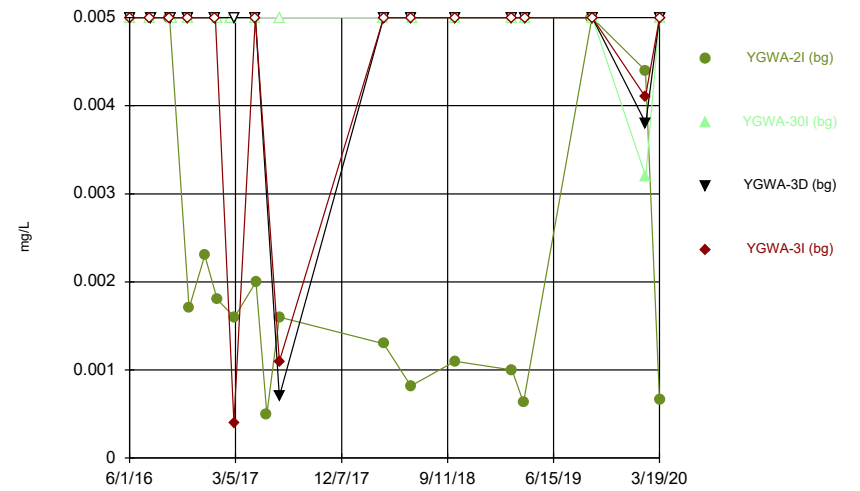
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



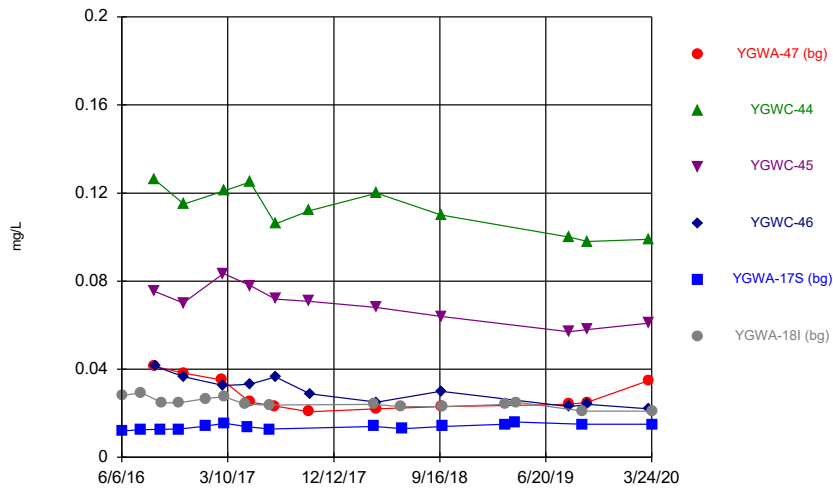
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



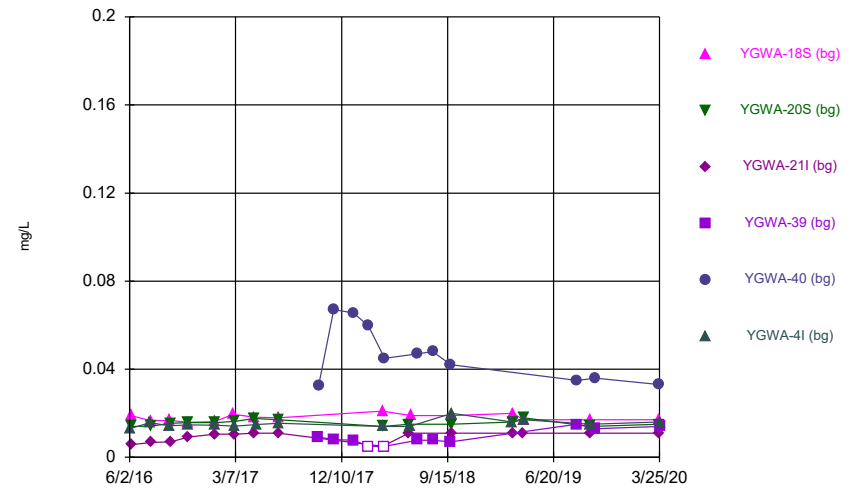
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



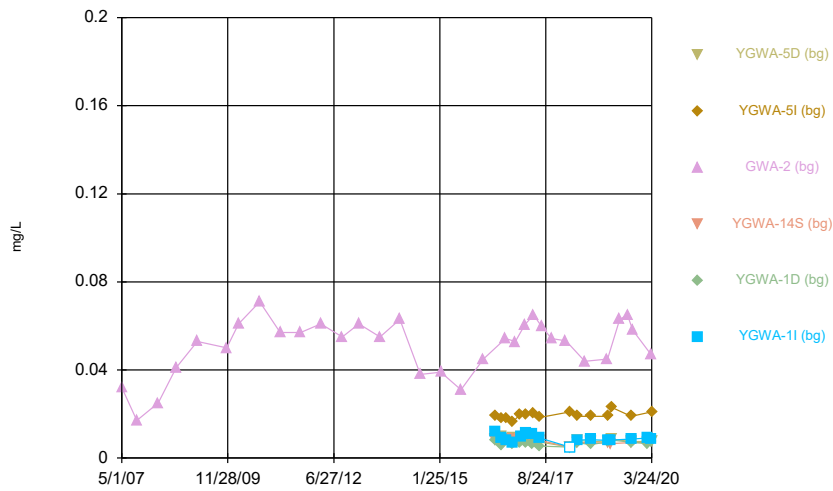
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Time Series



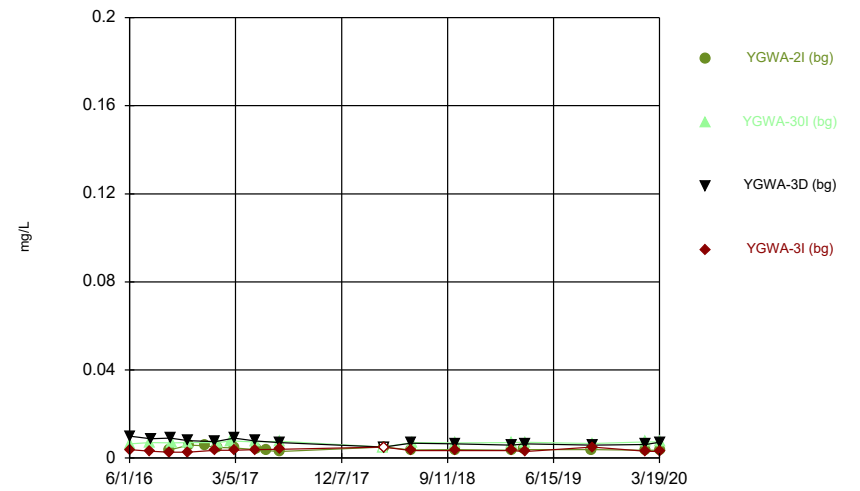
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Time Series



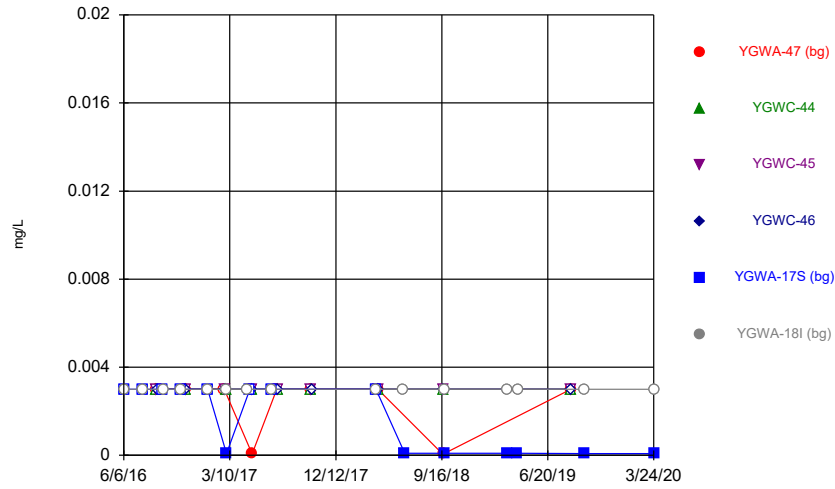
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Time Series



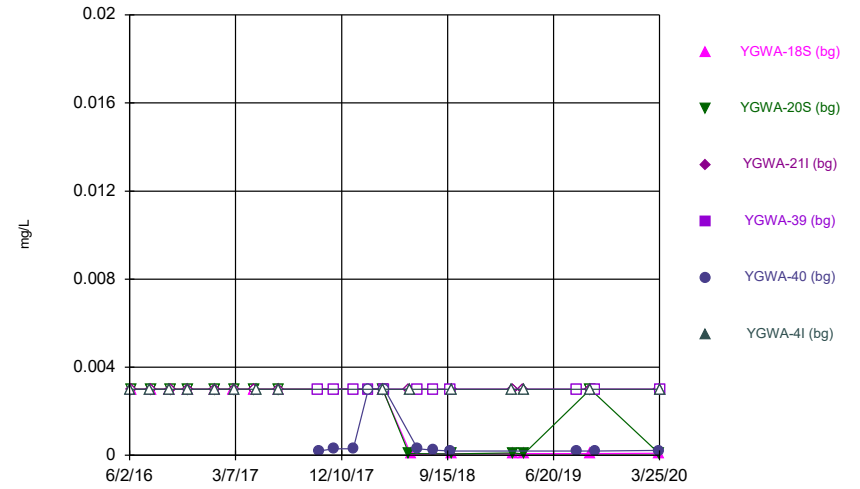
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Time Series



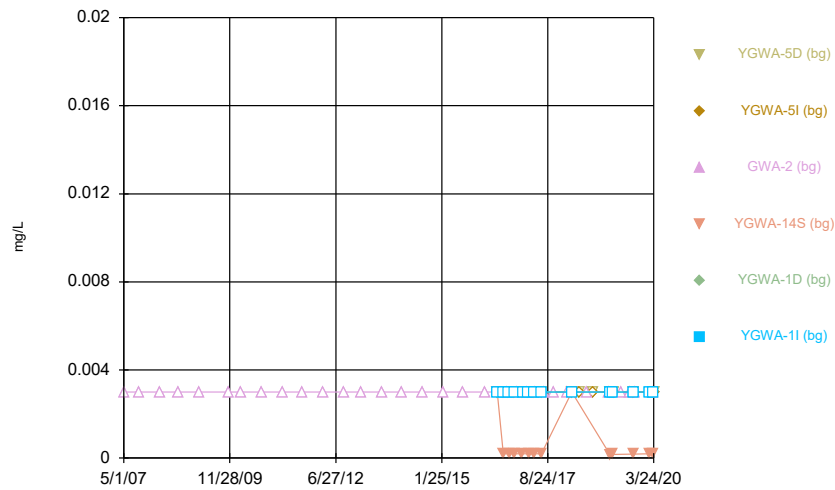
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Time Series



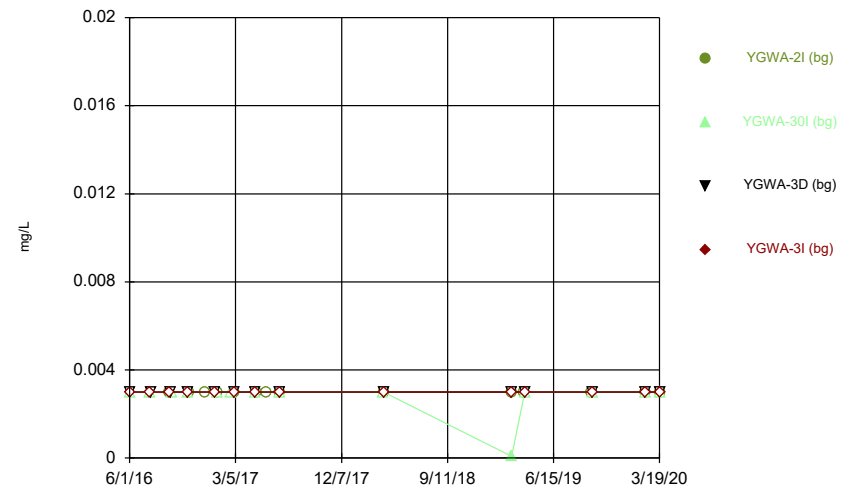
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Time Series



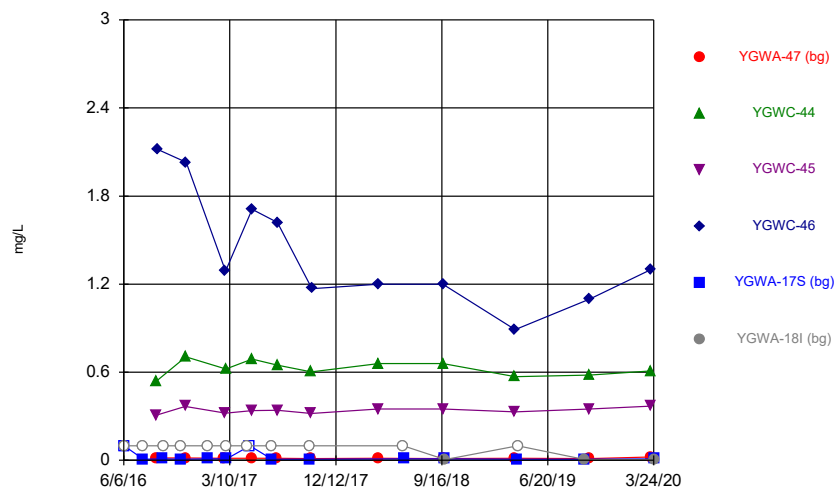
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Time Series



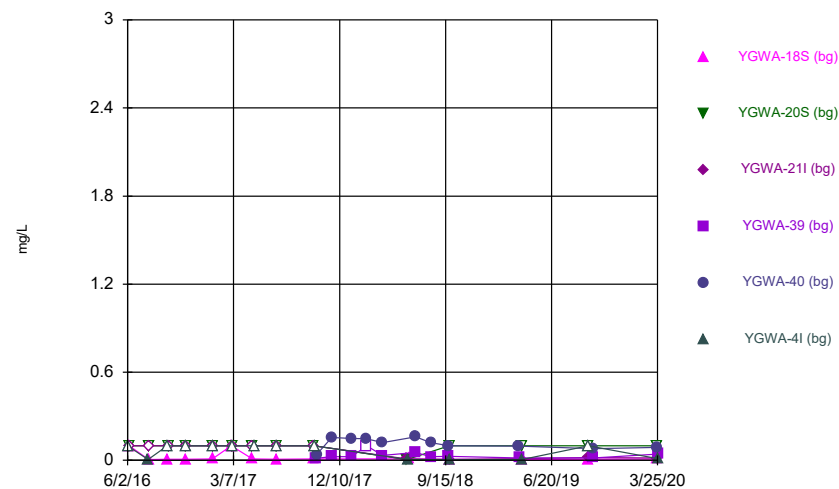
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Time Series



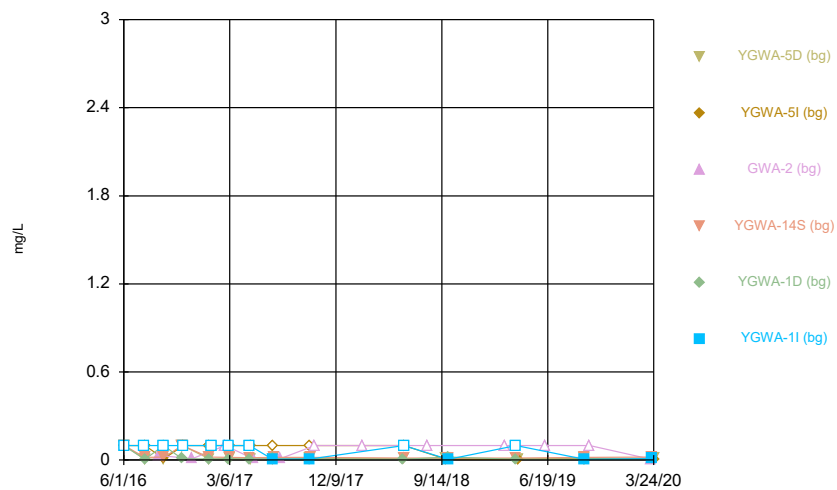
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



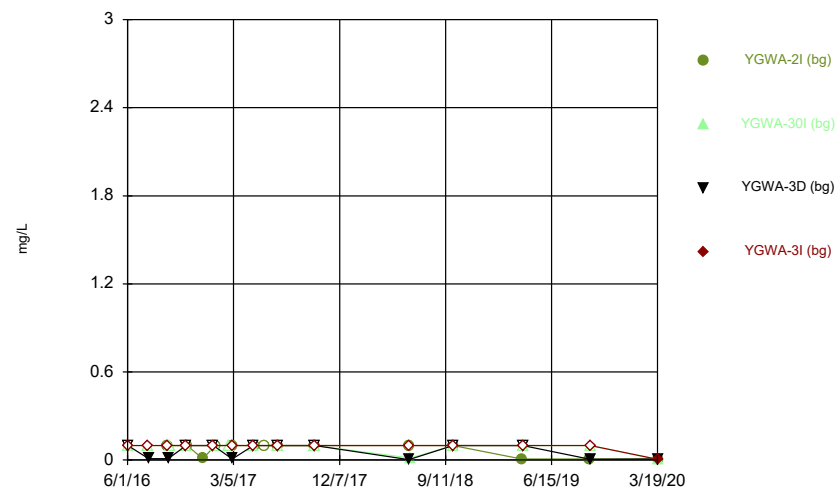
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



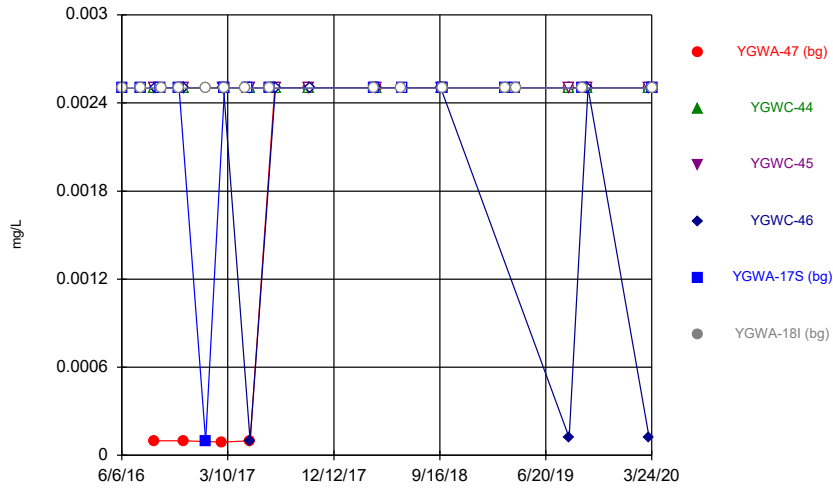
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



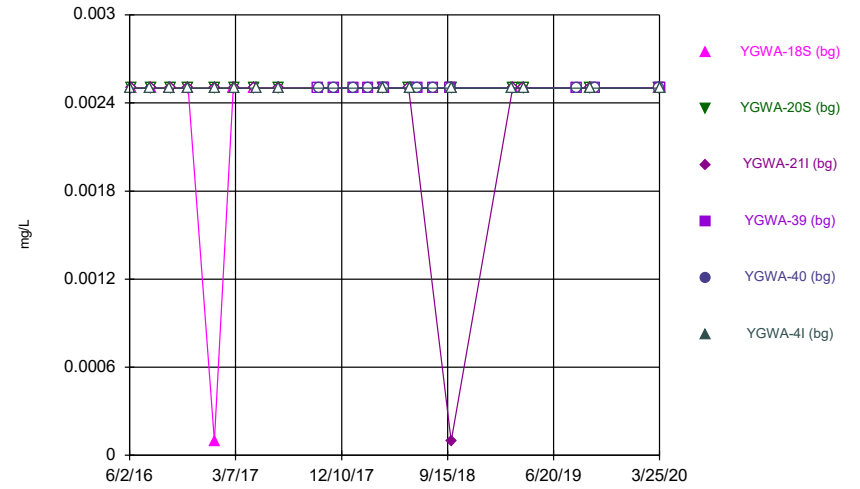
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



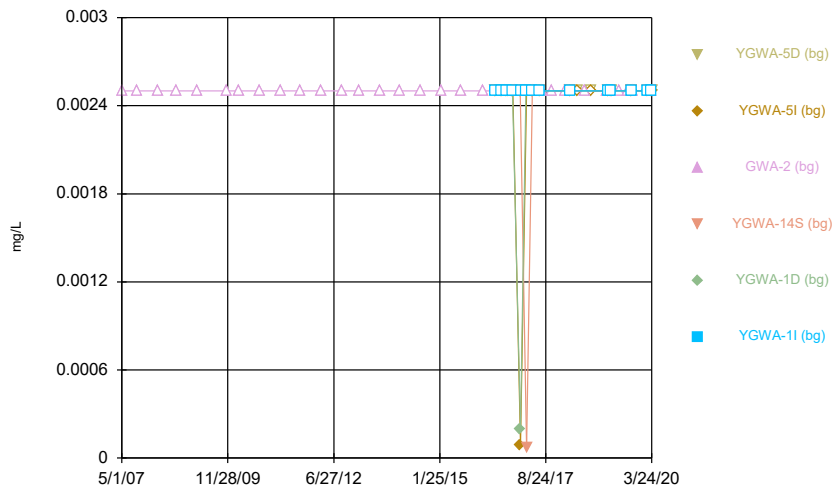
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



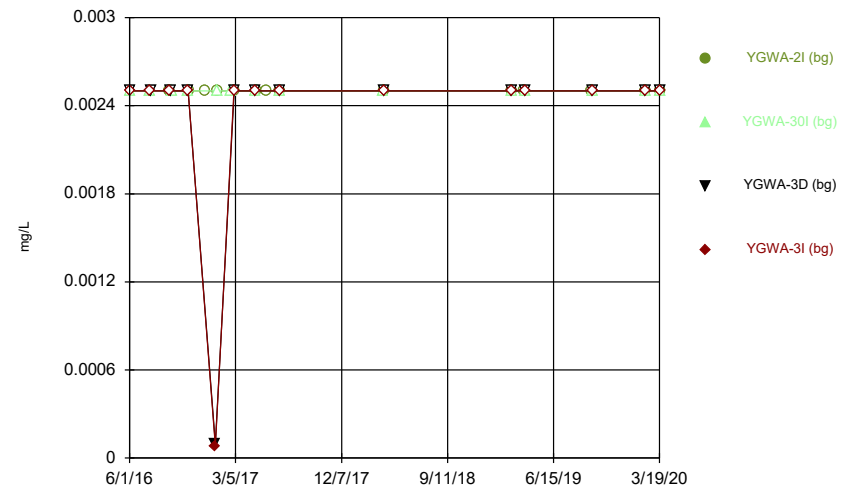
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Time Series



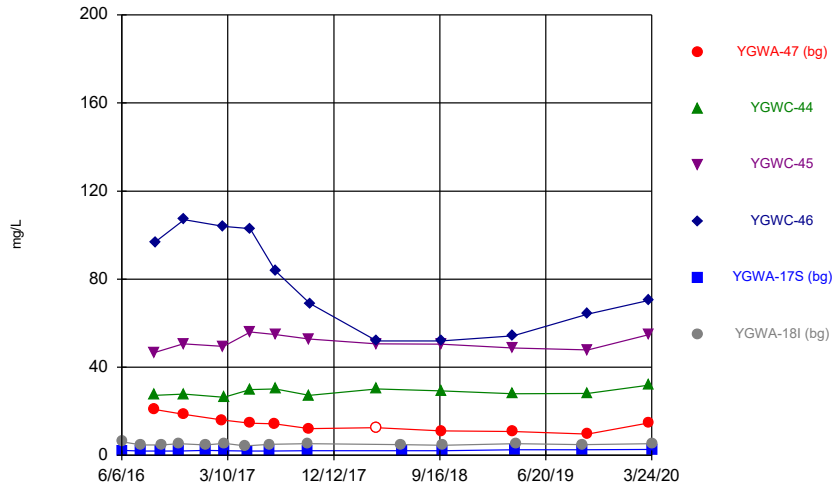
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Time Series



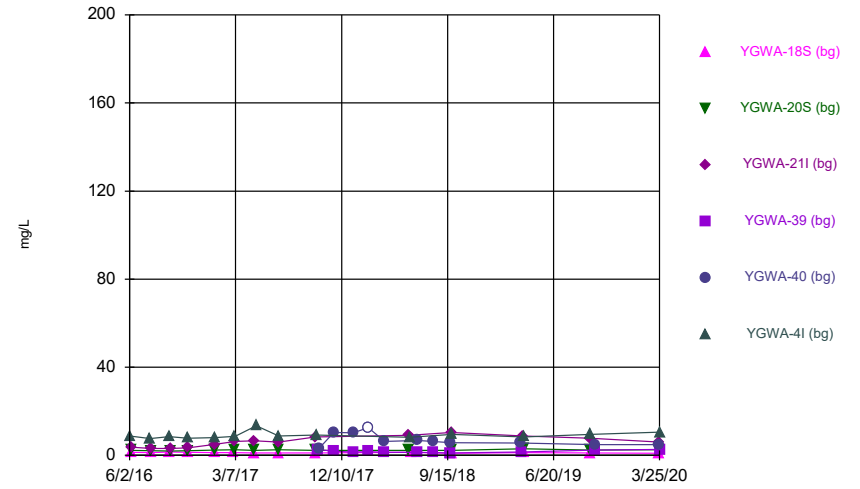
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



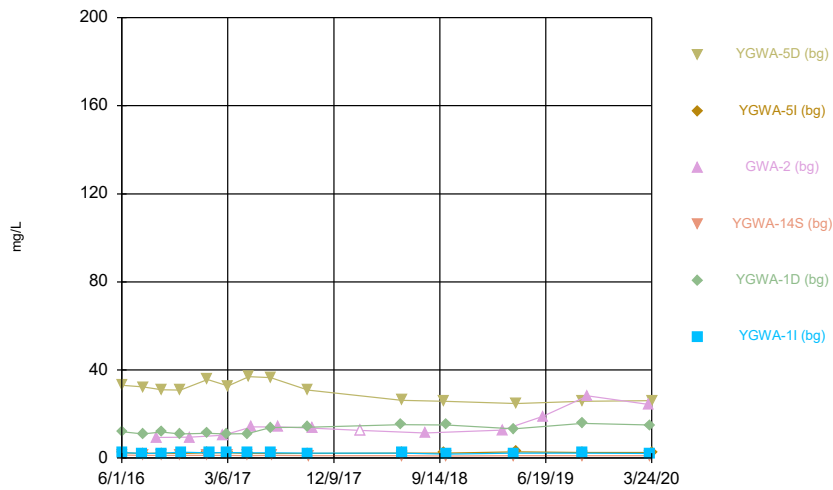
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



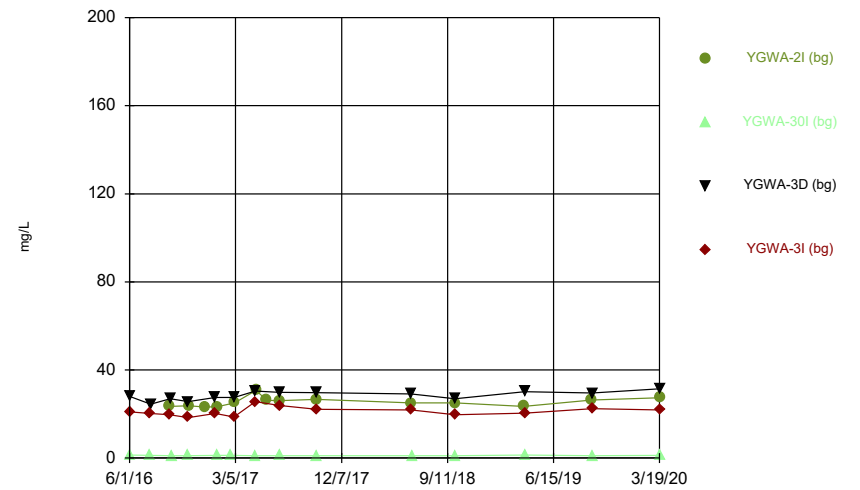
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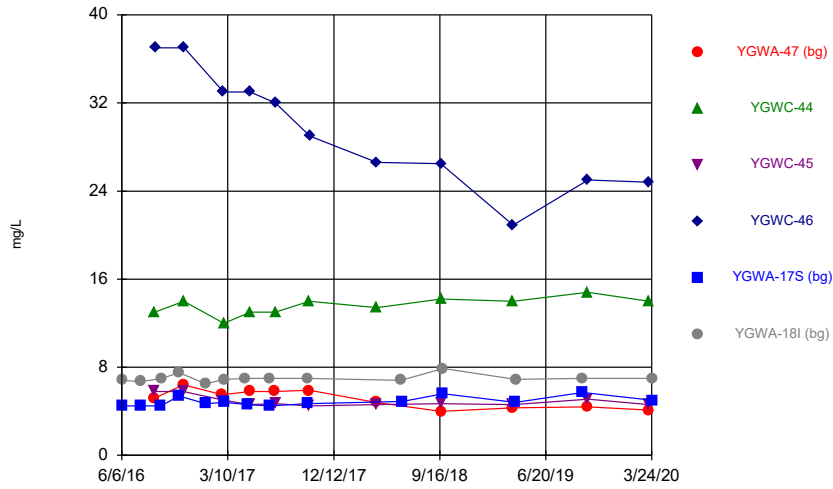
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Time Series



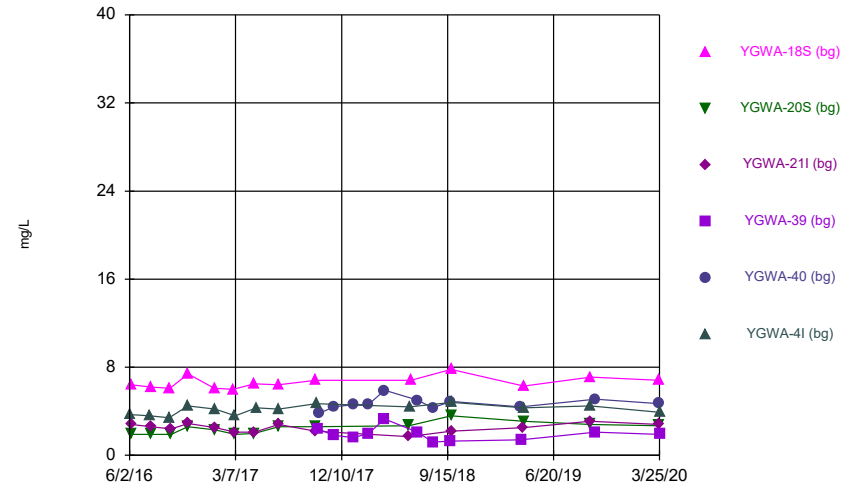
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Time Series



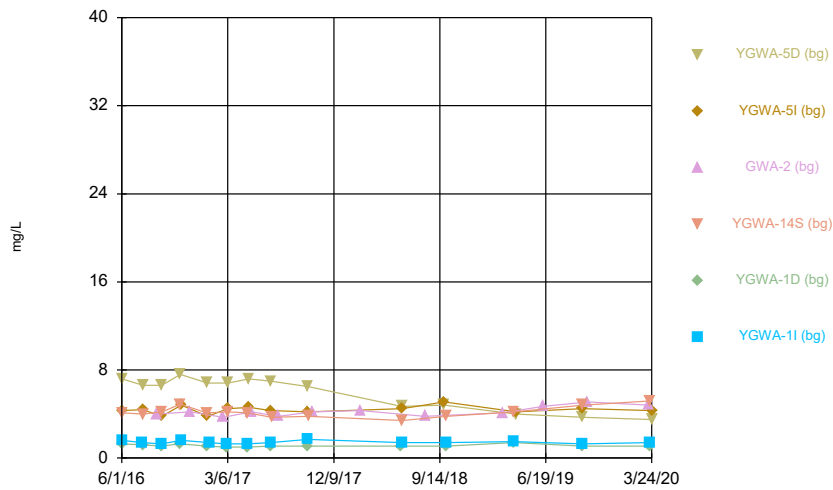
Constituent: Chloride Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



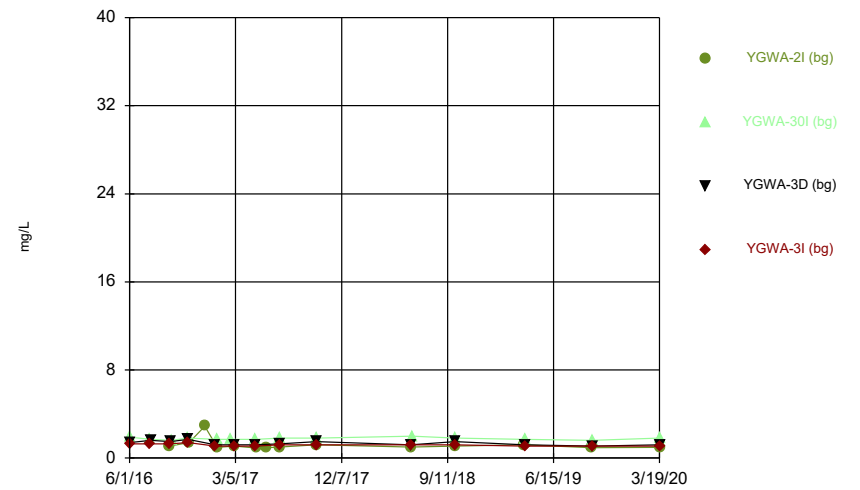
Constituent: Chloride Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



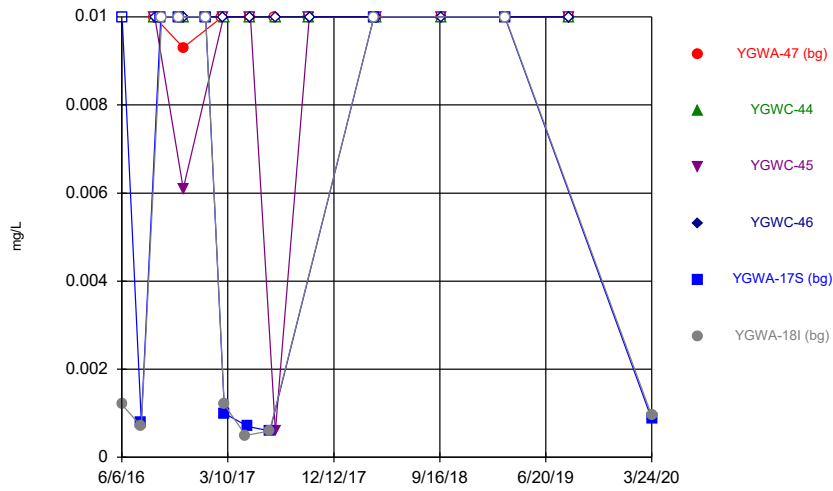
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



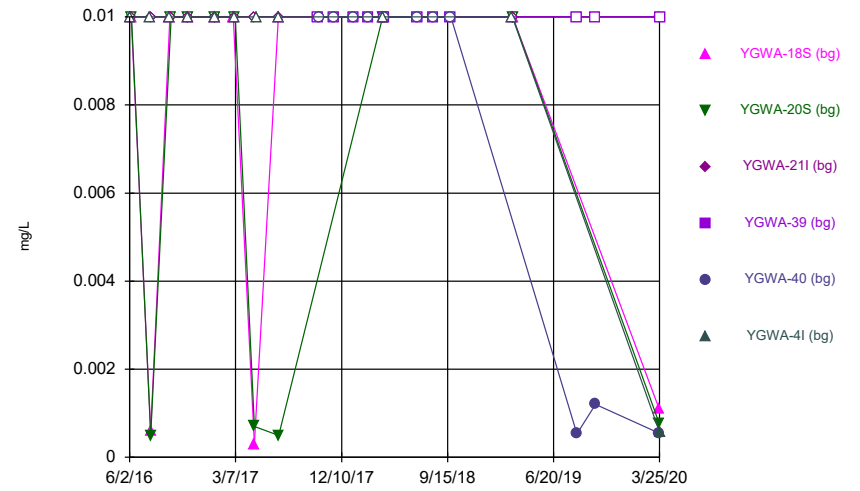
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



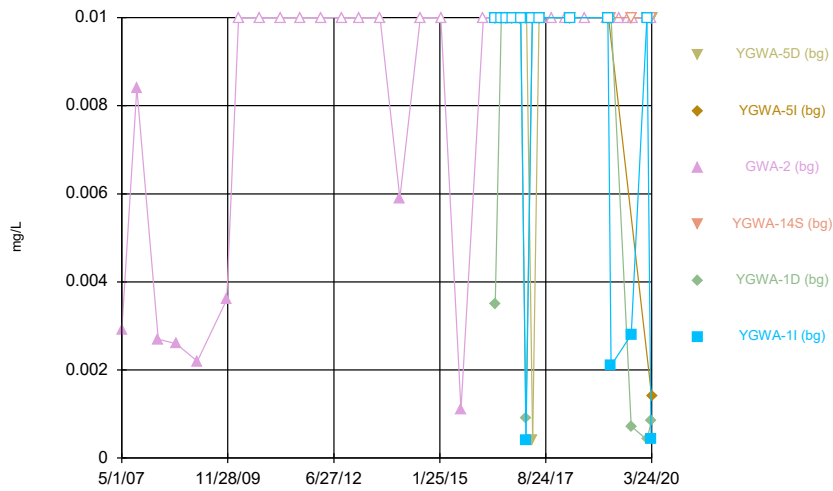
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



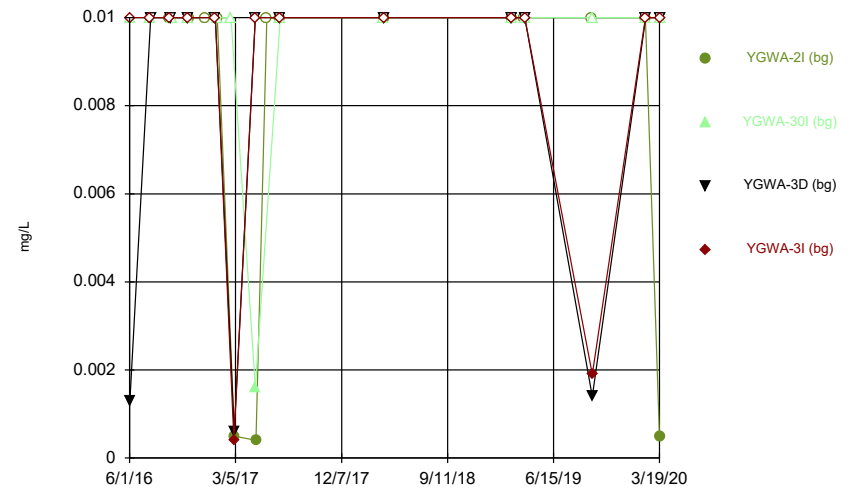
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



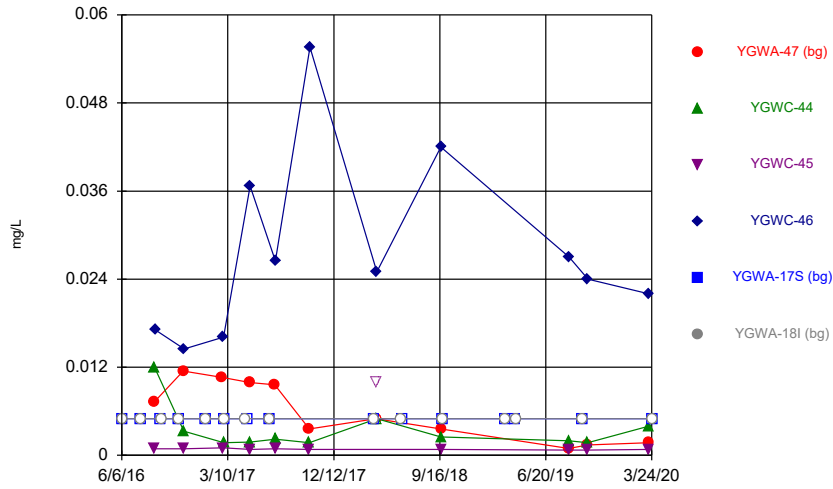
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



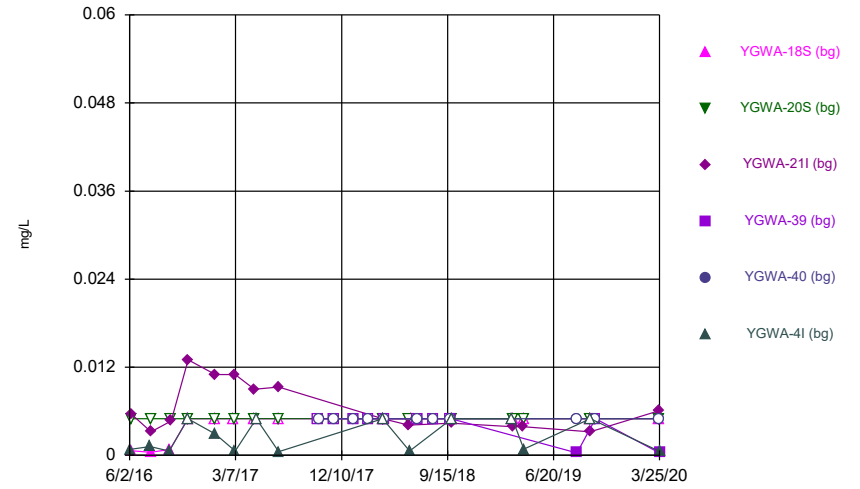
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



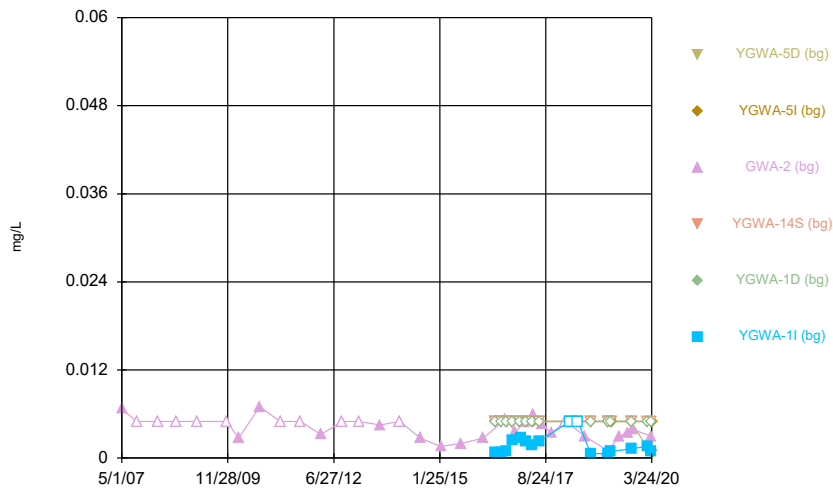
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



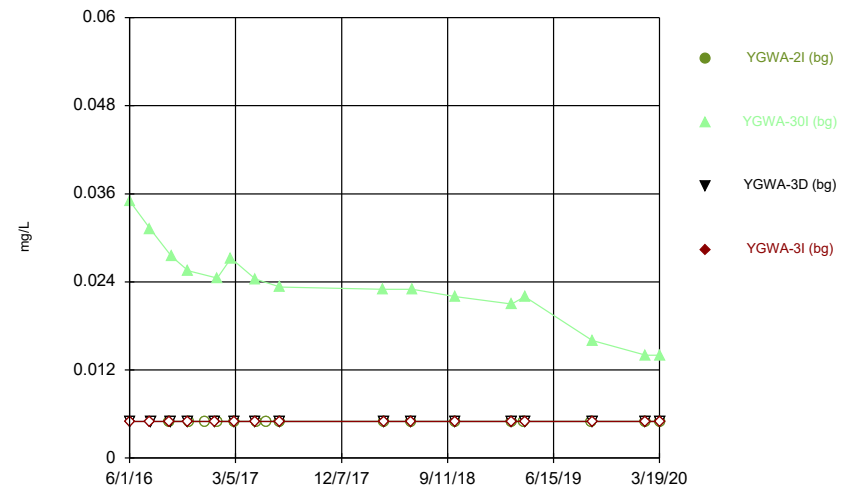
Constituent: Cobalt Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



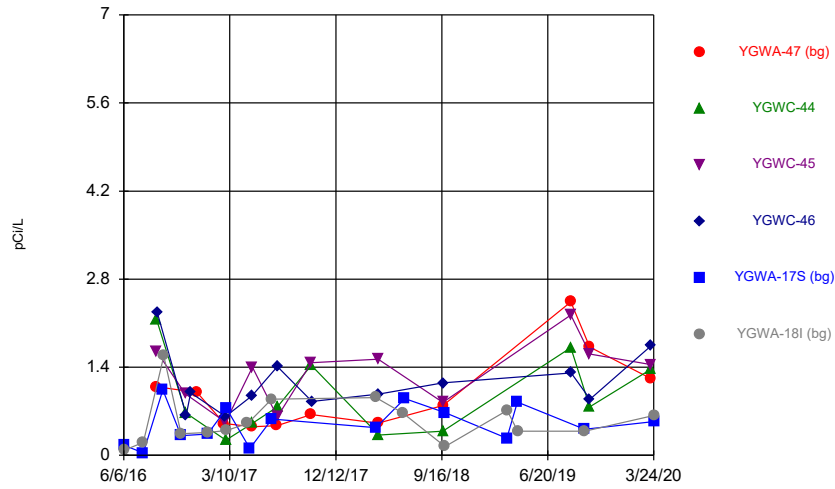
Constituent: Cobalt Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



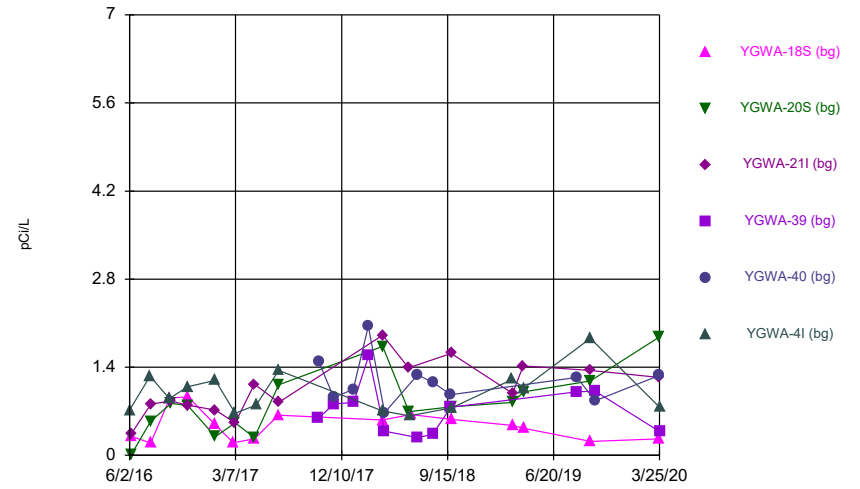
Constituent: Cobalt Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



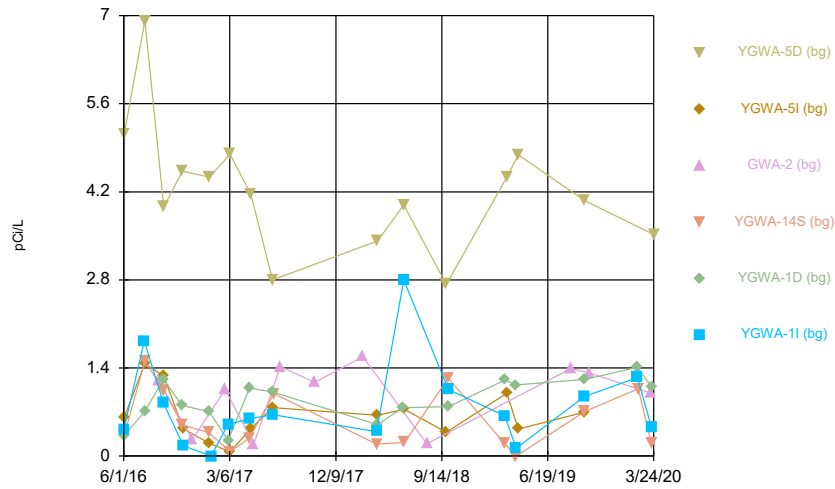
Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



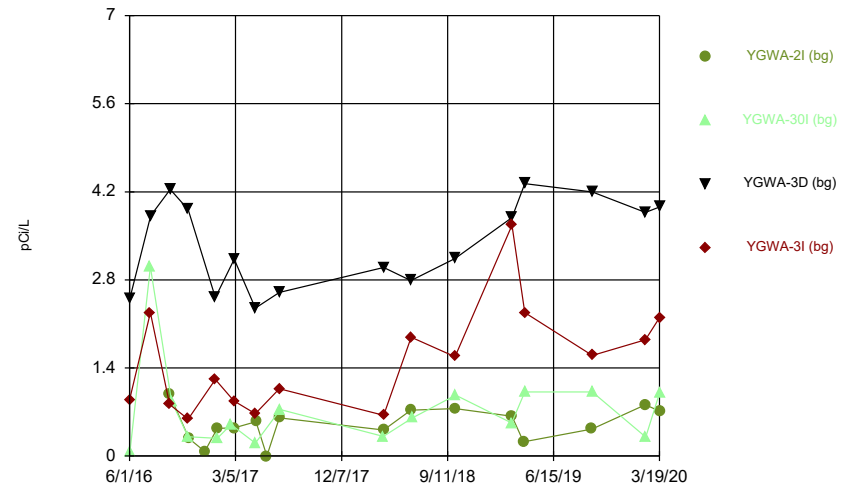
Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



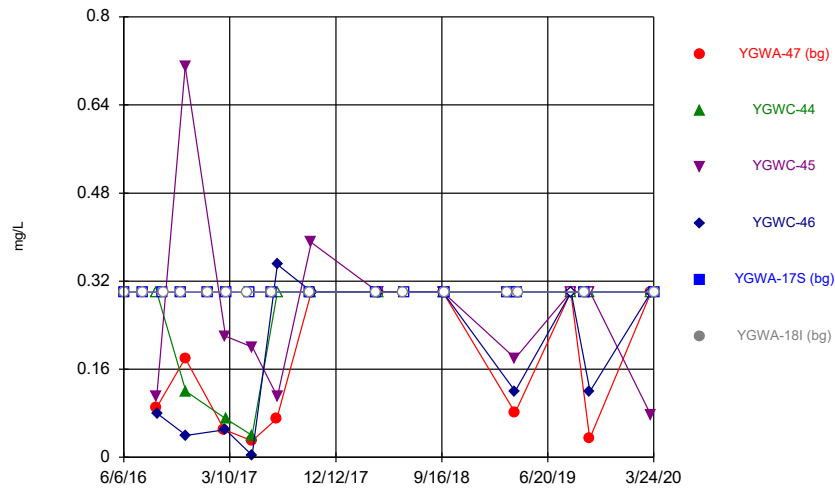
Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



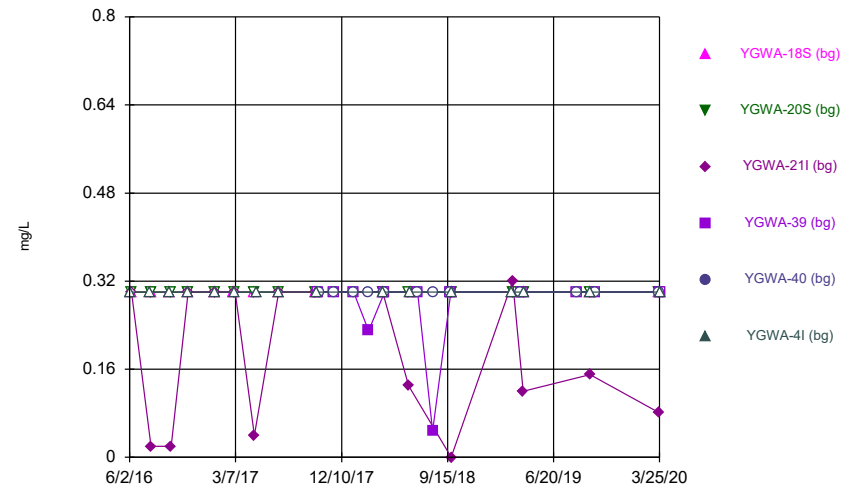
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



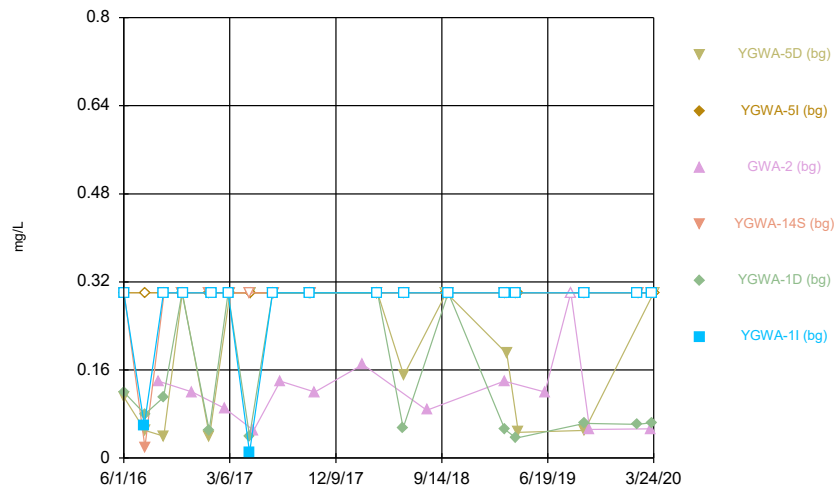
Constituent: Fluoride Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



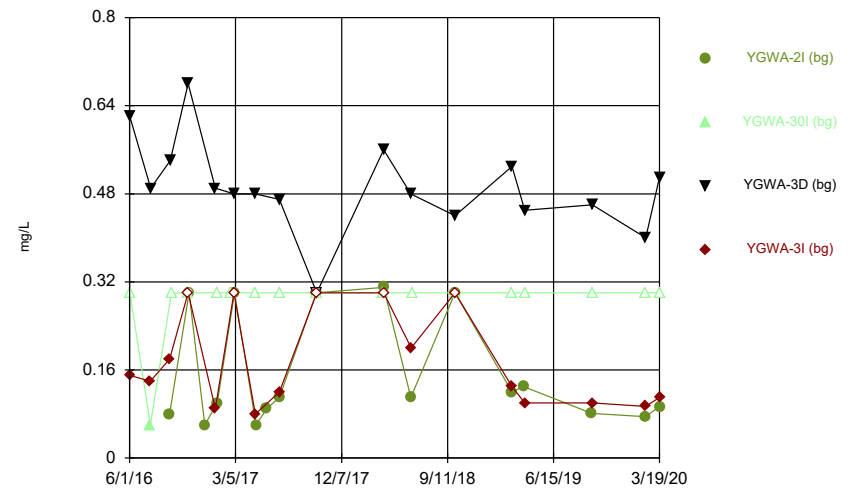
Constituent: Fluoride Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



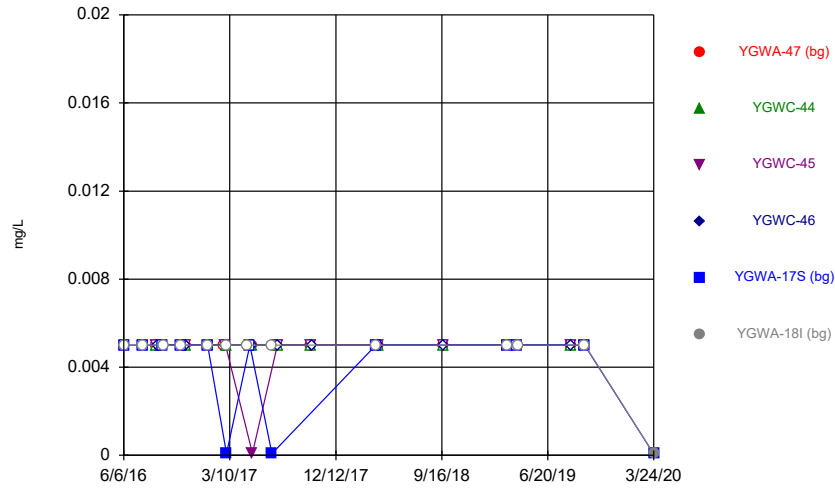
Constituent: Fluoride Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



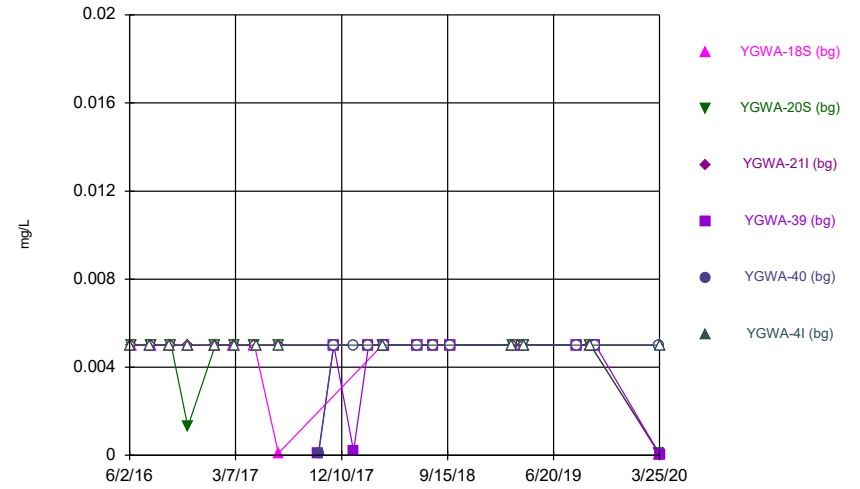
Constituent: Fluoride Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



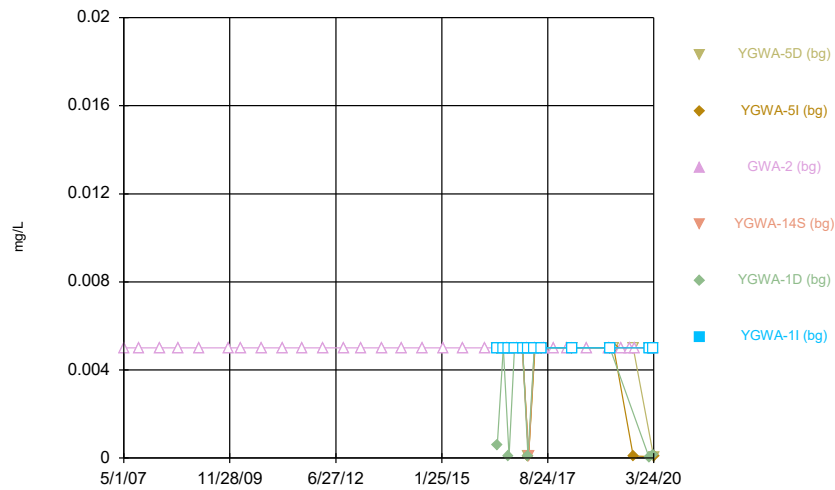
Constituent: Lead Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



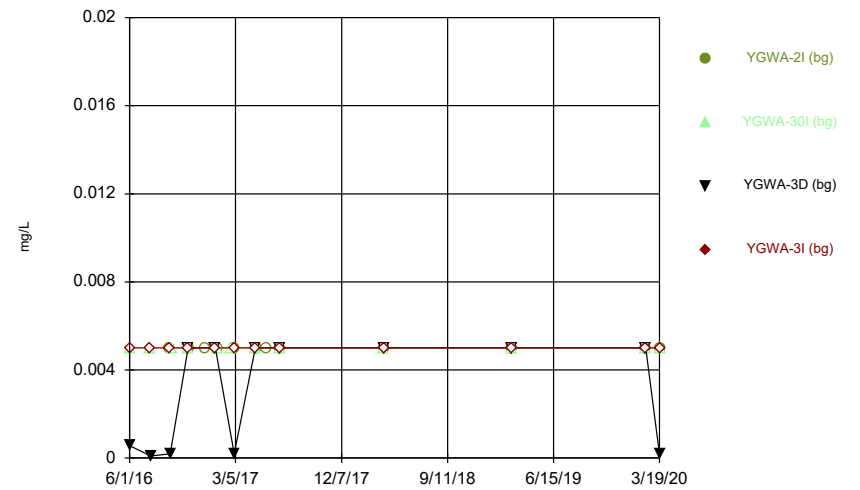
Constituent: Lead Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



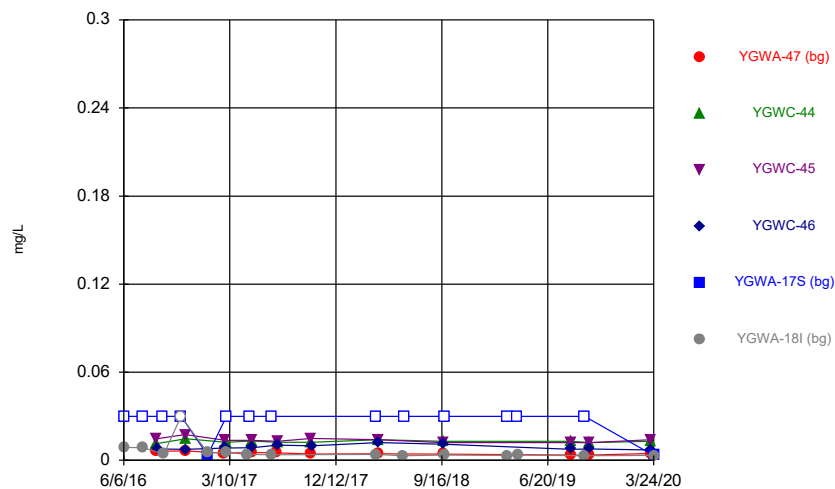
Constituent: Lead Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



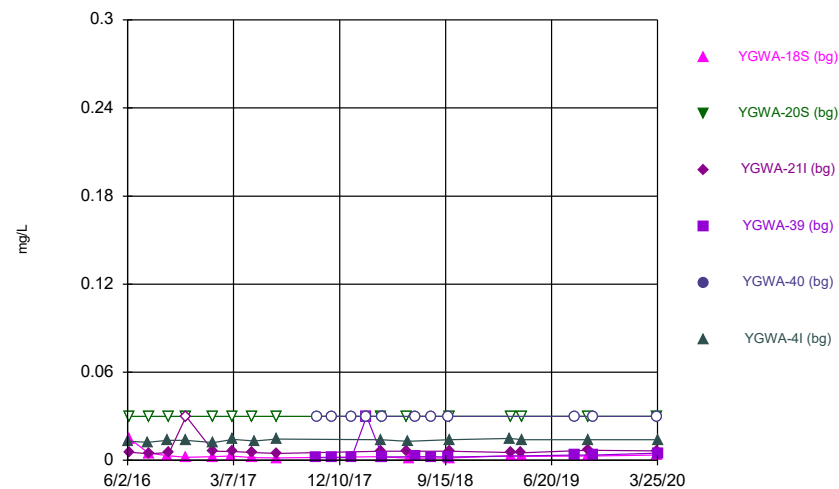
Constituent: Lead Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



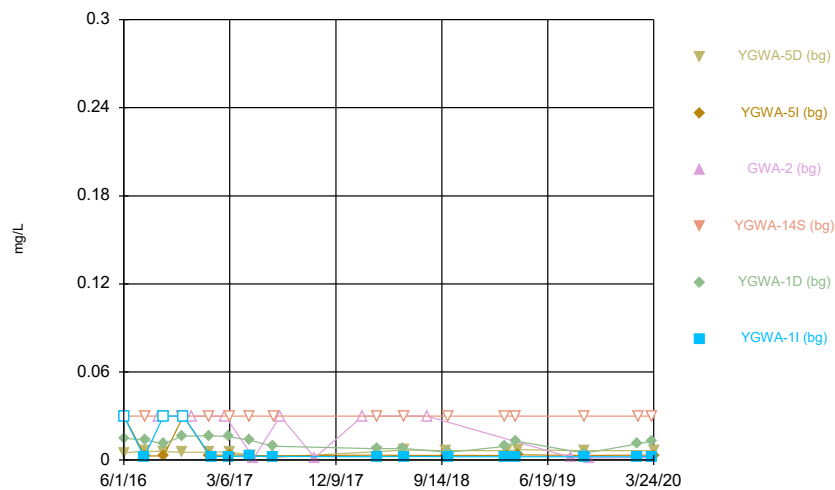
Constituent: Lithium Analysis Run 7/27/2020 3:57 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



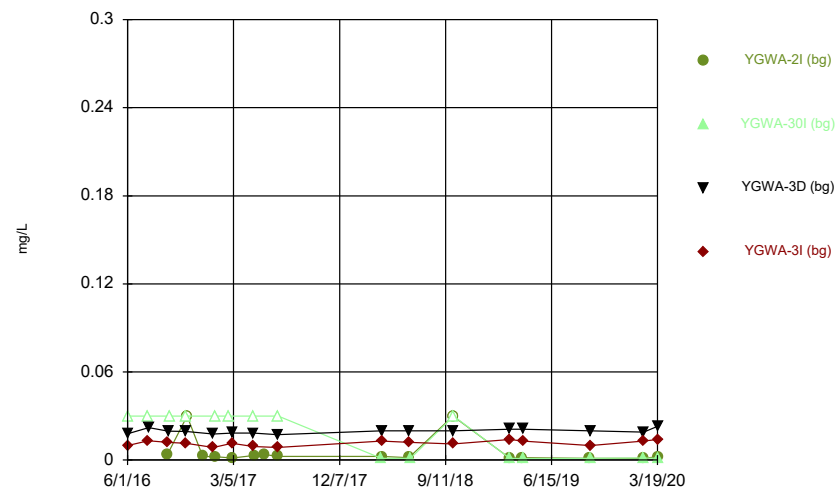
Constituent: Lithium Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



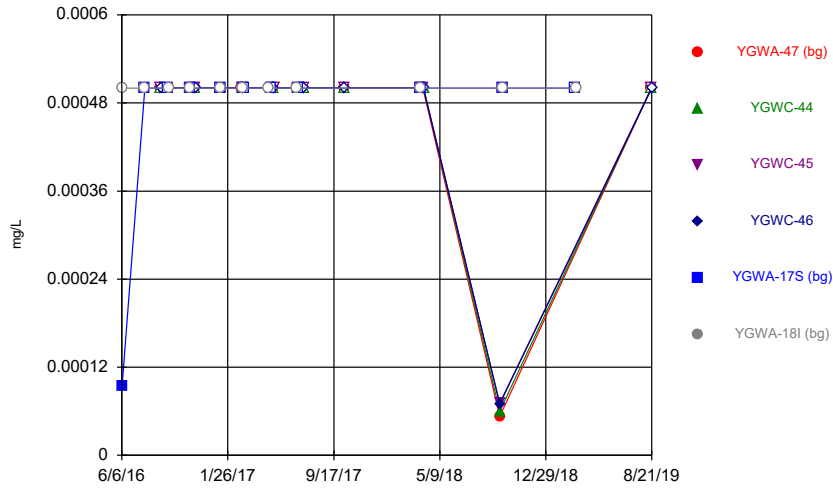
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



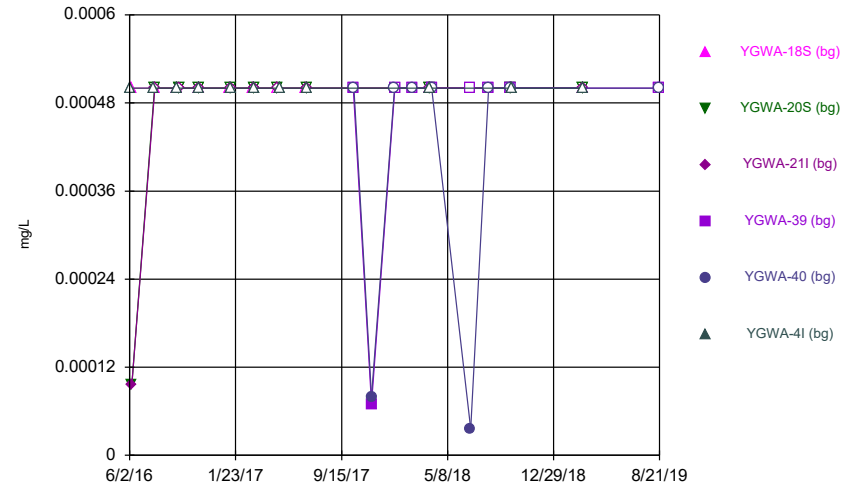
Constituent: Lithium Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



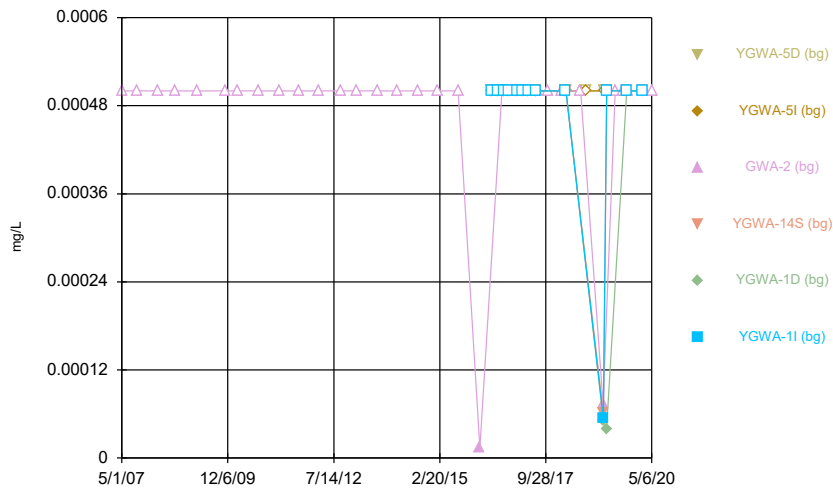
Constituent: Mercury Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



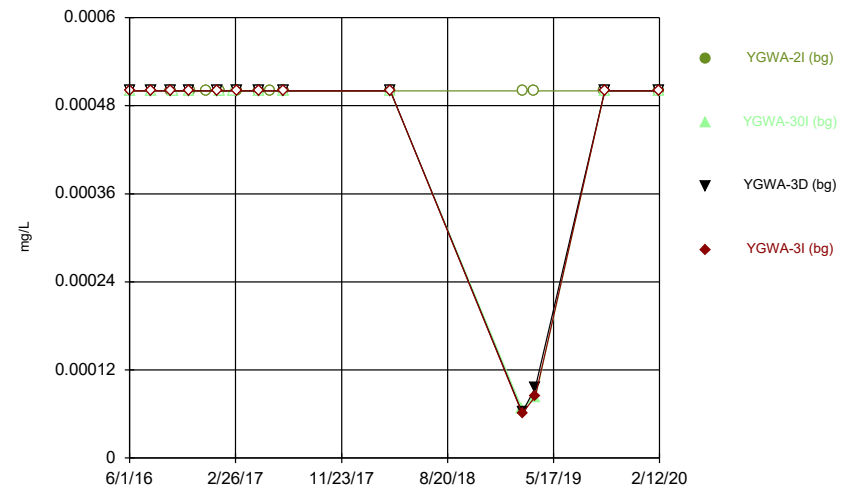
Constituent: Mercury Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



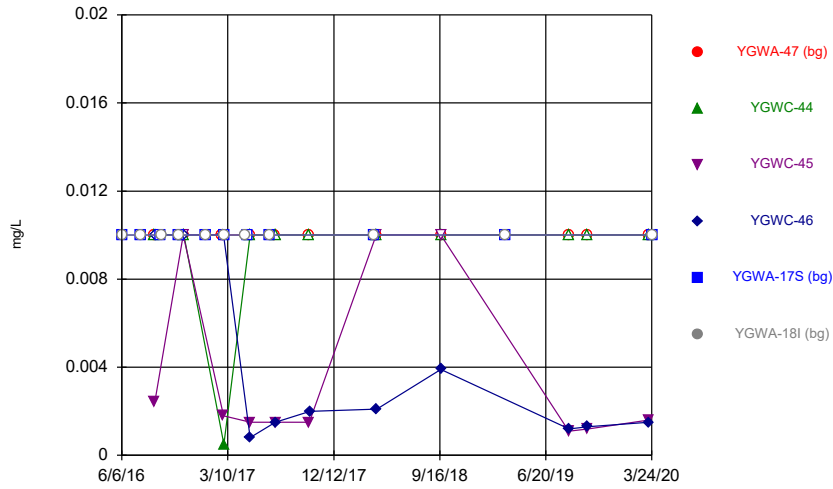
Constituent: Mercury Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series

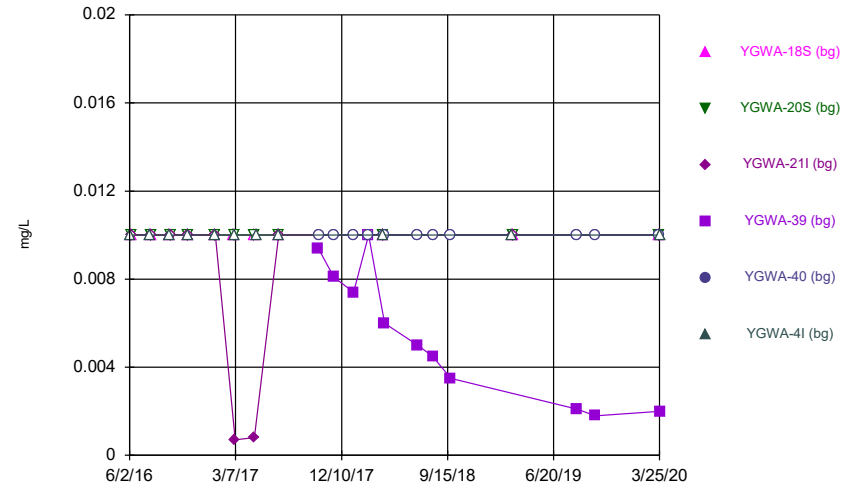


Constituent: Mercury Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

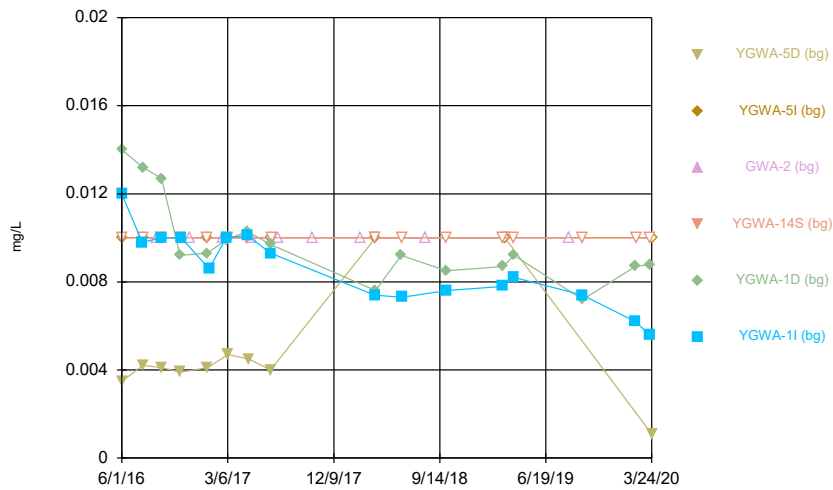
Time Series



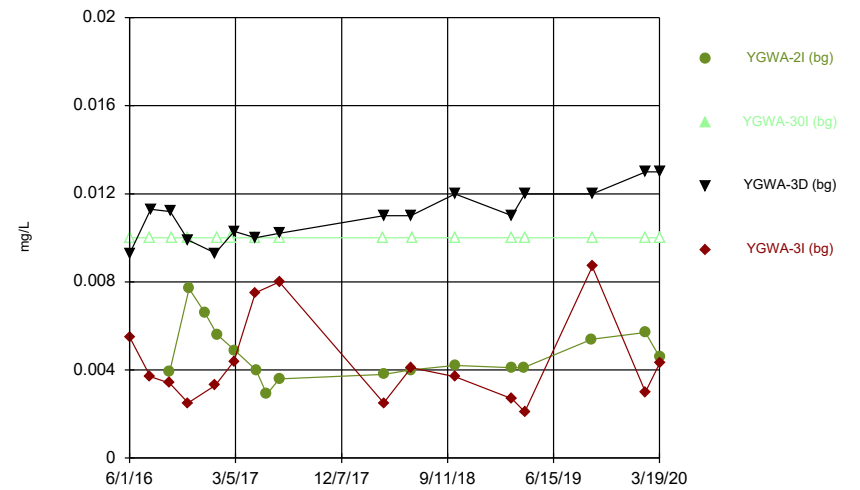
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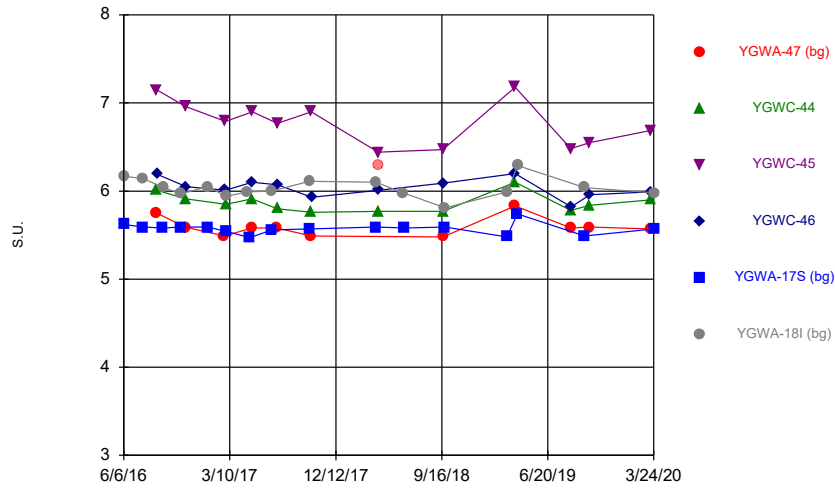
Time Series



Time Series

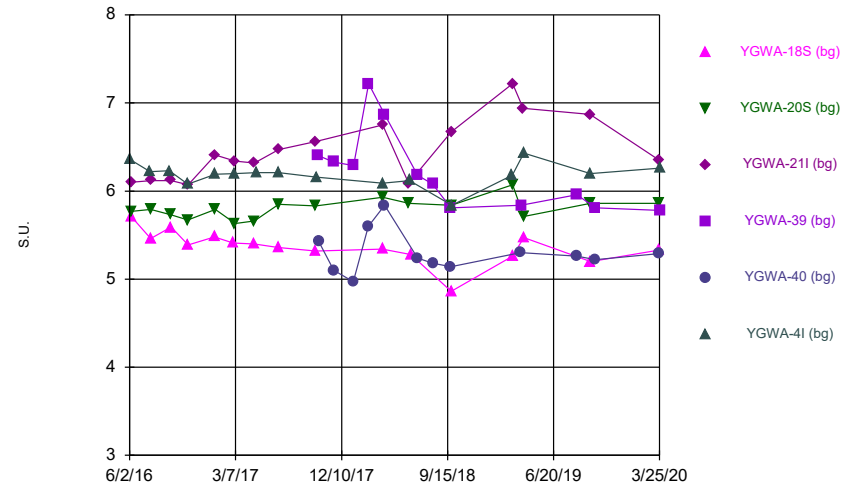


Time Series



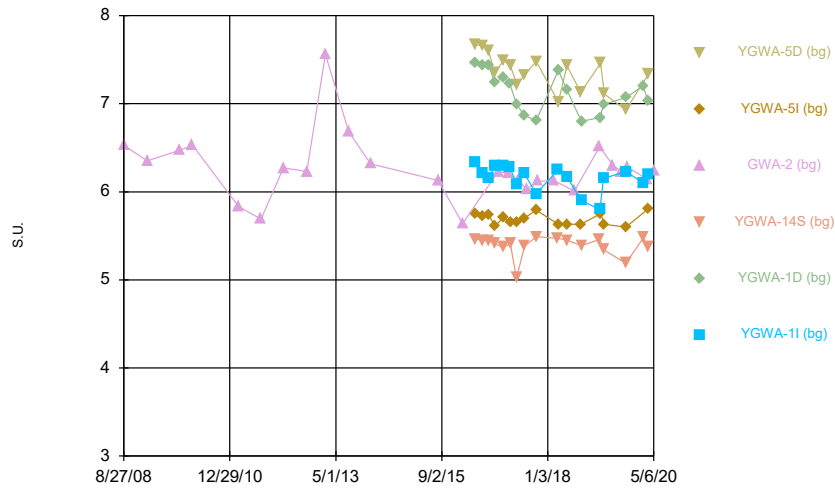
Constituent: pH Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



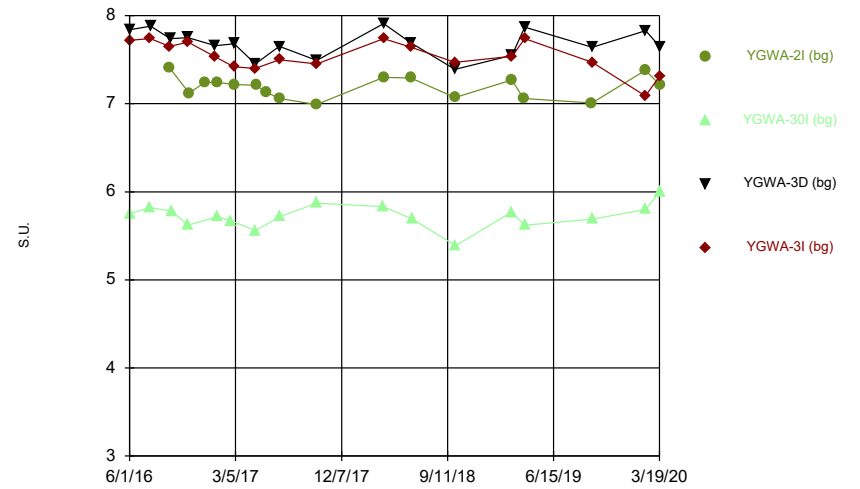
Constituent: pH Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



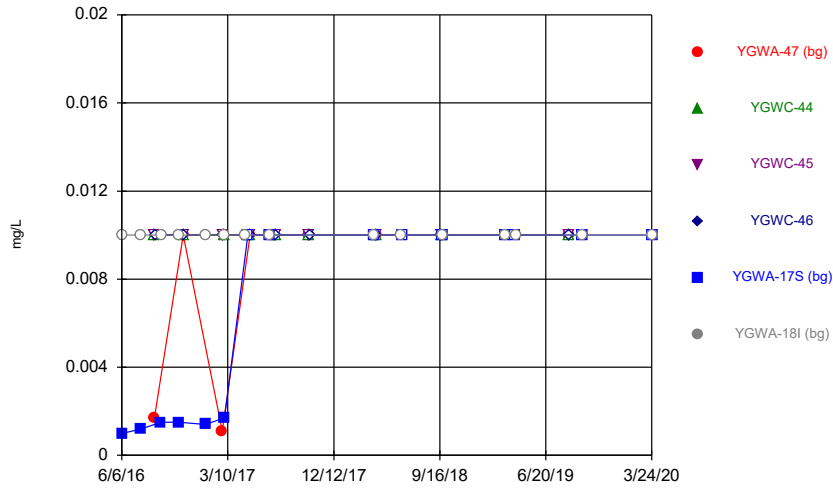
Constituent: pH Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



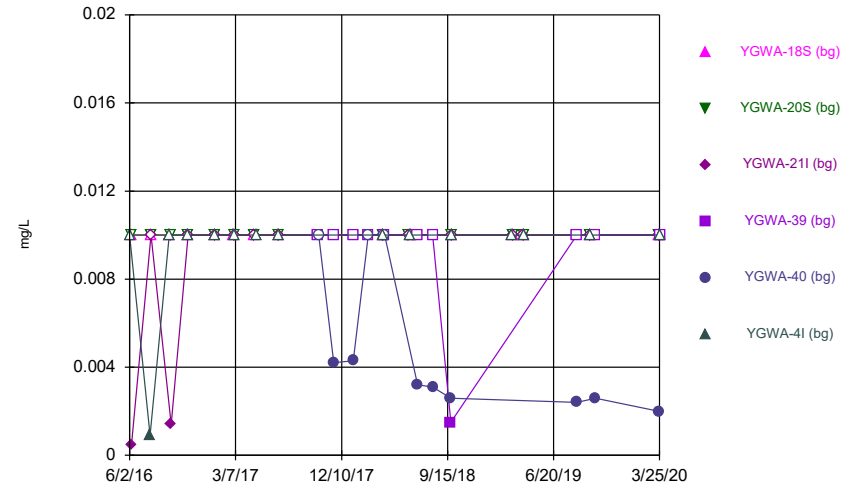
Constituent: pH Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



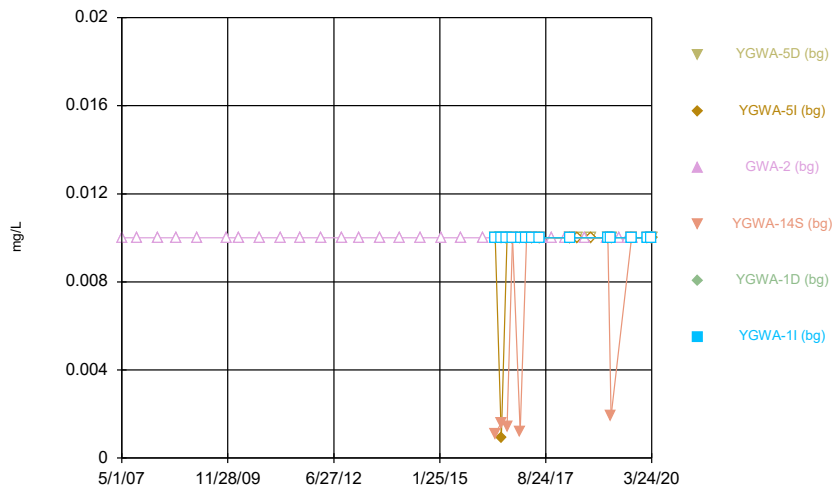
Constituent: Seleniun Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



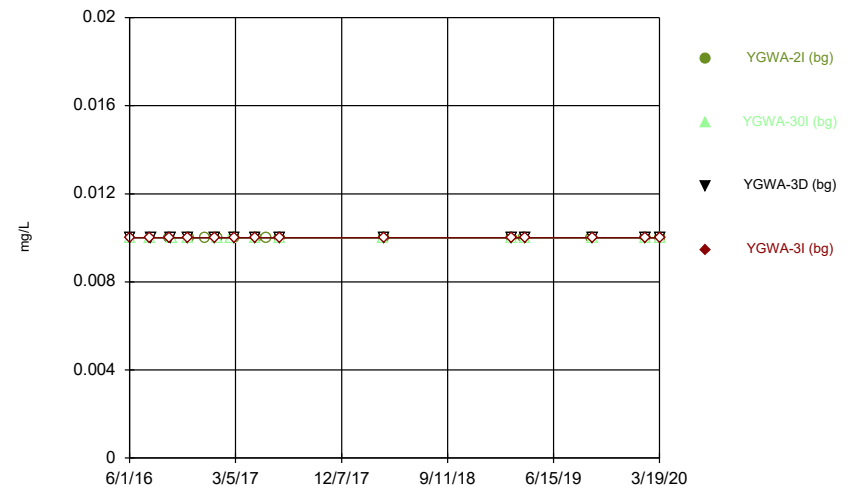
Constituent: Seleniun Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



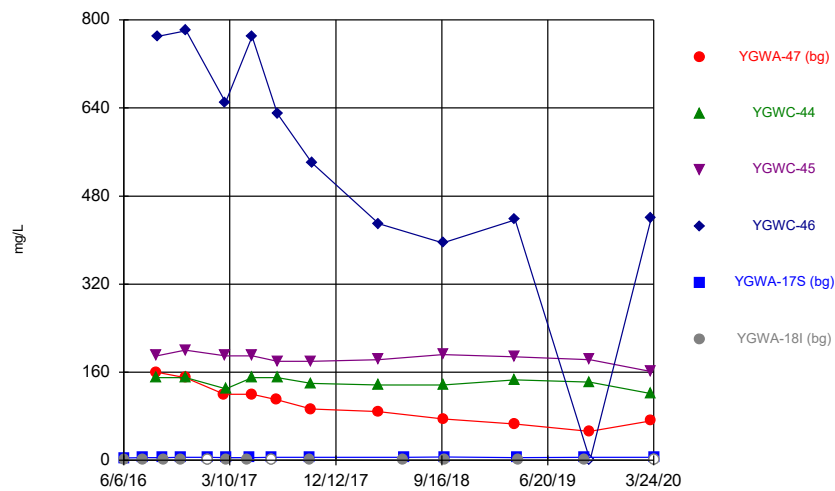
Constituent: Seleniun Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



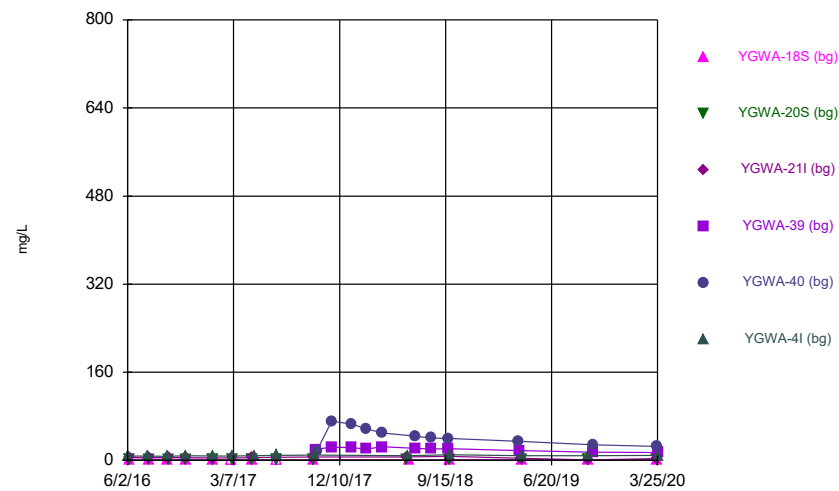
Constituent: Seleniun Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



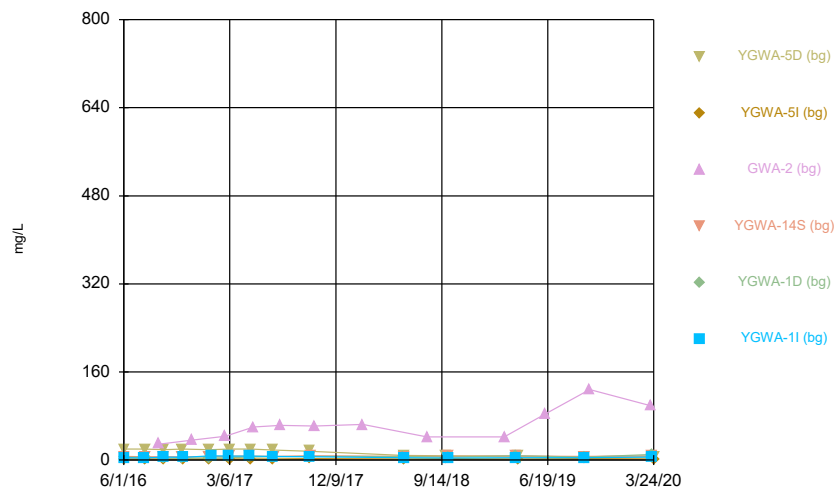
Constituent: Sulfate Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



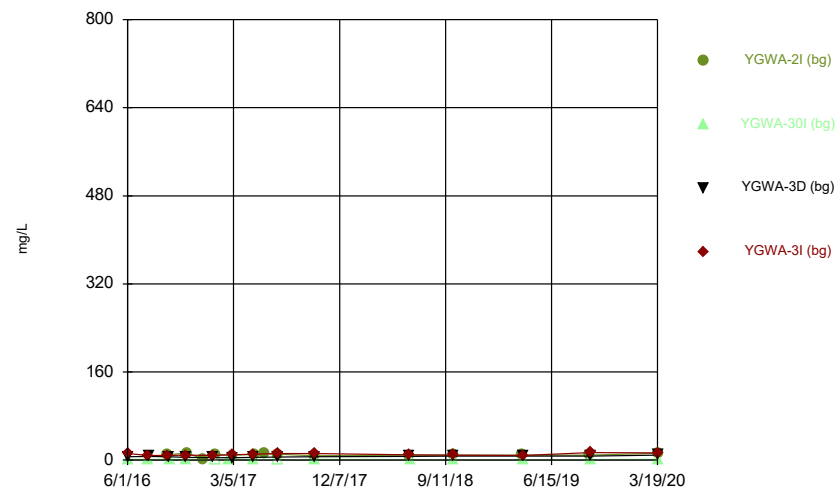
Constituent: Sulfate Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



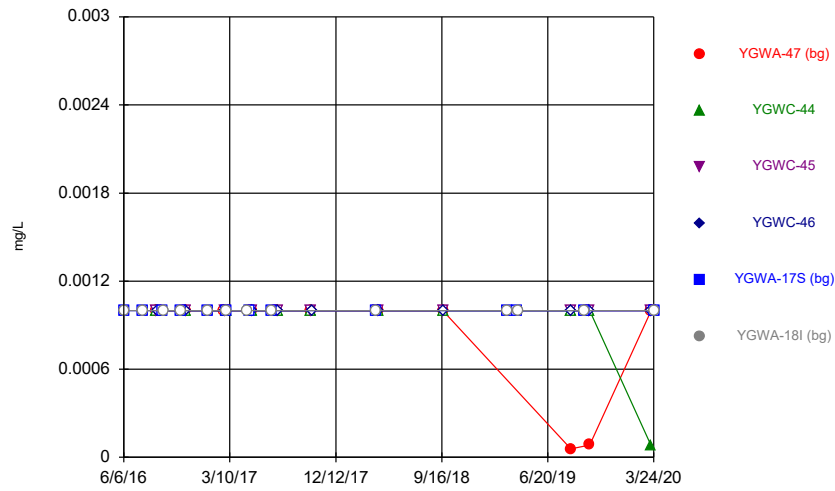
Constituent: Sulfate Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



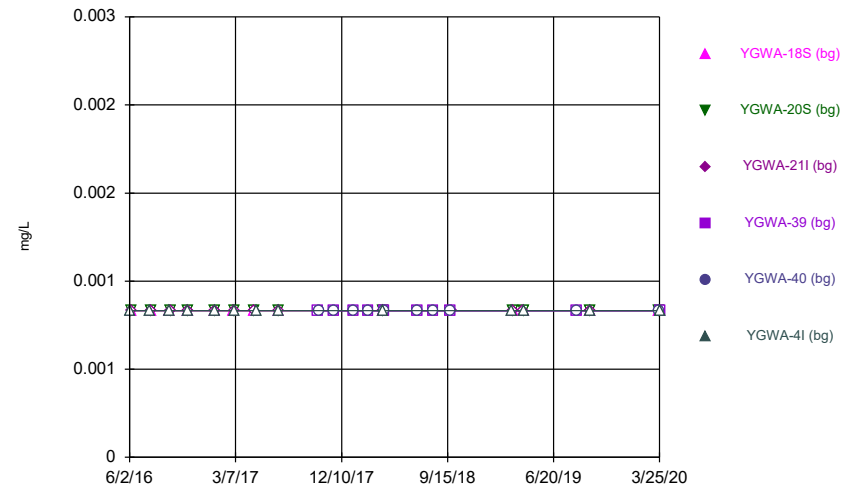
Constituent: Sulfate Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



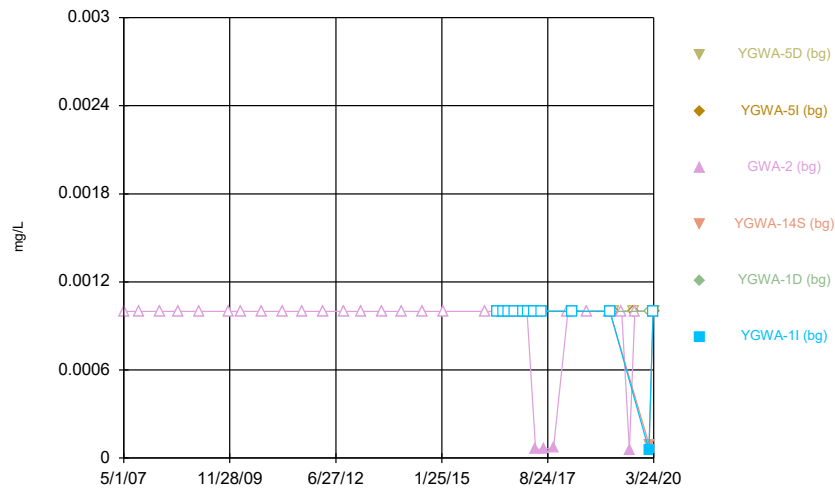
Constituent: Thallium Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



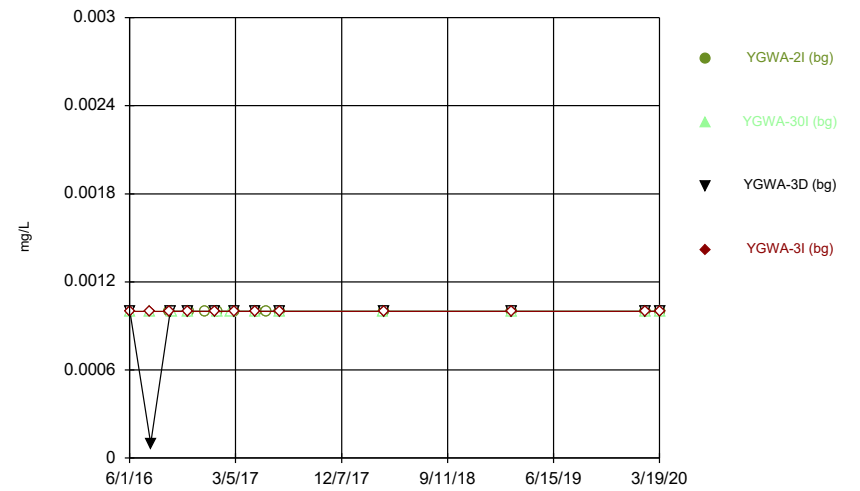
Constituent: Thallium Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



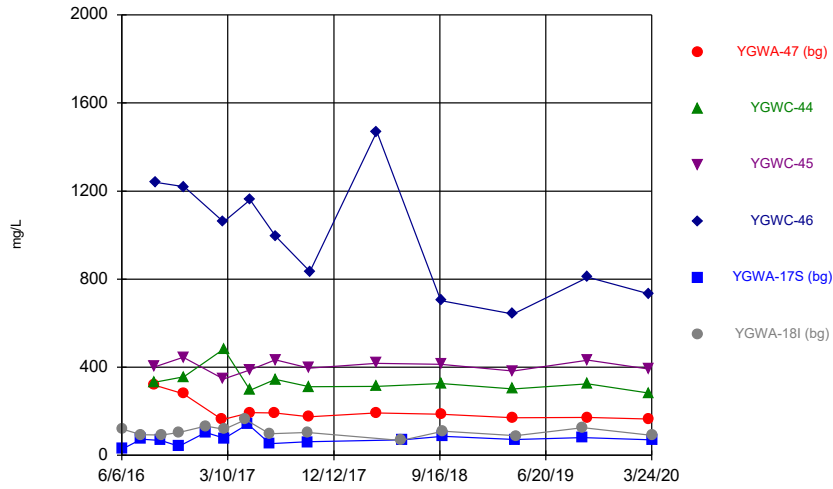
Constituent: Thallium Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



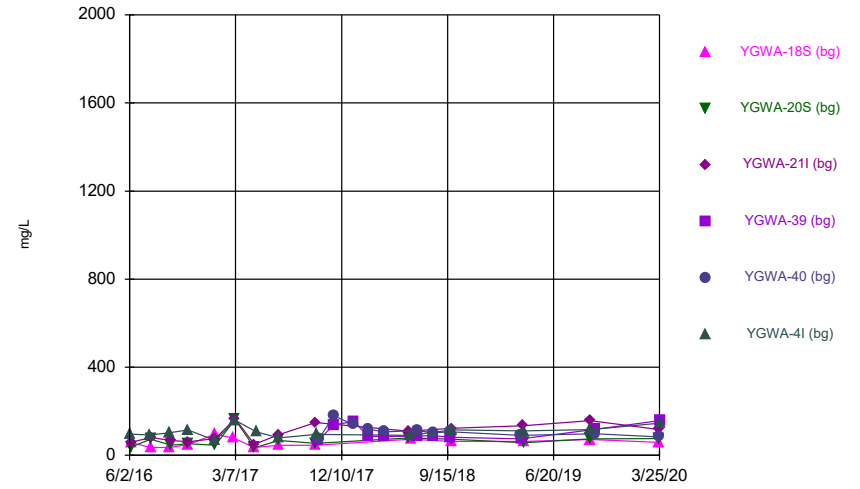
Constituent: Thallium Analysis Run 7/27/2020 3:58 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



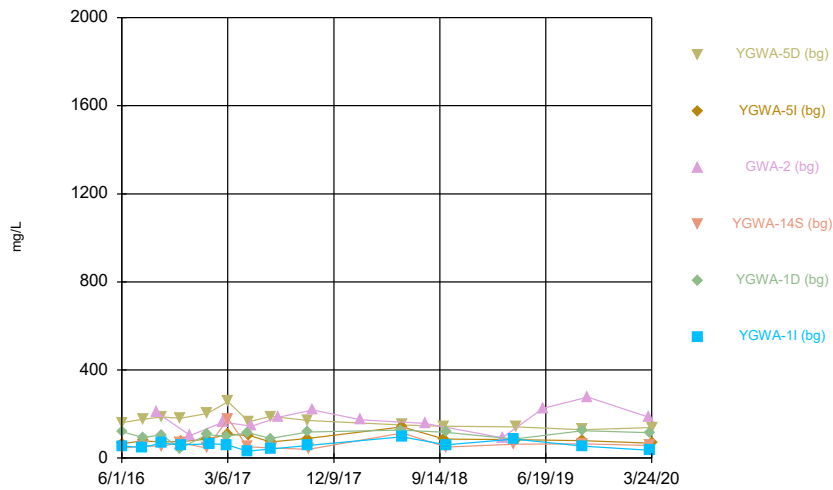
Constituent: Total Dissolved Solids Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



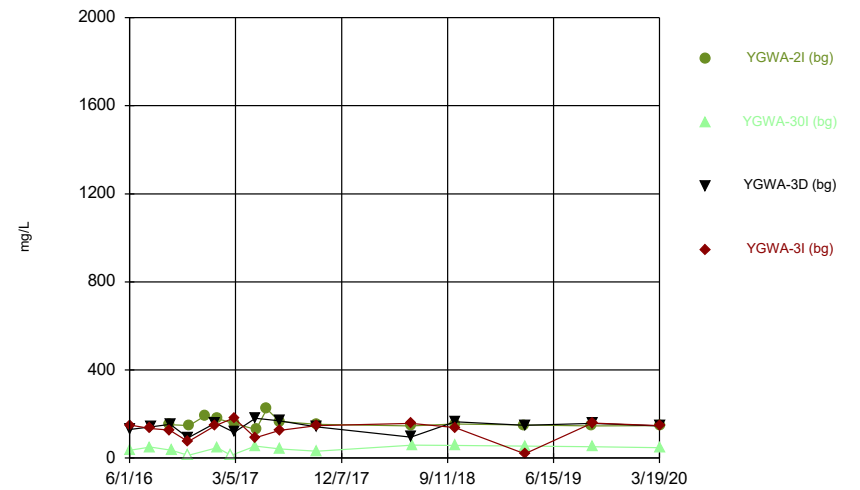
Constituent: Total Dissolved Solids Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 3:58 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.003
6/7/2016					<0.003	
7/27/2016					<0.003	0.0005 (J)
8/30/2016	0.0028 (J)					
8/31/2016		<0.003	<0.003			
9/1/2016				<0.003		
9/16/2016					<0.003	
9/19/2016						<0.003
11/3/2016					<0.003	<0.003
11/14/2016	<0.003		<0.003			
11/15/2016		<0.003				
11/16/2016				<0.003		
1/11/2017					<0.003	<0.003
2/24/2017	<0.003					
2/27/2017			<0.003	<0.003		
2/28/2017		<0.003				
3/1/2017						<0.003
3/2/2017					<0.003	
4/26/2017						<0.003
5/2/2017					<0.003	
5/8/2017	0.0004 (J)	<0.003		<0.003		
5/9/2017			<0.003			
6/28/2017						<0.003
6/29/2017					<0.003	
7/11/2017	0.0006 (J)					
7/13/2017		<0.003	<0.003	<0.003		
10/10/2017	<0.003	<0.003	<0.003			
10/11/2017				<0.003		
3/28/2018					<0.003	<0.003
4/2/2018	<0.003					
4/3/2018			<0.003			
4/4/2018		<0.003		<0.003		
9/19/2018	<0.003	<0.003	<0.003	<0.003		
3/5/2019					<0.003	
3/6/2019						<0.003
4/2/2019					<0.003	
4/3/2019						<0.003
8/20/2019	<0.003	<0.003	<0.003			
8/21/2019				<0.003		
9/25/2019					<0.003	
9/26/2019						0.00056 (J)
3/24/2020					<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.003
6/6/2016	<0.003					
6/7/2016		<0.003	<0.003			
7/26/2016						0.0003 (J)
7/27/2016	<0.003	<0.003				
7/28/2016			<0.003			
9/14/2016						<0.003
9/16/2016	<0.003					
9/19/2016		<0.003	0.001 (J)			
11/2/2016		<0.003				<0.003
11/3/2016	<0.003		<0.003			
1/11/2017	<0.003					
1/13/2017		<0.003	<0.003			<0.003
3/1/2017	<0.003					
3/6/2017		<0.003	0.0005 (J)			<0.003
4/26/2017	<0.003	<0.003	<0.003			
5/1/2017						<0.003
6/28/2017	<0.003					
6/29/2017		<0.003	<0.003			<0.003
10/11/2017				0.0006 (J)		
10/12/2017					<0.003	
11/20/2017				<0.003	<0.003	
1/10/2018					<0.003	
1/11/2018				<0.003		
2/19/2018					<0.003	
2/20/2018				<0.003		
3/28/2018	<0.003					
3/29/2018		<0.003	<0.003			<0.003
4/3/2018				<0.003	<0.003	
6/28/2018				<0.003	<0.003	
8/7/2018				<0.003	<0.003	
9/24/2018				<0.003	<0.003	
3/4/2019						<0.003
3/5/2019	<0.003	<0.003	0.0011 (J)			
4/2/2019			0.0011 (J)			
4/3/2019	<0.003	<0.003				<0.003
8/21/2019				<0.003	<0.003	
9/24/2019			0.0035			
9/25/2019		<0.003				<0.003
9/26/2019	<0.003					
3/24/2020	<0.003	<0.003	0.0017 (J)		<0.003	
3/25/2020				0.0014 (J)		<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
5/1/2007			<0.003			
9/11/2007			<0.003			
3/20/2008			<0.003			
8/27/2008			<0.003			
3/3/2009			<0.003			
11/18/2009			<0.003			
3/3/2010			<0.003			
9/8/2010			<0.003			
3/10/2011			<0.003			
9/8/2011			<0.003			
3/5/2012			<0.003			
9/10/2012			<0.003			
2/6/2013			<0.003			
8/12/2013			<0.003			
2/5/2014			<0.003			
8/5/2014			<0.003			
2/4/2015			<0.003			
8/3/2015			<0.003			
2/16/2016			<0.003			
6/1/2016					<0.003	<0.003
6/2/2016	<0.003	<0.003		<0.003		
7/25/2016						<0.003
7/26/2016	<0.003	<0.003		0.0005 (J)	0.001 (J)	
8/31/2016			<0.003			
9/13/2016					0.001 (J)	<0.003
9/14/2016	<0.003	<0.003				
9/15/2016				<0.003		
11/1/2016					0.0015 (J)	
11/2/2016	<0.003			<0.003		
11/4/2016		<0.003				<0.003
11/28/2016			0.0014 (J)			
1/10/2017				<0.003		
1/11/2017					<0.003	
1/12/2017	<0.003	<0.003				
1/16/2017						<0.003
2/22/2017			<0.003			
3/2/2017					0.0004 (J)	<0.003
3/7/2017	<0.003	<0.003				
3/8/2017				<0.003		
4/26/2017				<0.003		
4/27/2017					0.0004 (J)	0.0017 (J)
5/1/2017	<0.003					
5/2/2017		<0.003				
5/8/2017			<0.003			
6/27/2017	<0.003	<0.003			<0.003	<0.003
6/30/2017				<0.003		
7/17/2017			<0.003			
10/16/2017			<0.003			
2/19/2018			<0.003			
3/27/2018				<0.003		<0.003
3/29/2018	<0.003	<0.003			<0.003	
8/6/2018			<0.003			

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
2/25/2019			<0.003			
2/26/2019				<0.003		
2/27/2019					<0.003	<0.003
3/4/2019	<0.003	<0.003				
4/3/2019	<0.003	<0.003				
6/12/2019			<0.003			
8/19/2019			<0.003			
9/24/2019	<0.003	<0.003				
10/8/2019			<0.003			
2/10/2020					0.00088 (J)	<0.003
2/12/2020				<0.003		
3/17/2020			<0.003			
3/18/2020				<0.003		0.0004 (J)
3/19/2020					<0.003	
3/24/2020	<0.003	<0.003				

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				<0.003
6/2/2016		<0.003	<0.003	
7/25/2016		<0.003		<0.003
7/26/2016			0.002 (J)	
9/14/2016	<0.003			<0.003
9/15/2016			0.0027 (J)	
9/19/2016		<0.003		
11/1/2016		<0.003	<0.003	<0.003
11/4/2016	<0.003			
12/15/2016	0.0012 (J)			
1/11/2017			<0.003	<0.003
1/16/2017	<0.003	<0.003		
2/21/2017		<0.003		
3/1/2017				<0.003
3/2/2017			0.0008 (J)	
3/3/2017	<0.003			
4/26/2017		<0.003	<0.003	<0.003
4/28/2017	0.0015 (J)			
5/26/2017	0.0005 (J)			
6/28/2017	<0.003		<0.003	<0.003
6/30/2017		<0.003		
3/27/2018		<0.003		
3/28/2018	<0.003		<0.003	<0.003
2/26/2019		<0.003		
2/27/2019	<0.003		<0.003	<0.003
2/11/2020	0.00036 (J)			<0.003
2/12/2020		<0.003	<0.003	
3/19/2020	0.0003 (J)	<0.003	0.00064 (J)	<0.003

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.005
6/7/2016					<0.005	
7/27/2016					<0.005	<0.005
8/30/2016	<0.005					
8/31/2016		<0.005	<0.005			
9/1/2016				<0.005		
9/16/2016					<0.005	
9/19/2016						<0.005
11/3/2016					<0.005	<0.005
11/14/2016	<0.005		<0.005			
11/15/2016		<0.005				
11/16/2016				<0.005		
1/11/2017					<0.005	<0.005
2/24/2017	<0.005					
2/27/2017			<0.005	<0.005		
2/28/2017		0.0005 (J)				
3/1/2017						<0.005
3/2/2017					<0.005	
4/26/2017						<0.005
5/2/2017					<0.005	
5/8/2017	<0.005	0.0006 (J)		0.0007 (J)		
5/9/2017			<0.005			
6/28/2017						<0.005
6/29/2017					<0.005	
7/11/2017	<0.005					
7/13/2017		<0.005	<0.005	0.0011 (J)		
10/10/2017	0.0007 (J)	0.0007 (J)	0.0006 (J)			
10/11/2017				0.0011 (J)		
3/28/2018					<0.005	<0.005
4/2/2018	<0.005					
4/3/2018			0.00061 (J)			
4/4/2018		<0.005		0.00087 (J)		
6/7/2018						0.00066 (J)
6/11/2018					<0.005	
9/19/2018	0.00072 (J)	0.00086 (J)	0.00072 (J)	0.0012 (J)		
9/25/2018					<0.005	<0.005
3/5/2019					<0.005	
3/6/2019						<0.005
4/2/2019					<0.005	
4/3/2019						<0.005
8/20/2019	<0.005	0.00097 (J)	0.00078 (J)			
8/21/2019				0.00074 (J)		
9/25/2019					<0.005	
9/26/2019						<0.005
10/8/2019	<0.005	<0.005				
10/9/2019			<0.005	<0.005		
3/17/2020	<0.005	<0.005	<0.005	<0.005		
3/24/2020					<0.005	<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.005
6/6/2016	<0.005					
6/7/2016		<0.005	<0.005			
7/26/2016						<0.005
7/27/2016	<0.005	<0.005				
7/28/2016			<0.005			
9/14/2016						<0.005
9/16/2016	<0.005					
9/19/2016		<0.005	<0.005			
11/2/2016		<0.005				<0.005
11/3/2016	<0.005		<0.005			
1/11/2017	<0.005					
1/13/2017		<0.005	<0.005			<0.005
3/1/2017	<0.005					
3/6/2017		<0.005	0.0017 (J)			<0.005
4/26/2017	<0.005	<0.005	<0.005			
5/1/2017						<0.005
6/28/2017	<0.005					
6/29/2017		<0.005	<0.005			<0.005
10/11/2017				0.0009 (J)		
10/12/2017					<0.005	
11/20/2017				<0.005	<0.005	
1/10/2018					<0.005	
1/11/2018				<0.005		
2/19/2018					<0.005	
2/20/2018				<0.005		
3/28/2018	0.00061 (J)					
3/29/2018		<0.005	0.0015 (J)			<0.005
4/3/2018				<0.005	<0.005	
6/5/2018			0.0013 (J)			
6/6/2018		<0.005				
6/7/2018						0.00059 (J)
6/11/2018	<0.005					
6/28/2018				<0.005	<0.005	
8/7/2018				<0.005	<0.005	
9/24/2018				<0.005	<0.005	
9/25/2018	<0.005	<0.005	0.0022 (J)			
9/26/2018						<0.005
3/4/2019						<0.005
3/5/2019	<0.005	<0.005	0.0013 (J)			
4/2/2019			0.00096 (J)			
4/3/2019	<0.005	<0.005				<0.005
8/21/2019				0.00058 (J)	<0.005	
9/24/2019			0.0026 (J)			
9/25/2019		<0.005				<0.005
9/26/2019	<0.005					
10/9/2019				0.00063 (J)	<0.005	
3/24/2020	<0.005	<0.005	0.0013 (J)		<0.005	
3/25/2020				0.0012 (J)		<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
5/1/2007			<0.005			
9/11/2007			<0.005			
3/20/2008			<0.005			
8/27/2008			<0.005			
3/3/2009			<0.005			
11/18/2009			<0.005			
3/3/2010			<0.005			
9/8/2010			<0.005			
3/10/2011			<0.005			
9/8/2011			<0.005			
3/5/2012			<0.005			
9/10/2012			<0.005			
2/6/2013			<0.005			
8/12/2013			<0.005			
2/5/2014			<0.005			
8/5/2014			<0.005			
2/4/2015			<0.005			
8/3/2015			<0.005			
2/16/2016			<0.005			
6/1/2016					0.0021	<0.005
6/2/2016	0.00071 (J)	<0.005		<0.005		
7/25/2016						<0.005
7/26/2016	0.001 (J)	<0.005		<0.005	0.0016 (J)	
8/31/2016			<0.005			
9/13/2016					<0.005	<0.005
9/14/2016	<0.005	<0.005				
9/15/2016				<0.005		
11/1/2016					<0.005	
11/2/2016	<0.005			<0.005		
11/4/2016		<0.005				<0.005
11/28/2016			<0.005			
1/10/2017				<0.005		
1/11/2017					0.0017 (J)	
1/12/2017	<0.005	<0.005				
1/16/2017						<0.005
2/22/2017			<0.005			
3/2/2017					0.0014 (J)	<0.005
3/7/2017	0.0012 (J)	<0.005				
3/8/2017				<0.005		
4/26/2017				<0.005		
4/27/2017					0.0018 (J)	<0.005
5/1/2017	<0.005					
5/2/2017		<0.005				
5/8/2017			<0.005			
6/27/2017	0.0019 (J)	<0.005			0.0018 (J)	<0.005
6/30/2017				<0.005		
7/17/2017			<0.005			
10/16/2017			<0.005			
2/19/2018			<0.005			
3/27/2018				<0.005		<0.005
3/29/2018	0.0006 (J)	<0.005			0.0017 (J)	
6/5/2018					0.0013 (J)	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/6/2018	0.0013 (J)					<0.005
6/7/2018		<0.005				
6/8/2018				<0.005		
8/6/2018			<0.005			
9/26/2018	0.0014 (J)	<0.005				
10/1/2018				<0.005	0.0016 (J)	<0.005
2/25/2019			<0.005			
2/26/2019				<0.005		
2/27/2019					0.0015 (J)	<0.005
3/4/2019	<0.005	<0.005				
3/28/2019					0.00072 (J)	<0.005
3/29/2019				<0.005		
4/3/2019	<0.005	<0.005				
6/12/2019			0.00038 (J)			
8/19/2019			0.00095 (J)			
9/24/2019	0.00043 (J)	<0.005			0.0014 (J)	<0.005
9/25/2019				<0.005		
10/8/2019			<0.005			
2/10/2020					0.0026 (J)	0.0005 (J)
2/12/2020				<0.005		
3/17/2020			<0.005			
3/18/2020				<0.005		<0.005
3/19/2020					0.00095 (J)	
3/24/2020	0.00065 (J)	<0.005				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				<0.005
6/2/2016		<0.005	<0.005	
7/25/2016		<0.005		<0.005
7/26/2016			<0.005	
9/14/2016	<0.005			<0.005
9/15/2016			<0.005	
9/19/2016		<0.005		
11/1/2016		<0.005	<0.005	<0.005
11/4/2016	0.0017 (J)			
12/15/2016	0.0023 (J)			
1/11/2017			<0.005	<0.005
1/16/2017	0.0018 (J)	<0.005		
2/21/2017		<0.005		
3/1/2017				0.0004 (J)
3/2/2017			<0.005	
3/3/2017	0.0016 (J)			
4/26/2017		<0.005	<0.005	<0.005
4/28/2017	0.002 (J)			
5/26/2017	0.0005 (J)			
6/28/2017	0.0016 (J)		0.0007 (J)	0.0011 (J)
6/30/2017		<0.005		
3/27/2018		<0.005		
3/28/2018	0.0013 (J)		<0.005	<0.005
6/7/2018	0.00082 (J)		<0.005	
6/8/2018				<0.005
6/11/2018		<0.005		
10/1/2018	0.0011 (J)		<0.005	<0.005
10/2/2018		<0.005		
2/26/2019		<0.005		
2/27/2019	0.001 (J)		<0.005	<0.005
3/29/2019	0.00063 (J)			
4/1/2019		<0.005	<0.005	<0.005
9/24/2019	<0.005			
9/25/2019		<0.005	<0.005	<0.005
2/11/2020	0.0044 (J)			0.0041 (J)
2/12/2020		0.0032 (J)	0.0038 (J)	
3/19/2020	0.00066 (J)	<0.005	<0.005	<0.005

Time Series

Constituent: Barium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						0.028
6/7/2016					0.012	
7/27/2016					0.0126	0.0294
8/30/2016	0.0413					
8/31/2016		0.126	0.0754			
9/1/2016				0.0414		
9/16/2016					0.0127	
9/19/2016						0.0247
11/3/2016					0.0128	0.0248
11/14/2016	0.0383		0.0701			
11/15/2016		0.115				
11/16/2016				0.0365		
1/11/2017					0.0142	0.0266
2/24/2017	0.0351					
2/27/2017			0.0834	0.0326		
2/28/2017		0.121				
3/1/2017						0.0275
3/2/2017					0.0155	
4/26/2017						0.024
5/2/2017					0.0138	
5/8/2017	0.0251	0.125		0.0332		
5/9/2017			0.0779			
6/28/2017						0.0237
6/29/2017					0.0128	
7/11/2017	0.0233					
7/13/2017		0.106	0.0719	0.0365		
10/10/2017	0.0207	0.112	0.0708			
10/11/2017				0.0288		
3/28/2018					0.014	0.024
4/2/2018	0.022					
4/3/2018			0.068			
4/4/2018		0.12		0.025		
6/7/2018						0.023
6/11/2018					0.013	
9/19/2018	0.023	0.11	0.064	0.03		
9/25/2018					0.014	0.023
3/5/2019					0.015	
3/6/2019						0.024
4/2/2019					0.016	
4/3/2019						0.025
8/20/2019	0.024	0.1	0.057			
8/21/2019				0.023		
9/25/2019					0.015	
9/26/2019						0.021
10/8/2019	0.025	0.098				
10/9/2019			0.058	0.024		
3/17/2020	0.035	0.099	0.061	0.022		
3/24/2020					0.015	0.021

Time Series

Constituent: Barium (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						0.013
6/6/2016	0.019					
6/7/2016		0.014	0.0058			
7/26/2016						0.0158
7/27/2016	0.0167	0.0141				
7/28/2016			0.0068 (J)			
9/14/2016						0.0143
9/16/2016	0.0168					
9/19/2016		0.0155	0.0071 (J)			
11/2/2016		0.0157				0.0148
11/3/2016	0.0159		0.0092 (J)			
1/11/2017	0.0162					
1/13/2017		0.0158	0.0105			0.0146
3/1/2017	0.0195					
3/6/2017		0.0163	0.0105			0.0141
4/26/2017	0.0182	0.0177	0.011			
5/1/2017						0.0149
6/28/2017	0.018					
6/29/2017		0.017	0.0109			0.0154
10/11/2017				0.0092 (J)		
10/12/2017					0.0328	
11/20/2017				0.0081 (J)	0.0671	
1/10/2018					0.0656	
1/11/2018				0.0077 (J)		
2/19/2018					0.0598	
2/20/2018				<0.01		
3/28/2018	0.021					
3/29/2018		0.014	<0.01			0.014
4/3/2018				<0.01	0.045	
6/5/2018			0.011			
6/6/2018		0.015				
6/7/2018						0.014
6/11/2018	0.019					
6/28/2018				0.0078 (J)	0.047	
8/7/2018				0.0078 (J)	0.048	
9/24/2018				0.0071 (J)	0.042	
9/25/2018	0.019	0.015	0.011			
9/26/2018						0.02
3/4/2019						0.016
3/5/2019	0.02	0.016	0.011			
4/2/2019			0.011			
4/3/2019	0.017	0.018				0.017
8/21/2019				0.015	0.035	
9/24/2019			0.011			
9/25/2019		0.014				0.015
9/26/2019	0.017					
10/9/2019				0.013	0.036	
3/24/2020	0.017	0.015	0.011		0.033	
3/25/2020				0.014		0.016

Time Series

Constituent: Barium (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
5/1/2007			0.032			
9/11/2007			0.017			
3/20/2008			0.025			
8/27/2008			0.041			
3/3/2009			0.053			
11/18/2009			0.05			
3/3/2010			0.061			
9/8/2010			0.071			
3/10/2011			0.057			
9/8/2011			0.057			
3/5/2012			0.061			
9/10/2012			0.055			
2/6/2013			0.061			
8/12/2013			0.055			
2/5/2014			0.063			
8/5/2014			0.038			
2/4/2015			0.039			
8/3/2015			0.031			
2/16/2016			0.045			
6/1/2016					0.008	0.012
6/2/2016	0.0084	0.019		0.0081		
7/25/2016						0.0091 (J)
7/26/2016	0.01	0.0179		0.0082 (J)	0.006 (J)	
8/31/2016			0.0542			
9/13/2016					0.0084 (J)	0.008 (J)
9/14/2016	0.0085 (J)	0.0181				
9/15/2016				0.0087 (J)		
11/1/2016					0.0062 (J)	
11/2/2016	0.0091 (J)			0.0082 (J)		
11/4/2016		0.0165				0.0067 (J)
11/28/2016			0.0529			
1/10/2017				0.0086 (J)		
1/11/2017					0.0069 (J)	
1/12/2017	0.0089 (J)	0.0199				
1/16/2017						0.0096 (J)
2/22/2017			0.0607			
3/2/2017					0.0071 (J)	0.0112
3/7/2017	0.009 (J)	0.0196				
3/8/2017				0.0088 (J)		
4/26/2017				0.0085 (J)		
4/27/2017					0.0064 (J)	0.0106
5/1/2017	0.0083 (J)					
5/2/2017		0.0202				
5/8/2017			0.065			
6/27/2017	0.0074 (J)	0.0184			0.0054 (J)	0.0092 (J)
6/30/2017				0.0081 (J)		
7/17/2017			0.06			
10/16/2017			0.0542			
2/19/2018			0.0533			
3/27/2018				<0.01		<0.01
3/29/2018	<0.01	0.021			<0.01	
6/5/2018					0.0069 (J)	

Time Series

Constituent: Barium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/6/2018	0.008 (J)					0.0082 (J)
6/7/2018		0.019				
6/8/2018				0.007 (J)		
8/6/2018			0.044			
9/26/2018	0.0075 (J)	0.019				
10/1/2018				0.007 (J)	0.0062 (J)	0.0084 (J)
2/25/2019			0.045			
2/26/2019				0.0067 (J)		
2/27/2019					0.0074 (J)	0.008 (J)
3/4/2019	0.0077 (J)	0.019				
3/28/2019					0.0082 (J)	0.0082 (J)
3/29/2019				0.0066 (J)		
4/3/2019	0.0087 (J)	0.023				
6/12/2019			0.063			
8/19/2019			0.065			
9/24/2019	0.0075 (J)	0.019			0.0072 (J)	0.0086 (J)
9/25/2019				0.0071 (J)		
10/8/2019			0.058			
2/10/2020					0.0066 (J)	0.0091 (J)
2/12/2020				0.007 (J)		
3/17/2020			0.047			
3/18/2020				0.0076 (J)		0.0084 (J)
3/19/2020					0.0076 (J)	
3/24/2020	0.0076 (J)	0.021				

Time Series

Constituent: Barium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				0.0038
6/2/2016		0.0064	0.01	
7/25/2016		0.0071 (J)		0.0031 (J)
7/26/2016			0.0088 (J)	
9/14/2016	0.0037 (J)			0.0027 (J)
9/15/2016			0.009 (J)	
9/19/2016		0.0069 (J)		
11/1/2016		0.007 (J)	0.0079 (J)	0.0027 (J)
11/4/2016	0.0059 (J)			
12/15/2016	0.0056 (J)			
1/11/2017			0.0075 (J)	0.0036 (J)
1/16/2017	0.0049 (J)	0.0071 (J)		
2/21/2017		0.0077 (J)		
3/1/2017				0.0036 (J)
3/2/2017			0.009 (J)	
3/3/2017	0.0046 (J)			
4/26/2017		0.0074 (J)	0.0078 (J)	0.0038 (J)
4/28/2017	0.0039 (J)			
5/26/2017	0.0034 (J)			
6/28/2017	0.003 (J)		0.0071 (J)	0.004 (J)
6/30/2017		0.0076 (J)		
3/27/2018		<0.01		
3/28/2018	<0.01		<0.01	<0.01
6/7/2018	0.0037 (J)		0.0068 (J)	
6/8/2018				0.0034 (J)
6/11/2018		0.007 (J)		
10/1/2018	0.0038 (J)		0.0065 (J)	0.0034 (J)
10/2/2018		0.0069 (J)		
2/26/2019		0.007 (J)		
2/27/2019	0.0035 (J)		0.0059 (J)	0.0034 (J)
3/29/2019	0.0039 (J)			
4/1/2019		0.0072 (J)	0.0064 (J)	0.003 (J)
9/24/2019	0.0038 (J)			
9/25/2019		0.0066 (J)	0.0059 (J)	0.005 (J)
2/11/2020	0.0036 (J)			0.0031 (J)
2/12/2020		0.0073 (J)	0.0062 (J)	
3/19/2020	0.0036 (J)	0.0074 (J)	0.0072 (J)	0.0029 (J)

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.003
6/7/2016					<0.003	
7/27/2016					<0.003	<0.003
8/30/2016	<0.003					
8/31/2016		<0.003	<0.003			
9/1/2016				<0.003		
9/16/2016					<0.003	
9/19/2016						<0.003
11/3/2016					<0.003	<0.003
11/14/2016	<0.003		<0.003			
11/15/2016		<0.003				
11/16/2016				<0.003		
1/11/2017					<0.003	<0.003
2/24/2017	<0.003					
2/27/2017			<0.003	<0.003		
2/28/2017		<0.003				
3/1/2017						<0.003
3/2/2017					8E-05 (J)	
4/26/2017						<0.003
5/2/2017					<0.003	
5/8/2017	7E-05 (J)	<0.003		<0.003		
5/9/2017			<0.003			
6/28/2017						<0.003
6/29/2017					<0.003	
7/11/2017	<0.003					
7/13/2017		<0.003	<0.003	<0.003		
10/10/2017	<0.003	<0.003	<0.003			
10/11/2017				<0.003		
3/28/2018					<0.003	<0.003
4/2/2018	<0.003					
4/3/2018			<0.003			
4/4/2018		<0.003		<0.003		
6/7/2018						<0.003
6/11/2018					9E-05 (J)	
9/19/2018	5.7E-05 (J)	<0.003	<0.003	<0.003		
9/25/2018					8.9E-05 (J)	<0.003
3/5/2019					9.1E-05 (J)	
3/6/2019						<0.003
4/2/2019					9E-05 (J)	
4/3/2019						<0.003
8/20/2019	<0.003	<0.003	<0.003			
8/21/2019				<0.003		
9/25/2019					8.1E-05 (J)	
9/26/2019						<0.003
3/24/2020					8E-05 (J)	<0.003

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.003
6/6/2016	<0.003					
6/7/2016		<0.003	<0.003			
7/26/2016						<0.003
7/27/2016	<0.003	<0.003				
7/28/2016			<0.003			
9/14/2016						<0.003
9/16/2016	<0.003					
9/19/2016		<0.003	<0.003			
11/2/2016		<0.003				<0.003
11/3/2016	<0.003		<0.003			
1/11/2017	<0.003					
1/13/2017		<0.003	<0.003			<0.003
3/1/2017	<0.003					
3/6/2017		<0.003	<0.003			<0.003
4/26/2017	<0.003	<0.003	<0.003			
5/1/2017						<0.003
6/28/2017	<0.003					
6/29/2017		<0.003	<0.003			<0.003
10/11/2017				<0.003		
10/12/2017					0.0002 (J)	
11/20/2017				<0.003	0.0003 (J)	
1/10/2018					0.0003 (J)	
1/11/2018				<0.003		
2/19/2018					<0.003	
2/20/2018				<0.003		
3/28/2018	<0.003					
3/29/2018		<0.003	<0.003			<0.003
4/3/2018				<0.003	<0.003	
6/5/2018			<0.003			
6/6/2018		8E-05 (J)				
6/7/2018						<0.003
6/11/2018	5.7E-05 (J)					
6/28/2018				<0.003	0.00029 (J)	
8/7/2018				<0.003	0.00024 (J)	
9/24/2018				<0.003	0.00019 (J)	
9/25/2018	8.2E-05 (J)	6.1E-05 (J)	<0.003			
9/26/2018						<0.003
3/4/2019						<0.003
3/5/2019	7.9E-05 (J)	0.00011 (J)	<0.003			
4/2/2019			<0.003			
4/3/2019	7.5E-05 (J)	6.4E-05 (J)				<0.003
8/21/2019				<0.003	0.0002 (J)	
9/24/2019			<0.003			
9/25/2019		<0.003				<0.003
9/26/2019	8.4E-05 (J)					
10/9/2019				<0.003	0.0002 (J)	
3/24/2020	8.9E-05 (J)	7.6E-05 (J)	<0.003		0.00022 (J)	
3/25/2020				<0.003		<0.003

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
5/1/2007			<0.003			
9/11/2007			<0.003			
3/20/2008			<0.003			
8/27/2008			<0.003			
3/3/2009			<0.003			
11/18/2009			<0.003			
3/3/2010			<0.003			
9/8/2010			<0.003			
3/10/2011			<0.003			
9/8/2011			<0.003			
3/5/2012			<0.003			
9/10/2012			<0.003			
2/6/2013			<0.003			
8/12/2013			<0.003			
2/5/2014			<0.003			
8/5/2014			<0.003			
2/4/2015			<0.003			
8/3/2015			<0.003			
2/16/2016			<0.003			
6/1/2016					<0.003	<0.003
6/2/2016	<0.003	<0.003		<0.003		
7/25/2016						<0.003
7/26/2016	<0.003	<0.003		0.0002 (J)	<0.003	
8/31/2016			<0.003			
9/13/2016					<0.003	<0.003
9/14/2016	<0.003	<0.003				
9/15/2016				0.0002 (J)		
11/1/2016					<0.003	
11/2/2016	<0.003			0.0002 (J)		
11/4/2016		<0.003				<0.003
11/28/2016			<0.003			
1/10/2017				0.0002 (J)		
1/11/2017					<0.003	
1/12/2017	<0.003	<0.003				
1/16/2017						<0.003
2/22/2017			<0.003			
3/2/2017					<0.003	<0.003
3/7/2017	<0.003	<0.003				
3/8/2017				0.0002 (J)		
4/26/2017				0.0002 (J)		
4/27/2017					<0.003	<0.003
5/1/2017	<0.003					
5/2/2017		<0.003				
5/8/2017			<0.003			
6/27/2017	<0.003	<0.003			<0.003	<0.003
6/30/2017				0.0002 (J)		
7/17/2017			<0.003			
10/16/2017			<0.003			
2/19/2018			<0.003			
3/27/2018				<0.003		<0.003
3/29/2018	<0.003	<0.003			<0.003	
6/6/2018	<0.003					

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/7/2018		<0.003				
8/6/2018			<0.003			
9/26/2018	<0.003	<0.003				
2/25/2019			<0.003			
2/26/2019				0.00016 (J)		
2/27/2019					<0.003	<0.003
3/4/2019	<0.003	<0.003				
3/28/2019					<0.003	<0.003
3/29/2019				0.00017 (J)		
4/3/2019	<0.003	<0.003				
6/12/2019			<0.003			
8/19/2019			<0.003			
9/24/2019	<0.003	<0.003			<0.003	<0.003
9/25/2019				0.00018 (J)		
10/8/2019			<0.003			
2/10/2020					<0.003	<0.003
2/12/2020				0.00019 (J)		
3/17/2020			<0.003			
3/18/2020				0.00021 (J)		<0.003
3/19/2020					<0.003	
3/24/2020	<0.003	<0.003				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				<0.003
6/2/2016		<0.003	<0.003	
7/25/2016		<0.003		<0.003
7/26/2016			<0.003	
9/14/2016	<0.003			<0.003
9/15/2016			<0.003	
9/19/2016		<0.003		
11/1/2016		<0.003	<0.003	<0.003
11/4/2016	<0.003			
12/15/2016	<0.003			
1/11/2017			<0.003	<0.003
1/16/2017	<0.003	<0.003		
2/21/2017		<0.003		
3/1/2017				<0.003
3/2/2017			<0.003	
3/3/2017	<0.003			
4/26/2017		<0.003	<0.003	<0.003
4/28/2017	<0.003			
5/26/2017	<0.003			
6/28/2017	<0.003		<0.003	<0.003
6/30/2017		<0.003		
3/27/2018		<0.003		
3/28/2018	<0.003		<0.003	<0.003
2/26/2019		7.2E-05 (J)		
2/27/2019	<0.003		<0.003	<0.003
3/29/2019	<0.003			
4/1/2019		<0.003	<0.003	<0.003
9/24/2019	<0.003			
9/25/2019		<0.003	<0.003	<0.003
2/11/2020	<0.003			<0.003
2/12/2020		<0.003	<0.003	
3/19/2020	<0.003	<0.003	<0.003	<0.003

Time Series

Constituent: Boron (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.1
6/7/2016					<0.1	
7/27/2016					0.008 (J)	<0.1
8/30/2016	0.0166 (J)					
8/31/2016		0.541	0.308			
9/1/2016				2.12		
9/16/2016					0.0086 (J)	
9/19/2016						<0.1
11/3/2016					0.0077 (J)	<0.1
11/14/2016	0.0166 (J)		0.368			
11/15/2016		0.706				
11/16/2016				2.03		
1/11/2017					0.0092 (J)	<0.1
2/24/2017	0.0145 (J)					
2/27/2017			0.321	1.29		
2/28/2017		0.623				
3/1/2017						<0.1
3/2/2017					0.0095 (J)	
4/26/2017						<0.1
5/2/2017					<0.1	
5/8/2017	0.0141 (J)	0.69		1.71		
5/9/2017			0.338			
6/28/2017						<0.1
6/29/2017					0.0074 (J)	
7/11/2017	0.0131 (J)					
7/13/2017		0.649	0.34	1.62		
10/4/2017					0.0077 (J)	
10/5/2017						<0.1
10/10/2017	0.0124 (J)	0.603	0.319			
10/11/2017				1.17		
4/2/2018	0.013 (J)					
4/3/2018			0.35			
4/4/2018		0.66		1.2		
6/7/2018						<0.1
6/11/2018					0.01 (J)	
9/19/2018	0.012 (J)	0.66	0.35	1.2		
9/25/2018					0.0096 (J)	0.0046 (J)
3/27/2019	0.013 (J)	0.57	0.33	0.89		
4/2/2019					0.0066 (J)	
4/3/2019						<0.1
9/25/2019					0.0081 (J)	
9/26/2019						0.0062 (J)
10/8/2019	0.012 (J)	0.58				
10/9/2019			0.35	1.1		
3/17/2020	0.023 (J)	0.61	0.37	1.3		
3/24/2020					0.0092 (J)	0.0054 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.1
6/6/2016	<0.1					
6/7/2016		<0.1	<0.1			
7/26/2016						0.0047 (J)
7/27/2016	0.0059 (J)	<0.1				
7/28/2016			<0.1			
9/14/2016						<0.1
9/16/2016	0.0079 (J)					
9/19/2016		<0.1	<0.1			
11/2/2016		<0.1				<0.1
11/3/2016	0.0082 (J)		<0.1			
1/11/2017	0.0096 (J)					
1/13/2017		<0.1	<0.1			<0.1
3/1/2017	<0.1					
3/6/2017		<0.1	<0.1			<0.1
4/26/2017	0.0091 (J)	<0.1	<0.1			
5/1/2017						<0.1
6/28/2017	0.0079 (J)					
6/29/2017		<0.1	<0.1			<0.1
10/3/2017			<0.1			
10/4/2017	0.009 (J)	<0.1				
10/5/2017						<0.1
10/11/2017				0.0135 (J)		
10/12/2017					0.0401	
11/20/2017				0.0251 (J)	0.156	
1/10/2018					0.15	
1/11/2018				0.0255 (J)		
2/19/2018					0.146	
2/20/2018				<0.1		
4/3/2018				0.033 (J)	0.12	
6/5/2018			0.0092 (J)			
6/6/2018		0.0049 (J)				
6/7/2018						0.0045 (J)
6/11/2018	0.0093 (J)					
6/28/2018				0.053	0.16	
8/7/2018				0.024 (J)	0.12	
9/24/2018				0.028 (J)	0.099	
9/25/2018	0.007 (J)	<0.1	0.0054 (J)			
9/26/2018						0.005 (J)
3/26/2019					0.096	
3/27/2019				0.017 (J)		
4/2/2019			0.011 (J)			
4/3/2019	0.0053 (J)	<0.1				0.0055 (J)
9/24/2019			0.018 (J)			
9/25/2019		<0.1				<0.1
9/26/2019	0.0072 (J)					
10/9/2019				0.017 (J)	0.079	
3/24/2020	0.01 (J)	<0.1	0.016 (J)		0.088 (J)	
3/25/2020				0.043 (J)		0.011 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/1/2016					<0.1	<0.1
6/2/2016	<0.1	<0.1		<0.1		
7/25/2016						<0.1
7/26/2016	0.0052 (J)	<0.1		0.0177 (J)	0.0055 (J)	
8/31/2016			0.0315 (J)			
9/13/2016					<0.1	<0.1
9/14/2016	0.0071 (J)	0.01 (J)				
9/15/2016				0.0214 (J)		
11/1/2016					0.0086 (J)	
11/2/2016	<0.1			<0.1		
11/4/2016		<0.1				<0.1
11/28/2016			0.0095 (J)			
1/10/2017				0.0198 (J)		
1/11/2017					0.0074 (J)	
1/12/2017	0.0076 (J)	<0.1				
1/16/2017						<0.1
2/22/2017			<0.1			
3/2/2017					0.008 (J)	<0.1
3/7/2017	0.0089 (J)	<0.1				
3/8/2017				0.0189 (J)		
4/26/2017				0.0161 (J)		
4/27/2017					0.0066 (J)	<0.1
5/1/2017	0.0061 (J)					
5/2/2017		<0.1				
5/8/2017			0.0084 (J)			
6/27/2017	0.0079 (J)	<0.1			0.0087 (J)	0.006 (J)
6/30/2017				0.0173 (J)		
7/17/2017			0.0092 (J)			
10/3/2017	0.0094 (J)	<0.1			0.0072 (J)	0.0071 (J)
10/5/2017				0.0173 (J)		
10/16/2017			<0.1			
2/19/2018			<0.1			
6/5/2018					0.0052 (J)	
6/6/2018	0.0098 (J)					<0.1
6/7/2018		<0.1				
6/8/2018				0.013 (J)		
8/6/2018			<0.1			
9/26/2018	0.01 (J)	0.0057 (J)				
10/1/2018				0.015 (J)	0.021 (J)	0.0049 (J)
2/25/2019			<0.1			
3/28/2019					0.005 (J)	<0.1
3/29/2019				0.014 (J)		
4/3/2019	0.0076 (J)	0.0044 (J)				
6/12/2019			<0.1			
9/24/2019	0.01 (J)	0.0049 (J)			0.0064 (J)	0.0055 (J)
9/25/2019				0.018 (J)		
10/8/2019			<0.1			
3/17/2020			0.0051 (J)			
3/18/2020				0.02 (J)		0.0087 (J)
3/19/2020					0.0085 (J)	
3/24/2020	0.011 (J)	0.0068 (J)				

Time Series

Constituent: Boron (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				<0.1
6/2/2016		<0.1	<0.1	
7/25/2016		<0.1		<0.1
7/26/2016			0.0097 (J)	
9/14/2016	<0.1			<0.1
9/15/2016			0.0102 (J)	
9/19/2016		<0.1		
11/1/2016		<0.1	<0.1	<0.1
11/4/2016	<0.1			
12/15/2016	0.0107 (J)			
1/11/2017			<0.1	<0.1
1/16/2017	<0.1	<0.1		
2/21/2017		<0.1		
3/1/2017				<0.1
3/2/2017			0.0084 (J)	
3/3/2017	<0.1			
4/26/2017		<0.1	<0.1	<0.1
4/28/2017	<0.1			
5/26/2017	<0.1			
6/28/2017	<0.1		<0.1	<0.1
6/30/2017		<0.1		
10/3/2017	<0.1			
10/4/2017		<0.1	<0.1	<0.1
6/7/2018	<0.1		0.004 (J)	
6/8/2018				<0.1
6/11/2018		0.014 (J)		
10/1/2018	<0.1		<0.1	<0.1
10/2/2018		<0.1		
3/29/2019	0.0065 (J)			
4/1/2019		<0.1	<0.1	<0.1
9/24/2019	0.0076 (J)			
9/25/2019		<0.1	0.0054 (J)	<0.1
3/19/2020	0.0073 (J)	0.0052 (J)	0.0073 (J)	0.0053 (J)

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.0025
6/7/2016					<0.0025	
7/27/2016					<0.0025	<0.0025
8/30/2016	0.0001 (J)					
8/31/2016		<0.0025	<0.0025			
9/1/2016				<0.0025		
9/16/2016					<0.0025	
9/19/2016						<0.0025
11/3/2016					<0.0025	<0.0025
11/14/2016	0.0001 (J)		<0.0025			
11/15/2016		<0.0025				
11/16/2016				<0.0025		
1/11/2017					0.0001 (J)	<0.0025
2/24/2017	9E-05 (J)					
2/27/2017			<0.0025	<0.0025		
2/28/2017		<0.0025				
3/1/2017						<0.0025
3/2/2017					<0.0025	
4/26/2017						<0.0025
5/2/2017					<0.0025	
5/8/2017	0.0001 (J)	<0.0025		0.0001 (J)		
5/9/2017			<0.0025			
6/28/2017						<0.0025
6/29/2017					<0.0025	
7/11/2017	<0.0025					
7/13/2017		<0.0025	<0.0025	<0.0025		
10/10/2017	<0.0025	<0.0025	<0.0025			
10/11/2017				<0.0025		
3/28/2018					<0.0025	<0.0025
4/2/2018	<0.0025					
4/3/2018			<0.0025			
4/4/2018		<0.0025		<0.0025		
6/7/2018						<0.0025
6/11/2018					<0.0025	
9/19/2018	<0.0025	<0.0025	<0.0025	<0.0025		
9/25/2018					<0.0025	<0.0025
3/5/2019					<0.0025	
3/6/2019						<0.0025
4/2/2019					<0.0025	
4/3/2019						<0.0025
8/20/2019	<0.0025	<0.0025	<0.0025			
8/21/2019				0.00012 (J)		
9/25/2019					<0.0025	
9/26/2019						<0.0025
10/8/2019	<0.0025	<0.0025				
10/9/2019			<0.0025	<0.0025		
3/17/2020	<0.0025	<0.0025	<0.0025	0.00012 (J)		
3/24/2020					<0.0025	<0.0025

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.0025
6/6/2016	<0.0025					
6/7/2016		<0.0025	<0.0025			
7/26/2016						<0.0025
7/27/2016	<0.0025	<0.0025				
7/28/2016			<0.0025			
9/14/2016						<0.0025
9/16/2016	<0.0025					
9/19/2016		<0.0025	<0.0025			
11/2/2016		<0.0025				<0.0025
11/3/2016	<0.0025		<0.0025			
1/11/2017	0.0001 (J)					
1/13/2017		<0.0025	<0.0025			<0.0025
3/1/2017	<0.0025					
3/6/2017		<0.0025	<0.0025			<0.0025
4/26/2017	<0.0025	<0.0025	<0.0025			
5/1/2017						<0.0025
6/28/2017	<0.0025					
6/29/2017		<0.0025	<0.0025			<0.0025
10/11/2017				<0.0025		
10/12/2017					<0.0025	
11/20/2017				<0.0025	<0.0025	
1/10/2018					<0.0025	
1/11/2018				<0.0025		
2/19/2018					<0.0025	
2/20/2018				<0.0025		
3/28/2018	<0.0025					
3/29/2018		<0.0025	<0.0025			<0.0025
4/3/2018				<0.0025	<0.0025	
6/5/2018			<0.0025			
6/6/2018		<0.0025				
6/7/2018						<0.0025
6/11/2018	<0.0025					
6/28/2018				<0.0025	<0.0025	
8/7/2018				<0.0025	<0.0025	
9/24/2018				<0.0025	<0.0025	
9/25/2018	<0.0025	<0.0025	9.6E-05 (J)			
9/26/2018						<0.0025
3/4/2019						<0.0025
3/5/2019	<0.0025	<0.0025	<0.0025			
4/2/2019			<0.0025			
4/3/2019	<0.0025	<0.0025				<0.0025
8/21/2019				<0.0025	<0.0025	
9/24/2019			<0.0025			
9/25/2019		<0.0025				<0.0025
9/26/2019	<0.0025					
10/9/2019				<0.0025	<0.0025	
3/24/2020	<0.0025	<0.0025	<0.0025		<0.0025	
3/25/2020				<0.0025		<0.0025

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
5/1/2007			<0.0025			
9/11/2007			<0.0025			
3/20/2008			<0.0025			
8/27/2008			<0.0025			
3/3/2009			<0.0025			
11/18/2009			<0.0025			
3/3/2010			<0.0025			
9/8/2010			<0.0025			
3/10/2011			<0.0025			
9/8/2011			<0.0025			
3/5/2012			<0.0025			
9/10/2012			<0.0025			
2/6/2013			<0.0025			
8/12/2013			<0.0025			
2/5/2014			<0.0025			
8/5/2014			<0.0025			
2/4/2015			<0.0025			
8/3/2015			<0.0025			
2/16/2016			<0.0025			
6/1/2016					<0.0025	<0.0025
6/2/2016	<0.0025	<0.0025		<0.0025		
7/25/2016						<0.0025
7/26/2016	<0.0025	<0.0025		<0.0025	<0.0025	
8/31/2016			<0.0025			
9/13/2016					<0.0025	<0.0025
9/14/2016	<0.0025	<0.0025				
9/15/2016				<0.0025		
11/1/2016					<0.0025	
11/2/2016	<0.0025			<0.0025		
11/4/2016		<0.0025				<0.0025
11/28/2016			<0.0025			
1/10/2017				<0.0025		
1/11/2017					0.0002 (J)	
1/12/2017	<0.0025	9E-05 (J)				
1/16/2017						<0.0025
2/22/2017			<0.0025			
3/2/2017					<0.0025	<0.0025
3/7/2017	<0.0025	<0.0025				
3/8/2017				7E-05 (J)		
4/26/2017				<0.0025		
4/27/2017					<0.0025	<0.0025
5/1/2017	<0.0025					
5/2/2017		<0.0025				
5/8/2017			<0.0025			
6/27/2017	<0.0025	<0.0025			<0.0025	<0.0025
6/30/2017				<0.0025		
7/17/2017			<0.0025			
10/16/2017			<0.0025			
2/19/2018			<0.0025			
3/27/2018				<0.0025		<0.0025
3/29/2018	<0.0025	<0.0025			<0.0025	
6/6/2018	<0.0025					

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/7/2018		<0.0025				
8/6/2018			<0.0025			
9/26/2018	<0.0025	<0.0025				
2/25/2019			<0.0025			
2/26/2019				<0.0025		
2/27/2019					<0.0025	<0.0025
3/4/2019	<0.0025	<0.0025				
3/28/2019					<0.0025	<0.0025
3/29/2019				<0.0025		
4/3/2019	<0.0025	<0.0025				
6/12/2019			<0.0025			
8/19/2019			<0.0025			
9/24/2019	<0.0025	<0.0025			<0.0025	<0.0025
9/25/2019				<0.0025		
10/8/2019			<0.0025			
2/10/2020					<0.0025	<0.0025
2/12/2020				<0.0025		
3/17/2020			<0.0025			
3/18/2020				<0.0025		<0.0025
3/19/2020					<0.0025	
3/24/2020	<0.0025	<0.0025				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				<0.0025
6/2/2016		<0.0025	<0.0025	
7/25/2016		<0.0025		<0.0025
7/26/2016			<0.0025	
9/14/2016	<0.0025			<0.0025
9/15/2016			<0.0025	
9/19/2016		<0.0025		
11/1/2016		<0.0025	<0.0025	<0.0025
11/4/2016	<0.0025			
12/15/2016	<0.0025			
1/11/2017			0.0001 (J)	8E-05 (J)
1/16/2017	<0.0025	<0.0025		
2/21/2017		<0.0025		
3/1/2017				<0.0025
3/2/2017			<0.0025	
3/3/2017	<0.0025			
4/26/2017		<0.0025	<0.0025	<0.0025
4/28/2017	<0.0025			
5/26/2017	<0.0025			
6/28/2017	<0.0025		<0.0025	<0.0025
6/30/2017		<0.0025		
3/27/2018		<0.0025		
3/28/2018	<0.0025		<0.0025	<0.0025
2/26/2019		<0.0025		
2/27/2019	<0.0025		<0.0025	<0.0025
3/29/2019	<0.0025			
4/1/2019		<0.0025	<0.0025	<0.0025
9/24/2019	<0.0025			
9/25/2019		<0.0025	<0.0025	<0.0025
2/11/2020	<0.0025			<0.0025
2/12/2020		<0.0025	<0.0025	
3/19/2020	<0.0025	<0.0025	<0.0025	<0.0025

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						6.2
6/7/2016					2.2	
7/27/2016					2	4.73
8/30/2016	20.9					
8/31/2016		27.3	46.7			
9/1/2016				96.8		
9/16/2016					1.97	
9/19/2016						4.76
11/3/2016					1.99	5.25
11/14/2016	18.6		50.6			
11/15/2016		27.8				
11/16/2016				107		
1/11/2017					2.28	4.74
2/24/2017	16.1					
2/27/2017			49.4	104		
2/28/2017		26.4				
3/1/2017						5.37
3/2/2017					2.15	
4/26/2017						4.28
5/2/2017					1.95	
5/8/2017	14.6	29.9		103		
5/9/2017			56			
6/28/2017						4.95
6/29/2017					2.02	
7/11/2017	14.3					
7/13/2017		30.2	54.8	83.7		
10/4/2017					2.03	
10/5/2017						5.28
10/10/2017	12.1	27.2	52.8			
10/11/2017				69		
4/2/2018	<25					
4/3/2018			50.6			
4/4/2018		30.1		51.9		
6/7/2018						4.8
6/11/2018					2.1	
9/19/2018	11.1 (J)	29.2	50.5	51.9		
9/25/2018					2.1	4.6
3/27/2019	10.8 (J)	27.9	48.8	54.2		
4/2/2019					2.5	
4/3/2019						5.3
9/25/2019					2.6	
9/26/2019						4.9
10/8/2019	9.7	28.1				
10/9/2019			47.9	64.2		
3/17/2020	14.8	31.9	54.8	70.4		
3/24/2020					2.7	5.3

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						8.8
6/6/2016	1.4					
6/7/2016		2.3	3.7			
7/26/2016						7.69
7/27/2016	1.19	2.08				
7/28/2016			3.15			
9/14/2016						8.49
9/16/2016	1.5					
9/19/2016		1.97	3.17			
11/2/2016		2.13				7.83
11/3/2016	1.31		3.4			
1/11/2017	1.25					
1/13/2017		2.45	4.98			8.08
3/1/2017	1.26					
3/6/2017		2.48	6.28			8.64
4/26/2017	1.05	2.3	6.65			
5/1/2017						13.4
6/28/2017	1.06					
6/29/2017		2.54	6.04			8.81
10/3/2017			8.28			
10/4/2017	1.1	2.25				
10/5/2017						9.29
10/11/2017				2.74		
10/12/2017					2.9	
11/20/2017				1.81	10.4	
1/10/2018					10.2	
1/11/2018				1.54		
2/19/2018					<25	
2/20/2018				1.71		
4/3/2018				1.4	6.3	
6/5/2018			9.1			
6/6/2018		2.3				
6/7/2018						8.2
6/11/2018	1.4					
6/28/2018				1.4	6.7	
8/7/2018				1.2	6.3	
9/24/2018				1.1	5.7	
9/25/2018	1	2.3	10.4 (J)			
9/26/2018						9.5 (J)
3/26/2019					5.6	
3/27/2019				1.5		
4/2/2019			8.8			
4/3/2019	1.2	2.9				8.4
9/24/2019			7.7			
9/25/2019		2.4				9.5
9/26/2019	1.1					
10/9/2019				2.4	4.9	
3/24/2020	1	2.6	6		4.8	
3/25/2020				2.7		10.5

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/1/2016					12	2.5
6/2/2016	33	2.4		1.3		
7/25/2016						2.16
7/26/2016	32.3	2.12		1.24	11	
8/31/2016			9.31			
9/13/2016					11.8	2.21
9/14/2016	31	2.18				
9/15/2016				1.17		
11/1/2016					11	
11/2/2016	30.9			1.23		
11/4/2016		2.17 (J)				2.67
11/28/2016			9.47 (B)			
1/10/2017				1.24		
1/11/2017					11.2	
1/12/2017	35.7	2.37				
1/16/2017						2.45
2/22/2017			10.4			
3/2/2017					11	2.57
3/7/2017	32.7	2.34				
3/8/2017				1.21		
4/26/2017				1.14		
4/27/2017					11.1	2.38
5/1/2017	37					
5/2/2017		2.17				
5/8/2017			14.2			
6/27/2017	36.5	2.13			13.8	2.36
6/30/2017				1.24		
7/17/2017			14.1			
10/3/2017	30.9	2.15			14	2.21
10/5/2017				1.11		
10/16/2017			13.6			
2/19/2018			<25			
6/5/2018					15.2 (J)	
6/6/2018	26.2					2.3
6/7/2018		2.3				
6/8/2018				1.1		
8/6/2018			11.4 (J)			
9/26/2018	25.8	2.3				
10/1/2018				0.99	15.1	1.8
2/25/2019			12.7 (J)			
3/28/2019					13.3 (J)	2.2
3/29/2019				1.1		
4/3/2019	24.7 (J)	2.8				
6/12/2019			18.9			
9/24/2019	25.8	2.5			15.8	2.3
9/25/2019				1.1		
10/8/2019			28.3			
3/17/2020			24.3			
3/18/2020				1.1		2.1
3/19/2020					15	
3/24/2020	26.1	2.5				

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				21
6/2/2016		1.3	28	
7/25/2016		1.17		20.3
7/26/2016			24.5	
9/14/2016	23.5			19.7
9/15/2016			27	
9/19/2016		1.05		
11/1/2016		1.14	25.6	18.4
11/4/2016	23.7			
12/15/2016	23.1			
1/11/2017			27.5	20.3
1/16/2017	23.3	1.23		
2/21/2017		1.25		
3/1/2017				18.6
3/2/2017			27.5	
3/3/2017	25.1			
4/26/2017		1.03	30.4	25.6
4/28/2017	30.7			
5/26/2017	26.2			
6/28/2017	26.1		29.8	23.9
6/30/2017		1.13		
10/3/2017	26.7			
10/4/2017		1.09	29.7	22.1
6/7/2018	25		29.1	
6/8/2018				21.9 (J)
6/11/2018		1.1		
10/1/2018	25		26.9	19.7
10/2/2018		1.1		
3/29/2019	23.5 (J)			
4/1/2019		1.3	30.1	20.4 (J)
9/24/2019	26.4			
9/25/2019		1.1	29.5	22.4
3/19/2020	27.4	1.2	31.5	21.9

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						6.8
6/7/2016					4.5	
7/27/2016					4.5	6.7
8/30/2016	5.2					
8/31/2016		13	5.8			
9/1/2016				37		
9/16/2016					4.5	
9/19/2016						7
11/3/2016					5.4	7.5
11/14/2016	6.4		5.8			
11/15/2016		14				
11/16/2016				37		
1/11/2017					4.7	6.5
2/24/2017	5.5					
2/27/2017			5	33		
2/28/2017		12				
3/1/2017						6.9
3/2/2017					4.8	
4/26/2017						7
5/2/2017					4.6	
5/8/2017	5.8	13		33		
5/9/2017			4.6			
6/28/2017						7
6/29/2017					4.5	
7/11/2017	5.8					
7/13/2017		13	4.7	32		
10/4/2017					4.7	
10/5/2017						7
10/10/2017	5.9	14	4.5			
10/11/2017				29		
4/2/2018	4.8					
4/3/2018			4.6			
4/4/2018		13.4		26.6		
6/7/2018						6.8
6/11/2018					4.9	
9/19/2018	4	14.2	4.7	26.5		
9/25/2018					5.6	7.9
3/27/2019	4.3	14	4.6	20.9		
4/2/2019					4.8	
4/3/2019						6.9
9/25/2019					5.7	
9/26/2019						7
10/8/2019	4.4	14.8				
10/9/2019			5.1	25		
3/17/2020	4.1	14	4.6	24.8		
3/24/2020					5	7

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						3.7
6/6/2016	6.4					
6/7/2016		1.9	2.8			
7/26/2016						3.6
7/27/2016	6.2	1.9				
7/28/2016			2.6			
9/14/2016						3.4
9/16/2016	6.1					
9/19/2016		1.9	2.4			
11/2/2016		2.6				4.5
11/3/2016	7.4		2.9			
1/11/2017	6.1					
1/13/2017		2.3	2.5			4.2
3/1/2017	6					
3/6/2017		1.9	2.1			3.6
4/26/2017	6.5	2	2.1			
5/1/2017						4.3
6/28/2017	6.4					
6/29/2017		2.6	2.8			4.2
10/3/2017			2.2			
10/4/2017	6.8	2.6				
10/5/2017						4.7
10/11/2017				2.4		
10/12/2017					3.8	
11/20/2017				1.8	4.4	
1/10/2018					4.6	
1/11/2018				1.6		
2/19/2018					4.6	
2/20/2018				2		
4/3/2018				3.3	5.9	
6/5/2018			1.7			
6/6/2018		2.7				
6/7/2018						4.4
6/11/2018	6.8					
6/28/2018				2.1	5	
8/7/2018				1.2	4.3	
9/24/2018				1.3	4.9	
9/25/2018	7.8	3.6	2.2			
9/26/2018						4.8
3/26/2019					4.4	
3/27/2019				1.4		
4/2/2019			2.5			
4/3/2019	6.3	3.1				4.3
9/24/2019			3.1			
9/25/2019		2.8				4.5
9/26/2019	7.1					
10/9/2019				2.1	5.1	
3/24/2020	6.8	2.7	2.8		4.7	
3/25/2020				1.9		3.9

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/1/2016					1.3	1.6
6/2/2016	7.2	4.3		4.1		
7/25/2016						1.4
7/26/2016	6.6	4.4		4	1.2	
8/31/2016			4			
9/13/2016					1.1	1.3
9/14/2016	6.6	3.8				
9/15/2016				4.2		
11/1/2016					1.3	
11/2/2016	7.6			4.9		
11/4/2016		4.8				1.6
11/28/2016			4.2			
1/10/2017				4.1		
1/11/2017					1.1	
1/12/2017	6.8	3.8				
1/16/2017						1.4
2/22/2017			3.7			
3/2/2017					1	1.3
3/7/2017	6.8	4.5				
3/8/2017				4.2		
4/26/2017				4.1		
4/27/2017					1	1.3
5/1/2017	7.2					
5/2/2017		4.6				
5/8/2017			4.2			
6/27/2017	7	4.3			1.1	1.4
6/30/2017				3.7		
7/17/2017			3.8			
10/3/2017	6.5	4.2			1.1	1.7
10/5/2017				3.8		
10/16/2017			4.2			
2/19/2018			4.3			
6/5/2018					1.1	
6/6/2018	4.7					1.4
6/7/2018		4.5				
6/8/2018				3.4		
8/6/2018			3.8			
9/26/2018	4.8	5.1				
10/1/2018				3.8	1.1	1.4
2/25/2019			4.1			
3/28/2019					1.4	1.5
3/29/2019				4.2		
4/3/2019	4	4.2				
6/12/2019			4.7			
9/24/2019	3.7	4.5			1.1	1.3
9/25/2019				4.8		
10/8/2019			5.1			
3/17/2020			4.8			
3/18/2020				5.2		1.4
3/19/2020					1.1	
3/24/2020	3.5	4.3				

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				1.3
6/2/2016		1.9	1.4	
7/25/2016		1.7		1.3
7/26/2016			1.6	
9/14/2016	1.1			1.3
9/15/2016			1.5	
9/19/2016		1.6		
11/1/2016		1.8	1.7	1.4
11/4/2016	1.4			
12/15/2016	2.9			
1/11/2017			1.2	1.1
1/16/2017	0.98	1.7		
2/21/2017		1.7		
3/1/2017				1.1
3/2/2017			1.2	
3/3/2017	1.1			
4/26/2017		1.7	1.2	1.1
4/28/2017	0.91			
5/26/2017	0.93			
6/28/2017	1		1.3	1.2
6/30/2017		1.8		
10/3/2017	1.2			
10/4/2017		1.8	1.5	1.2
6/7/2018	1		1.2	
6/8/2018				1.2
6/11/2018		2		
10/1/2018	1.1		1.5	1.2
10/2/2018		1.8		
3/29/2019	1.2			
4/1/2019		1.7	1.2	1.1
9/24/2019	0.95 (J)			
9/25/2019		1.6	1.1	1.1
3/19/2020	0.97 (J)	1.8	1.2	1.1

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						0.0012 (J)
6/7/2016					<0.01	
7/27/2016					0.0008 (J)	0.0007 (J)
8/30/2016	<0.01					
8/31/2016		<0.01	<0.01			
9/1/2016				<0.01		
9/16/2016					<0.01	
9/19/2016						<0.01
11/3/2016					<0.01	<0.01
11/14/2016	0.0093 (J)		0.0061 (J)			
11/15/2016		<0.01				
11/16/2016				<0.01		
1/11/2017					<0.01	<0.01
2/24/2017	<0.01					
2/27/2017			<0.01	<0.01		
2/28/2017		<0.01				
3/1/2017						0.0012 (J)
3/2/2017					0.001 (J)	
4/26/2017						0.0005 (J)
5/2/2017					0.0007 (J)	
5/8/2017	<0.01	<0.01		<0.01		
5/9/2017			<0.01			
6/28/2017						0.0006 (J)
6/29/2017					0.0006 (J)	
7/11/2017	<0.01					
7/13/2017		<0.01	0.0006 (J)	<0.01		
10/10/2017	<0.01	<0.01	<0.01			
10/11/2017				<0.01		
3/28/2018					<0.01	<0.01
4/2/2018	<0.01					
4/3/2018			<0.01			
4/4/2018		<0.01		<0.01		
9/19/2018	<0.01	<0.01	<0.01	<0.01		
3/5/2019					<0.01	
3/6/2019						<0.01
8/20/2019	<0.01	<0.01	<0.01			
8/21/2019				<0.01		
3/24/2020					0.00087 (J)	0.00095 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.01
6/6/2016	<0.01					
6/7/2016		<0.01	<0.01			
7/26/2016						<0.01
7/27/2016	0.0006 (J)	0.0005 (J)				
7/28/2016			<0.01			
9/14/2016						<0.01
9/16/2016	<0.01					
9/19/2016		<0.01	<0.01			
11/2/2016		<0.01				<0.01
11/3/2016	<0.01		<0.01			
1/11/2017	<0.01					
1/13/2017		<0.01	<0.01			<0.01
3/1/2017	<0.01					
3/6/2017		<0.01	<0.01			<0.01
4/26/2017	0.0003 (J)	0.0007 (J)	<0.01			
5/1/2017						<0.01
6/28/2017	<0.01					
6/29/2017		0.0005 (J)	<0.01			<0.01
10/11/2017				<0.01		
10/12/2017					<0.01	
11/20/2017				<0.01	<0.01	
1/10/2018					<0.01	
1/11/2018				<0.01		
2/19/2018					<0.01	
2/20/2018				<0.01		
3/28/2018	<0.01					
3/29/2018		<0.01	<0.01			<0.01
4/3/2018				<0.01	<0.01	
6/28/2018				<0.01	<0.01	
8/7/2018				<0.01	<0.01	
9/24/2018				<0.01	<0.01	
3/4/2019						<0.01
3/5/2019	<0.01	<0.01	<0.01			
8/21/2019				<0.01	0.00053 (J)	
10/9/2019				<0.01	0.0012 (J)	
3/24/2020	0.0011 (J)	0.00077 (J)	<0.01		0.00055 (J)	
3/25/2020				<0.01		0.00058 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
5/1/2007			0.0029			
9/11/2007			0.0084			
3/20/2008			0.0027			
8/27/2008			0.0026			
3/3/2009			0.0022			
11/18/2009			0.0036			
3/3/2010			<0.01			
9/8/2010			<0.01			
3/10/2011			<0.01			
9/8/2011			<0.01			
3/5/2012			<0.01			
9/10/2012			<0.01			
2/6/2013			<0.01			
8/12/2013			<0.01			
2/5/2014			0.0059			
8/5/2014			<0.01			
2/4/2015			<0.01			
8/3/2015			0.0011 (J)			
2/16/2016			<0.01			
6/1/2016					0.0035	<0.01
6/2/2016	<0.01	<0.01		<0.01		
7/25/2016						<0.01
7/26/2016	<0.01	<0.01		<0.01	<0.01	
8/31/2016			<0.01			
9/13/2016					<0.01	<0.01
9/14/2016	<0.01	<0.01				
9/15/2016				<0.01		
11/1/2016					<0.01	
11/2/2016	<0.01			<0.01		
11/4/2016		<0.01				<0.01
11/28/2016			<0.01			
1/10/2017				<0.01		
1/11/2017					<0.01	
1/12/2017	<0.01	<0.01				
1/16/2017						<0.01
2/22/2017			<0.01			
3/2/2017					0.0009 (J)	0.0004 (J)
3/7/2017	<0.01	<0.01				
3/8/2017				<0.01		
4/26/2017				<0.01		
4/27/2017					<0.01	<0.01
5/1/2017	0.0004 (J)					
5/2/2017		<0.01				
5/8/2017			<0.01			
6/27/2017	<0.01	<0.01			<0.01	<0.01
6/30/2017				<0.01		
7/17/2017			<0.01			
10/16/2017			<0.01			
2/19/2018			<0.01			
3/27/2018				<0.01		<0.01
3/29/2018	<0.01	<0.01			<0.01	
8/6/2018			<0.01			

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
2/25/2019			<0.01			
2/26/2019				<0.01		
2/27/2019					<0.01	<0.01
3/4/2019	<0.01	<0.01				
3/28/2019					<0.01	0.0021 (J)
3/29/2019				<0.01		
6/12/2019			<0.01			
8/19/2019			<0.01			
9/24/2019					0.00072 (J)	0.0028 (J)
9/25/2019				<0.01		
10/8/2019			<0.01			
2/10/2020					0.00042 (J)	<0.01
2/12/2020				<0.01		
3/17/2020			<0.01			
3/18/2020				<0.01		0.00044 (J)
3/19/2020					0.00084 (J)	
3/24/2020	<0.01	0.0014 (J)				

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				<0.01
6/2/2016		<0.01	0.0013 (J)	
7/25/2016		<0.01		<0.01
7/26/2016			<0.01	
9/14/2016	<0.01			<0.01
9/15/2016			<0.01	
9/19/2016		<0.01		
11/1/2016		<0.01	<0.01	<0.01
11/4/2016	<0.01			
12/15/2016	<0.01			
1/11/2017			<0.01	<0.01
1/16/2017	<0.01	<0.01		
2/21/2017		<0.01		
3/1/2017				0.0004 (J)
3/2/2017			0.0006 (J)	
3/3/2017	0.0005 (J)			
4/26/2017		0.0016 (J)	<0.01	<0.01
4/28/2017	0.0004 (J)			
5/26/2017	<0.01			
6/28/2017	<0.01		<0.01	<0.01
6/30/2017		<0.01		
3/27/2018		<0.01		
3/28/2018	<0.01		<0.01	<0.01
2/26/2019		<0.01		
2/27/2019	<0.01		<0.01	<0.01
3/29/2019	<0.01			
4/1/2019		<0.01	<0.01	<0.01
9/24/2019	<0.01			
9/25/2019		<0.01	0.0014 (J)	0.0019 (J)
2/11/2020	<0.01			<0.01
2/12/2020		<0.01	<0.01	
3/19/2020	0.00048 (J)	<0.01	<0.01	<0.01

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.005
6/7/2016					<0.005	
7/27/2016					<0.005	<0.005
8/30/2016	0.0073 (J)					
8/31/2016		0.0119	0.0009 (J)			
9/1/2016				0.0171		
9/16/2016					<0.005	
9/19/2016						<0.005
11/3/2016					<0.005	<0.005
11/14/2016	0.0115		0.0009 (J)			
11/15/2016		0.0033 (J)				
11/16/2016				0.0145		
1/11/2017					<0.005	<0.005
2/24/2017	0.0106					
2/27/2017			0.001 (J)	0.0161		
2/28/2017		0.0017 (J)				
3/1/2017						<0.005
3/2/2017					<0.005	
4/26/2017						<0.005
5/2/2017					<0.005	
5/8/2017	0.0099 (J)	0.0018 (J)		0.0367		
5/9/2017			0.0008 (J)			
6/28/2017						<0.005
6/29/2017					<0.005	
7/11/2017	0.0096 (J)					
7/13/2017		0.0022 (J)	0.0009 (J)	0.0265		
10/10/2017	0.0036 (J)	0.0017 (J)	0.0008 (J)			
10/11/2017				0.0556		
3/28/2018					<0.005	<0.005
4/2/2018	<0.005					
4/3/2018			<0.01 (o)			
4/4/2018		<0.005		0.025		
6/7/2018						<0.005
6/11/2018					<0.005	
9/19/2018	0.0036 (J)	0.0025 (J)	0.00081 (J)	0.042		
9/25/2018					<0.005	<0.005
3/5/2019					<0.005	
3/6/2019						<0.005
4/2/2019					<0.005	
4/3/2019						<0.005
8/20/2019	0.00092 (J)	0.002 (J)	0.00071 (J)			
8/21/2019				0.027		
9/25/2019					<0.005	
9/26/2019						<0.005
10/8/2019	0.0014 (J)	0.0017 (J)				
10/9/2019			0.0007 (J)	0.024		
3/17/2020	0.0017 (J)	0.004 (J)	0.00081 (J)	0.022		
3/24/2020					<0.005	<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						0.00082 (J)
6/6/2016	0.00061 (J)					
6/7/2016		<0.005	0.0056			
7/26/2016						0.0012 (J)
7/27/2016	0.0004 (J)	<0.005				
7/28/2016			0.0032 (J)			
9/14/2016						0.0006 (J)
9/16/2016	0.0008 (J)					
9/19/2016		<0.005	0.0047 (J)			
11/2/2016		<0.005				<0.005
11/3/2016	<0.005		0.013			
1/11/2017	<0.005					
1/13/2017		<0.005	0.011			0.0029 (J)
3/1/2017	<0.005					
3/6/2017		<0.005	0.011			0.0006 (J)
4/26/2017	<0.005	<0.005	0.009 (J)			
5/1/2017						<0.005
6/28/2017	<0.005					
6/29/2017		<0.005	0.0093 (J)			0.0005 (J)
10/11/2017				<0.005		
10/12/2017					<0.005	
11/20/2017				<0.005	<0.005	
1/10/2018					<0.005	
1/11/2018				<0.005		
2/19/2018					<0.005	
2/20/2018				<0.005		
3/28/2018	<0.005					
3/29/2018		<0.005	<0.005			<0.005
4/3/2018				<0.005	<0.005	
6/5/2018			0.0041 (J)			
6/6/2018		<0.005				
6/7/2018						0.00058 (J)
6/11/2018	<0.005					
6/28/2018				<0.005	<0.005	
8/7/2018				<0.005	<0.005	
9/24/2018				<0.005	<0.005	
9/25/2018	<0.005	<0.005	0.0044 (J)			
9/26/2018						<0.005
3/4/2019						<0.005
3/5/2019	<0.005	<0.005	0.0039 (J)			
4/2/2019			0.0039 (J)			
4/3/2019	<0.005	<0.005				0.00083 (J)
8/21/2019				0.00034 (J)	<0.005	
9/24/2019			0.0032 (J)			
9/25/2019		<0.005				<0.005
9/26/2019	<0.005					
10/9/2019				<0.005	<0.005	
3/24/2020	<0.005	<0.005	0.0061		<0.005	
3/25/2020				0.00034 (J)		0.00056 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
5/1/2007			0.0067			
9/11/2007			<0.005			
3/20/2008			<0.005			
8/27/2008			<0.005			
3/3/2009			<0.005			
11/18/2009			<0.005			
3/3/2010			0.0027			
9/8/2010			0.007			
3/10/2011			<0.005			
9/8/2011			<0.005			
3/5/2012			0.0032			
9/10/2012			<0.005			
2/6/2013			<0.005			
8/12/2013			0.0045			
2/5/2014			<0.005			
8/5/2014			0.0027			
2/4/2015			0.0016			
8/3/2015			0.002			
2/16/2016			0.0027			
6/1/2016					<0.005	0.00082 (J)
6/2/2016	<0.005	<0.005		<0.005		
7/25/2016						0.0008 (J)
7/26/2016	<0.005	<0.005		<0.005	<0.005	
8/31/2016			0.0053 (J)			
9/13/2016					<0.005	0.0009 (J)
9/14/2016	<0.005	<0.005				
9/15/2016				<0.005		
11/1/2016					<0.005	
11/2/2016	<0.005			<0.005		
11/4/2016		<0.005				0.0025 (J)
11/28/2016			0.0036 (J)			
1/10/2017				<0.005		
1/11/2017					<0.005	
1/12/2017	<0.005	<0.005				
1/16/2017						0.0027 (J)
2/22/2017			0.0049 (J)			
3/2/2017					<0.005	0.0022 (J)
3/7/2017	<0.005	<0.005				
3/8/2017				<0.005		
4/26/2017				<0.005		
4/27/2017					<0.005	0.0018 (J)
5/1/2017	<0.005					
5/2/2017		<0.005				
5/8/2017			0.0059 (J)			
6/27/2017	<0.005	<0.005			<0.005	0.0023 (J)
6/30/2017				<0.005		
7/17/2017			0.0046 (J)			
10/16/2017			0.0034 (J)			
2/19/2018			<0.005			
3/27/2018				<0.005		<0.005
3/29/2018	<0.005	<0.005			<0.005	
6/5/2018					<0.005	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/6/2018	<0.005					<0.005
6/7/2018		<0.005				
6/8/2018				<0.005		
8/6/2018			0.003 (J)			
9/26/2018	<0.005	<0.005				
10/1/2018				<0.005	<0.005	0.00059 (J)
2/25/2019			0.001 (J)			
2/26/2019				<0.005		
2/27/2019					<0.005	0.00064 (J)
3/4/2019	<0.005	<0.005				
3/28/2019					<0.005	0.00091 (J)
3/29/2019				<0.005		
4/3/2019	<0.005	<0.005				
6/12/2019			0.003 (J)			
8/19/2019			0.0035 (J)			
9/24/2019	<0.005	<0.005			<0.005	0.0013 (J)
9/25/2019				<0.005		
10/8/2019			0.0039 (J)			
2/10/2020					<0.005	0.0016 (J)
2/12/2020				<0.005		
3/17/2020			0.003 (J)			
3/18/2020				<0.005		0.00087 (J)
3/19/2020					<0.005	
3/24/2020	0.00035 (J)	<0.005				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				<0.005
6/2/2016		0.035	<0.005	
7/25/2016		0.0312		<0.005
7/26/2016			<0.005	
9/14/2016	<0.005			<0.005
9/15/2016			<0.005	
9/19/2016		0.0275		
11/1/2016		0.0255	<0.005	<0.005
11/4/2016	<0.005			
12/15/2016	<0.005			
1/11/2017			<0.005	<0.005
1/16/2017	<0.005	0.0245		
2/21/2017		0.0272		
3/1/2017				<0.005
3/2/2017			<0.005	
3/3/2017	<0.005			
4/26/2017		0.0244	<0.005	<0.005
4/28/2017	<0.005			
5/26/2017	<0.005			
6/28/2017	<0.005		<0.005	<0.005
6/30/2017		0.0233		
3/27/2018		0.023		
3/28/2018	<0.005		<0.005	<0.005
6/7/2018	<0.005		<0.005	
6/8/2018				<0.005
6/11/2018		0.023		
10/1/2018	<0.005		<0.005	<0.005
10/2/2018		0.022		
2/26/2019		0.021		
2/27/2019	<0.005		<0.005	<0.005
3/29/2019	<0.005			
4/1/2019		0.022	<0.005	<0.005
9/24/2019	<0.005			
9/25/2019		0.016	<0.005	<0.005
2/11/2020	<0.005			<0.005
2/12/2020		0.014	<0.005	
3/19/2020	<0.005	0.014	<0.005	<0.005

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						0.0804 (U)
6/7/2016					0.158 (U)	
7/27/2016					0.0354 (U)	0.206 (U)
8/30/2016	1.09					
8/31/2016		2.15	1.65			
9/1/2016				2.28		
9/16/2016					1.04	
9/19/2016						1.58
11/3/2016					0.314 (U)	0.342 (U)
11/14/2016			0.981 (U)			
11/15/2016		0.676 (U)				
11/16/2016				0.639 (U)		
11/28/2016				0.996		
12/15/2016	1 (U)					
1/11/2017					0.34 (U)	0.365 (U)
2/24/2017	0.504 (U)					
2/27/2017			0.528 (U)	0.617 (U)		
2/28/2017		0.241 (U)				
3/1/2017						0.395 (U)
3/2/2017					0.746 (U)	
4/26/2017						0.507 (U)
5/2/2017					0.111 (U)	
5/8/2017	0.455 (U)	0.508 (U)		0.949		
5/9/2017			1.4			
6/28/2017						0.892
6/29/2017					0.576 (U)	
7/11/2017	0.471 (U)					
7/13/2017		0.77 (U)	0.611 (U)	1.41		
10/10/2017	0.649 (U)	1.43	1.47			
10/11/2017				0.856 (U)		
3/28/2018					0.438 (U)	0.92 (U)
4/2/2018	0.512 (U)					
4/3/2018			1.53			
4/4/2018		0.325 (U)		0.974		
6/7/2018						0.668 (U)
6/11/2018					0.901 (U)	
9/19/2018	0.789 (U)	0.386 (U)	0.839 (U)	1.15 (U)		
9/25/2018					0.68 (U)	0.141 (U)
3/5/2019					0.272 (U)	
3/6/2019						0.714 (U)
4/2/2019					0.847 (U)	
4/3/2019						0.385 (U)
8/20/2019	2.44	1.71	2.23			
8/21/2019				1.31		
9/25/2019					0.412 (U)	
9/26/2019						0.386 (U)
10/8/2019	1.72	0.769 (U)				
10/9/2019			1.61	0.892 (U)		
3/17/2020	1.22 (U)	1.37	1.44	1.74		
3/24/2020					0.534 (U)	0.632 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						0.721
6/6/2016	0.301 (U)					
6/7/2016		0.0191 (U)	0.347			
7/26/2016						1.26
7/27/2016	0.196 (U)	0.541 (U)				
7/28/2016			0.815 (U)			
9/14/2016						0.901 (U)
9/16/2016	0.915 (U)					
9/19/2016		0.826 (U)	0.862 (U)			
11/2/2016		0.791 (U)				1.09 (U)
11/3/2016	0.928 (U)		0.797 (U)			
1/11/2017	0.502 (U)					
1/13/2017		0.296 (U)	0.72 (U)			1.19
3/1/2017	0.202 (U)					
3/6/2017		0.518 (U)	0.518 (U)			0.669 (U)
4/26/2017	0.264 (U)	0.282 (U)	1.13 (U)			
5/1/2017						0.803 (U)
6/28/2017	0.636 (U)					
6/29/2017		1.12	0.841 (U)			1.35
10/11/2017				0.586 (U)		
10/12/2017					1.49	
11/20/2017				0.816 (U)	0.918 (U)	
1/10/2018					1.05	
1/11/2018				0.841 (U)		
2/19/2018					2.05	
2/20/2018				1.58		
3/28/2018	0.56 (U)					
3/29/2018		1.73	1.91			0.703 (U)
4/3/2018				0.385 (U)	0.68 (U)	
6/5/2018			1.39			
6/6/2018		0.694 (U)				
6/7/2018						0.628 (U)
6/11/2018	0.649 (U)					
6/28/2018				0.283 (U)	1.28	
8/7/2018				0.332 (U)	1.16	
9/24/2018				0.767 (U)	0.965 (U)	
9/25/2018	0.574 (U)	0.772 (U)	1.62			
9/26/2018						0.756 (U)
3/4/2019						1.21 (U)
3/5/2019	0.474 (U)	0.84 (U)	0.985 (U)			
4/2/2019			1.42			
4/3/2019	0.429 (U)	1.01				1.07 (U)
8/21/2019				1.01 (U)	1.24 (U)	
9/24/2019			1.35			
9/25/2019		1.18 (U)				1.86
9/26/2019	0.222 (U)					
10/8/2019				1.02 (U)	0.866 (U)	
3/24/2020	0.262 (U)	1.88	1.24 (U)		1.27 (U)	
3/25/2020				0.377 (U)		0.766 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/1/2016					0.321 (U)	0.42
6/2/2016	5.11	0.614		0.329 (U)		
7/25/2016						1.83
7/26/2016	6.92	1.47		1.51	0.707 (U)	
8/31/2016			1.2			
9/13/2016					1.22	0.841
9/14/2016	3.96	1.27				
9/15/2016				1.04 (U)		
11/1/2016					0.805 (U)	
11/2/2016	4.53			0.496 (U)		
11/4/2016		0.434 (U)				0.166 (U)
11/28/2016			0.264 (U)			
1/10/2017				0.376 (U)		
1/11/2017					0.705 (U)	
1/12/2017	4.43	0.202 (U)				
1/16/2017						0
2/22/2017			1.06 (U)			
3/2/2017					0.251 (U)	0.504 (U)
3/7/2017	4.8	0.0674 (U)				
3/8/2017				0.0745 (U)		
4/26/2017				0.282 (U)		
4/27/2017					1.08	0.593 (U)
5/1/2017	4.16					
5/2/2017		0.444 (U)				
5/8/2017			0.187 (U)			
6/27/2017	2.8	0.77 (U)			1.02 (U)	0.657 (U)
6/30/2017				0.994		
7/17/2017			1.42			
10/16/2017			1.17			
2/19/2018			1.58 (D)			
3/27/2018				0.189 (U)		0.39 (U)
3/29/2018	3.42	0.648 (U)			0.503 (U)	
6/5/2018					0.771 (U)	
6/6/2018	3.99					2.8
6/7/2018		0.745 (U)				
6/8/2018				0.218 (U)		
8/6/2018			0.196 (U)			
9/26/2018	2.73	0.377 (U)				
10/1/2018				1.24	0.783 (U)	1.06 (U)
2/26/2019				0.202 (U)		
2/27/2019					1.21 (U)	0.637 (U)
3/4/2019	4.43	1 (U)				
3/28/2019					1.13 (U)	0.125 (U)
3/29/2019				0 (U)		
4/3/2019	4.79	0.43 (U)				
8/19/2019			1.39			
9/24/2019	4.06	0.699 (U)			1.22 (U)	0.949 (U)
9/25/2019				0.707 (U)		
10/8/2019			1.32 (U)			
2/10/2020					1.41	1.25 (U)
2/12/2020				1.07 (U)		
3/17/2020			1 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/18/2020				0.207 (U)		0.458 (U)
3/19/2020					1.1	
3/24/2020	3.52					

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				0.896
6/2/2016		0.0652 (U)	2.51	
7/25/2016		3.01		2.28
7/26/2016			3.82	
9/14/2016	0.98 (U)			0.821 (U)
9/15/2016			4.24	
9/19/2016		0.871 (U)		
11/1/2016		0.307 (U)	3.92	0.585 (U)
11/4/2016	0.277 (U)			
12/15/2016	0.071 (U)			
1/11/2017			2.52	1.22
1/16/2017	0.44 (U)	0.284 (U)		
2/21/2017		0.503 (U)		
3/1/2017				0.877 (U)
3/2/2017			3.13	
3/3/2017	0.448 (U)			
4/26/2017		0.204 (U)	2.35	0.672 (U)
4/28/2017	0.548 (U)			
5/26/2017	0 (U)			
6/28/2017	0.608 (U)		2.6	1.07 (U)
6/30/2017		0.738 (U)		
3/27/2018		0.31 (U)		
3/28/2018	0.412 (U)		3	0.65 (U)
6/7/2018	0.73 (U)		2.79	
6/8/2018				1.89
6/11/2018		0.608 (U)		
10/1/2018	0.756 (U)		3.14	1.58
10/2/2018		0.97 (U)		
2/26/2019		0.524 (U)		
2/27/2019	0.635 (U)		3.79	3.67
3/29/2019	0.224 (U)			
4/1/2019		1.02 (U)	4.33	2.28
9/24/2019	0.429 (U)			
9/25/2019		1.02 (U)	4.2	1.6
2/11/2020	0.817 (U)		3.87	1.85
2/12/2020		0.301 (U)		
3/19/2020	0.715 (U)	1	3.96	2.2

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.3
6/7/2016					<0.3	
7/27/2016					<0.3	<0.3
8/30/2016	0.09 (J)					
8/31/2016		<0.3	0.11 (J)			
9/1/2016				0.08 (J)		
9/16/2016					<0.3	
9/19/2016						<0.3
11/3/2016					<0.3	<0.3
11/14/2016	0.18 (J)		0.71			
11/15/2016		0.12 (J)				
11/16/2016				0.04 (J)		
1/11/2017					<0.3	<0.3
2/24/2017	0.05 (J)					
2/27/2017			0.22 (J)	0.05 (J)		
2/28/2017		0.07 (J)				
3/1/2017						<0.3
3/2/2017					<0.3	
4/26/2017						<0.3
5/2/2017					<0.3	
5/8/2017	0.03 (J)	0.04 (J)		0.004 (J)		
5/9/2017			0.2 (J)			
6/28/2017						<0.3
6/29/2017					<0.3	
7/11/2017	0.07 (J)					
7/13/2017		<0.3	0.11 (J)	0.35		
10/4/2017					<0.3	
10/5/2017						<0.3
10/10/2017	<0.3	<0.3	0.39			
10/11/2017				<0.3		
3/28/2018					<0.3	<0.3
4/2/2018	<0.3					
4/3/2018			<0.3			
4/4/2018		<0.3		<0.3		
6/7/2018						<0.3
6/11/2018					<0.3	
9/19/2018	<0.3	<0.3	<0.3	<0.3		
9/25/2018					<0.3	<0.3
3/5/2019					<0.3	
3/6/2019						<0.3
3/27/2019	0.081 (J)	<0.3	0.18 (J)	0.12 (J)		
4/2/2019					<0.3	
4/3/2019						<0.3
8/20/2019	<0.3	<0.3	<0.3			
8/21/2019				<0.3		
9/25/2019					<0.3	
9/26/2019						<0.3
10/8/2019	0.034 (J)	<0.3				
10/9/2019			<0.3	0.12 (J)		
3/17/2020	<0.3	<0.3	0.076 (J)	<0.3		
3/24/2020					<0.3	<0.3

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.3
6/6/2016	<0.3					
6/7/2016		<0.3	<0.3			
7/26/2016						<0.3
7/27/2016	<0.3	<0.3				
7/28/2016			0.02 (J)			
9/14/2016						<0.3
9/16/2016	<0.3					
9/19/2016		<0.3	0.02 (J)			
11/2/2016		<0.3				<0.3
11/3/2016	<0.3		<0.3			
1/11/2017	<0.3					
1/13/2017		<0.3	<0.3			<0.3
3/1/2017	<0.3					
3/6/2017		<0.3	<0.3			<0.3
4/26/2017	<0.3	<0.3	0.04 (J)			
5/1/2017						<0.3
6/28/2017	<0.3					
6/29/2017		<0.3	<0.3			<0.3
10/3/2017			<0.3			
10/4/2017	<0.3	<0.3				
10/5/2017						<0.3
10/11/2017				<0.3		
10/12/2017					<0.3	
11/20/2017				<0.3	<0.3	
1/10/2018					<0.3	
1/11/2018				<0.3		
2/19/2018					<0.3	
2/20/2018				0.23		
3/28/2018	<0.3					
3/29/2018		<0.3	<0.3			<0.3
4/3/2018				<0.3	<0.3	
6/5/2018			0.13 (J)			
6/6/2018		<0.3				
6/7/2018						<0.3
6/11/2018	<0.3					
6/28/2018				<0.3	<0.3	
8/7/2018				0.048 (J)	<0.3	
9/24/2018				<0.3	<0.3	
9/25/2018	<0.3	<0.3	0 (J)			
9/26/2018						<0.3
3/4/2019						<0.3
3/5/2019	<0.3	<0.3	0.32			
3/26/2019					<0.3	
3/27/2019				<0.3		
4/2/2019			0.12 (J)			
4/3/2019	<0.3	<0.3				<0.3
8/21/2019				<0.3	<0.3	
9/24/2019			0.15 (J)			
9/25/2019		<0.3				<0.3
9/26/2019	<0.3					
10/9/2019				<0.3	<0.3	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
3/24/2020	<0.3	<0.3	0.081 (J)		<0.3	
3/25/2020				<0.3		<0.3

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/1/2016					0.12 (J)	<0.3
6/2/2016	0.11 (J)	<0.3		<0.3		
7/25/2016						0.06 (J)
7/26/2016	0.05 (J)	<0.3		0.02 (J)	0.08 (J)	
8/31/2016			0.14 (J)			
9/13/2016					0.11 (J)	<0.3
9/14/2016	0.04 (J)	<0.3				
9/15/2016				<0.3		
11/1/2016					<0.3	
11/2/2016	<0.3			<0.3		
11/4/2016		<0.3				<0.3
11/28/2016			0.12 (J)			
1/10/2017				<0.3		
1/11/2017					0.05 (J)	
1/12/2017	0.04 (J)	<0.3				
1/16/2017						<0.3
2/22/2017			0.09 (J)			
3/2/2017					<0.3	<0.3
3/7/2017	<0.3	<0.3				
3/8/2017				<0.3		
4/26/2017				<0.3		
4/27/2017					0.04 (J)	0.01 (J)
5/1/2017	<0.3					
5/2/2017		<0.3				
5/8/2017			0.05 (J)			
6/27/2017	<0.3	<0.3			<0.3	<0.3
6/30/2017				<0.3		
7/17/2017			0.14 (J)			
10/3/2017	<0.3	<0.3			<0.3	<0.3
10/5/2017				<0.3		
10/16/2017			0.12 (J)			
2/19/2018			0.17			
3/27/2018				<0.3		<0.3
3/29/2018	<0.3	<0.3			<0.3	
6/5/2018					0.055 (J)	
6/6/2018	0.15 (J)					<0.3
6/7/2018		<0.3				
6/8/2018				<0.3		
8/6/2018			0.087 (J)			
9/26/2018	<0.3	<0.3				
10/1/2018				<0.3	<0.3	<0.3
2/25/2019			0.14 (J)			
2/26/2019				<0.3		
2/27/2019					0.052 (J)	<0.3
3/4/2019	0.19 (J)	<0.3				
3/28/2019					0.036 (J)	<0.3
3/29/2019				<0.3		
4/3/2019	0.047 (J)	<0.3				
6/12/2019			0.12 (J)			
8/19/2019			<0.3			
9/24/2019	0.05 (J)	<0.3			0.063 (J)	<0.3
9/25/2019				<0.3		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
10/8/2019			0.052 (J)			
2/10/2020					0.061 (J)	<0.3
2/12/2020				<0.3		
3/17/2020			0.053 (J)			
3/18/2020				<0.3		<0.3
3/19/2020					0.064 (J)	
3/24/2020	<0.3	<0.3				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				0.15 (J)
6/2/2016		<0.3	0.62	
7/25/2016		0.06 (J)		0.14 (J)
7/26/2016			0.49	
9/14/2016	0.08 (J)			0.18 (J)
9/15/2016			0.54	
9/19/2016		<0.3		
11/1/2016		<0.3	0.68	<0.3
11/4/2016	<0.3			
12/15/2016	0.06 (J)			
1/11/2017			0.49	0.09 (J)
1/16/2017	0.1 (J)	<0.3		
2/21/2017		<0.3		
3/1/2017				<0.3
3/2/2017			0.48	
3/3/2017	<0.3			
4/26/2017		<0.3	0.48	0.08 (J)
4/28/2017	0.06 (J)			
5/26/2017	0.09 (J)			
6/28/2017	0.11 (J)		0.47	0.12 (J)
6/30/2017		<0.3		
10/3/2017	<0.3			
10/4/2017		<0.3	<0.3	<0.3
3/27/2018		<0.3		
3/28/2018	0.31		0.56	<0.3
6/7/2018	0.11 (J)		0.48	
6/8/2018				0.2 (J)
6/11/2018		<0.3		
10/1/2018	<0.3		0.44	<0.3
10/2/2018		<0.3		
2/26/2019		<0.3		
2/27/2019	0.12 (J)		0.53	0.13 (J)
3/29/2019	0.13 (J)			
4/1/2019		<0.3	0.45	0.1 (J)
9/24/2019	0.081 (J)			
9/25/2019		<0.3	0.46	0.1 (J)
2/11/2020	0.075 (J)			0.094 (J)
2/12/2020		<0.3	0.4	
3/19/2020	0.093 (J)	<0.3	0.51	0.11 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.005
6/7/2016					<0.005	
7/27/2016					<0.005	<0.005
8/30/2016	<0.005					
8/31/2016		<0.005	<0.005			
9/1/2016				<0.005		
9/16/2016					<0.005	
9/19/2016						<0.005
11/3/2016					<0.005	<0.005
11/14/2016	<0.005		<0.005			
11/15/2016		<0.005				
11/16/2016				<0.005		
1/11/2017					<0.005	<0.005
2/24/2017	<0.005					
2/27/2017			<0.005	<0.005		
2/28/2017		<0.005				
3/1/2017						<0.005
3/2/2017					8E-05 (J)	
4/26/2017						<0.005
5/2/2017					<0.005	
5/8/2017	<0.005	<0.005		<0.005		
5/9/2017			0.0001 (J)			
6/28/2017						<0.005
6/29/2017					8E-05 (J)	
7/11/2017	<0.005					
7/13/2017		<0.005	<0.005	<0.005		
10/10/2017	<0.005	<0.005	<0.005			
10/11/2017				<0.005		
3/28/2018					<0.005	<0.005
4/2/2018	<0.005					
4/3/2018			<0.005			
4/4/2018		<0.005		<0.005		
9/19/2018	<0.005	<0.005	<0.005	<0.005		
3/5/2019					<0.005	
3/6/2019						<0.005
4/2/2019					<0.005	
4/3/2019						<0.005
8/20/2019	<0.005	<0.005	<0.005			
8/21/2019				<0.005		
9/25/2019					<0.005	
9/26/2019						<0.005
3/24/2020					6.4E-05 (J)	7.1E-05 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.005
6/6/2016	<0.005					
6/7/2016		<0.005	<0.005			
7/26/2016						<0.005
7/27/2016	<0.005	<0.005				
7/28/2016			<0.005			
9/14/2016						<0.005
9/16/2016	<0.005					
9/19/2016		<0.005	<0.005			
11/2/2016		0.0013 (J)				<0.005
11/3/2016	<0.005		<0.005			
1/11/2017	<0.005					
1/13/2017		<0.005	<0.005			<0.005
3/1/2017	<0.005					
3/6/2017		<0.005	<0.005			<0.005
4/26/2017	<0.005	<0.005	<0.005			
5/1/2017						<0.005
6/28/2017	0.0001 (J)					
6/29/2017		<0.005	<0.005			<0.005
10/11/2017				0.0001 (J)		
10/12/2017					9E-05 (J)	
11/20/2017				<0.005	<0.005	
1/10/2018					<0.005	
1/11/2018				0.0002 (J)		
2/19/2018					<0.005	
2/20/2018				<0.005		
3/28/2018	<0.005					
3/29/2018		<0.005	<0.005			<0.005
4/3/2018				<0.005	<0.005	
6/28/2018				<0.005	<0.005	
8/7/2018				<0.005	<0.005	
9/24/2018				<0.005	<0.005	
3/4/2019						<0.005
3/5/2019	<0.005	<0.005	<0.005			
4/2/2019			<0.005			
4/3/2019	<0.005	<0.005				<0.005
8/21/2019				<0.005	<0.005	
9/24/2019			<0.005			
9/25/2019		<0.005				<0.005
9/26/2019	<0.005					
10/9/2019				<0.005	<0.005	
3/24/2020	5.4E-05 (J)	0.00011 (J)	<0.005		<0.005	
3/25/2020				5.1E-05 (J)		<0.005

Time Series

Constituent: Lead (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
5/1/2007			<0.005			
9/11/2007			<0.005			
3/20/2008			<0.005			
8/27/2008			<0.005			
3/3/2009			<0.005			
11/18/2009			<0.005			
3/3/2010			<0.005			
9/8/2010			<0.005			
3/10/2011			<0.005			
9/8/2011			<0.005			
3/5/2012			<0.005			
9/10/2012			<0.005			
2/6/2013			<0.005			
8/12/2013			<0.005			
2/5/2014			<0.005			
8/5/2014			<0.005			
2/4/2015			<0.005			
8/3/2015			<0.005			
2/16/2016			<0.005			
6/1/2016					0.00056 (J)	<0.005
6/2/2016	<0.005	<0.005		<0.005		
7/25/2016						<0.005
7/26/2016	<0.005	<0.005		<0.005	<0.005	
8/31/2016			<0.005			
9/13/2016					0.0001 (J)	<0.005
9/14/2016	<0.005	<0.005				
9/15/2016				<0.005		
11/1/2016					<0.005	
11/2/2016	<0.005			<0.005		
11/4/2016		<0.005				<0.005
11/28/2016			<0.005			
1/10/2017				<0.005		
1/11/2017					<0.005	
1/12/2017	<0.005	<0.005				
1/16/2017						<0.005
2/22/2017			<0.005			
3/2/2017					0.0001 (J)	<0.005
3/7/2017	0.0001 (J)	7E-05 (J)				
3/8/2017				0.0001 (J)		
4/26/2017				<0.005		
4/27/2017					<0.005	<0.005
5/1/2017	<0.005					
5/2/2017		<0.005				
5/8/2017			<0.005			
6/27/2017	<0.005	<0.005			<0.005	<0.005
6/30/2017				<0.005		
7/17/2017			<0.005			
10/16/2017			<0.005			
2/19/2018			<0.005			
3/27/2018				<0.005		<0.005
3/29/2018	<0.005	<0.005			<0.005	
8/6/2018			<0.005			

Time Series

Constituent: Lead (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
2/25/2019			<0.005			
2/26/2019				<0.005		
2/27/2019					<0.005	<0.005
3/4/2019	<0.005	<0.005				
4/3/2019	<0.005	<0.005				
6/12/2019			<0.005			
8/19/2019			<0.005			
9/24/2019	<0.005	9E-05 (J)				
10/8/2019			<0.005			
2/10/2020					4.9E-05 (J)	<0.005
2/12/2020				<0.005		
3/17/2020			<0.005			
3/18/2020				<0.005		<0.005
3/19/2020					0.00012 (J)	
3/24/2020	5.4E-05 (J)	6.8E-05 (J)				

Time Series

Constituent: Lead (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				<0.005
6/2/2016		<0.005	0.00056 (J)	
7/25/2016		<0.005		<0.005
7/26/2016			0.0001 (J)	
9/14/2016	<0.005			<0.005
9/15/2016			0.0002 (J)	
9/19/2016		<0.005		
11/1/2016		<0.005	<0.005	<0.005
11/4/2016	<0.005			
12/15/2016	<0.005			
1/11/2017			<0.005	<0.005
1/16/2017	<0.005	<0.005		
2/21/2017		<0.005		
3/1/2017				<0.005
3/2/2017			0.0002 (J)	
3/3/2017	<0.005			
4/26/2017		<0.005	<0.005	<0.005
4/28/2017	<0.005			
5/26/2017	<0.005			
6/28/2017	<0.005		<0.005	<0.005
6/30/2017		<0.005		
3/27/2018		<0.005		
3/28/2018	<0.005		<0.005	<0.005
2/26/2019		<0.005		
2/27/2019	<0.005		<0.005	<0.005
2/11/2020	<0.005			<0.005
2/12/2020		<0.005	<0.005	
3/19/2020	<0.005	<0.005	0.00017 (J)	<0.005

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						0.0088
6/7/2016					<0.03	
7/27/2016					<0.03	0.0087 (J)
8/30/2016	0.0061 (J)					
8/31/2016		0.0115 (J)	0.0147 (J)			
9/1/2016				0.0077 (J)		
9/16/2016					<0.03	
9/19/2016						0.0043 (J)
11/3/2016					<0.03	<0.03
11/14/2016	0.0064 (J)		0.0175 (J)			
11/15/2016		0.0148 (J)				
11/16/2016				0.0075 (J)		
1/11/2017					0.0035 (J)	0.0052 (J)
2/24/2017	0.0049 (J)					
2/27/2017			0.0135 (J)	0.0084 (J)		
2/28/2017		0.0124 (J)				
3/1/2017						0.0053 (J)
3/2/2017					<0.03	
4/26/2017						0.0041 (J)
5/2/2017					<0.03	
5/8/2017	0.0053 (J)	0.0132 (J)		0.0087 (J)		
5/9/2017			0.0136 (J)			
6/28/2017						0.0039 (J)
6/29/2017					<0.03	
7/11/2017	0.0051 (J)					
7/13/2017		0.0124 (J)	0.0129 (J)	0.0104 (J)		
10/10/2017	0.0043 (J)	0.0123 (J)	0.015 (J)			
10/11/2017				0.0099 (J)		
3/28/2018					<0.03	0.0041 (J)
4/2/2018	0.0045 (J)					
4/3/2018			0.014 (J)			
4/4/2018		0.014 (J)		0.012 (J)		
6/7/2018						0.0032 (J)
6/11/2018					<0.03	
9/19/2018	0.0043 (J)	0.013 (J)	0.012 (J)	0.011 (J)		
9/25/2018					<0.03	0.0036 (J)
3/5/2019					<0.03	
3/6/2019						0.0033 (J)
4/2/2019					<0.03	
4/3/2019						0.0035 (J)
8/20/2019	0.0036 (J)	0.013 (J)	0.012 (J)			
8/21/2019				0.0076 (J)		
9/25/2019					<0.03	
9/26/2019						0.0032 (J)
10/8/2019	0.0036 (J)	0.012 (J)				
10/9/2019			0.012 (J)	0.0078 (J)		
3/17/2020	0.0046 (J)	0.013 (J)	0.014 (J)	0.0071 (J)		
3/24/2020					0.0034 (J)	0.0033 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						0.013
6/6/2016	0.015					
6/7/2016		<0.03	0.0055			
7/26/2016						0.0123 (J)
7/27/2016	0.0049 (J)	<0.03				
7/28/2016			0.0045 (J)			
9/14/2016						0.0137 (J)
9/16/2016	0.0031 (J)					
9/19/2016		<0.03	0.0054 (J)			
11/2/2016		<0.03				0.0136 (J)
11/3/2016	0.0021 (J)		<0.03			
1/11/2017	0.0025 (J)					
1/13/2017		<0.03	0.0062 (J)			0.0121 (J)
3/1/2017	0.0029 (J)					
3/6/2017		<0.03	0.0059 (J)			0.0143 (J)
4/26/2017	0.0019 (J)	<0.03	0.0054 (J)			
5/1/2017						0.0132 (J)
6/28/2017	0.0016 (J)					
6/29/2017		<0.03	0.0047 (J)			0.0145 (J)
10/11/2017				0.0018 (J)		
10/12/2017					<0.03	
11/20/2017				0.0018 (J)	<0.03	
1/10/2018					<0.03	
1/11/2018				0.0019 (J)		
2/19/2018					<0.03	
2/20/2018				<0.03		
3/28/2018	0.0024 (J)					
3/29/2018		<0.03	0.0062 (J)			0.014 (J)
4/3/2018				0.0022 (J)	<0.03	
6/5/2018			0.0061 (J)			
6/6/2018		<0.03				
6/7/2018						0.013 (J)
6/11/2018	0.0014 (J)					
6/28/2018				0.0026 (J)	<0.03	
8/7/2018				0.0024 (J)	<0.03	
9/24/2018				0.0022 (J)	<0.03	
9/25/2018	0.0016 (J)	<0.03	0.0062 (J)			
9/26/2018						0.014 (J)
3/4/2019						0.015 (J)
3/5/2019	0.0031 (J)	<0.03	0.0053 (J)			
4/2/2019			0.0051 (J)			
4/3/2019	0.0028 (J)	<0.03				0.014 (J)
8/21/2019				0.0035 (J)	<0.03	
9/24/2019			0.0068 (J)			
9/25/2019		<0.03				0.014 (J)
9/26/2019	0.0029 (J)					
10/9/2019				0.0036 (J)	<0.03	
3/24/2020	0.0035 (J)	<0.03	0.0064 (J)		<0.03	
3/25/2020				0.0049 (J)		0.014 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/1/2016					0.015	<0.03
6/2/2016	0.0049 (J)	<0.03		<0.03		
7/25/2016						0.002 (J)
7/26/2016	0.0063 (J)	0.0027 (J)		<0.03	0.0135 (J)	
8/31/2016			<0.03			
9/13/2016					0.0112 (J)	<0.03
9/14/2016	0.0058 (J)	0.0029 (J)				
9/15/2016				<0.03		
11/1/2016					0.0163 (J)	
11/2/2016	0.0053 (J)			<0.03		
11/4/2016		<0.03				<0.03
11/28/2016			<0.03			
1/10/2017				<0.03		
1/11/2017					0.0166 (J)	
1/12/2017	0.0054 (J)	0.0032 (J)				
1/16/2017						0.0023 (J)
2/22/2017			<0.03			
3/2/2017					0.0159 (J)	0.0025 (J)
3/7/2017	0.0056 (J)	0.0035 (J)				
3/8/2017				<0.03		
4/26/2017				<0.03		
4/27/2017					0.0137 (J)	0.0027 (J)
5/1/2017	0.0031 (J)					
5/2/2017		0.0031 (J)				
5/8/2017			0.0014 (J)			
6/27/2017	0.0018 (J)	0.0029 (J)			0.0094 (J)	0.0024 (J)
6/30/2017				<0.03		
7/17/2017			<0.03			
10/16/2017			0.0016 (J)			
2/19/2018			<0.03			
3/27/2018				<0.03		0.0023 (J)
3/29/2018	0.0058 (J)	0.0034 (J)			0.0078 (J)	
6/5/2018					0.0079 (J)	
6/6/2018	0.0068 (J)					0.0024 (J)
6/7/2018		0.0032 (J)				
6/8/2018				<0.03		
8/6/2018			<0.03			
9/26/2018	0.0065 (J)	0.0032 (J)				
10/1/2018				<0.03	0.0053 (J)	0.0023 (J)
2/26/2019				<0.03		
2/27/2019					0.0093 (J)	0.0023 (J)
3/4/2019	0.0065 (J)	0.0032 (J)				
3/28/2019					0.013 (J)	0.0022 (J)
3/29/2019				<0.03		
4/3/2019	0.007 (J)	0.0035 (J)				
8/19/2019			0.0019 (J)			
9/24/2019	0.0065 (J)	0.0031 (J)			0.0046 (J)	0.0023 (J)
9/25/2019				<0.03		
10/8/2019			0.0015 (J)			
2/10/2020					0.011 (J)	0.0023 (J)
2/12/2020				<0.03		
3/17/2020			0.0017 (J)			

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/18/2020				<0.03		0.0024 (J)
3/19/2020					0.013 (J)	
3/24/2020	0.0064 (J)	0.0033 (J)				

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				0.01
6/2/2016		<0.03	0.018	
7/25/2016		<0.03		0.0132 (J)
7/26/2016			0.0221 (J)	
9/14/2016	0.004 (J)			0.012 (J)
9/15/2016			0.0197 (J)	
9/19/2016		<0.03		
11/1/2016		<0.03	0.0194 (J)	0.0115 (J)
11/4/2016	<0.03			
12/15/2016	0.0026 (J)			
1/11/2017			0.0177 (J)	0.0085 (J)
1/16/2017	0.0023 (J)	<0.03		
2/21/2017		<0.03		
3/1/2017				0.0114 (J)
3/2/2017			0.0185 (J)	
3/3/2017	0.0013 (J)			
4/26/2017		<0.03	0.0183 (J)	0.0092 (J)
4/28/2017	0.0031 (J)			
5/26/2017	0.0038 (J)			
6/28/2017	0.0026 (J)		0.0173 (J)	0.0085 (J)
6/30/2017		<0.03		
3/27/2018		0.0011 (J)		
3/28/2018	0.0025 (J)		0.02 (J)	0.013 (J)
6/7/2018	0.0017 (J)		0.02 (J)	
6/8/2018				0.012 (J)
6/11/2018		0.0012 (J)		
10/1/2018	<0.03		0.02 (J)	0.011 (J)
10/2/2018		<0.03		
2/26/2019		0.0011 (J)		
2/27/2019	0.0011 (J)		0.021 (J)	0.014 (J)
3/29/2019	0.0016 (J)			
4/1/2019		0.001 (J)	0.021 (J)	0.013 (J)
9/24/2019	0.0011 (J)			
9/25/2019		0.0011 (J)	0.02 (J)	0.01 (J)
2/11/2020	0.0012 (J)			0.013 (J)
2/12/2020		0.0013 (J)	0.019 (J)	
3/19/2020	0.0022 (J)	0.0012 (J)	0.023 (J)	0.014 (J)

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.0005
6/7/2016					9.5E-05 (J)	
7/27/2016					<0.0005	<0.0005
8/30/2016	<0.0005					
8/31/2016		<0.0005	<0.0005			
9/1/2016				<0.0005		
9/16/2016					<0.0005	
9/19/2016						<0.0005
11/3/2016					<0.0005	<0.0005
11/14/2016	<0.0005		<0.0005			
11/15/2016		<0.0005				
11/16/2016				<0.0005		
1/11/2017					<0.0005	<0.0005
2/24/2017	<0.0005					
2/27/2017			<0.0005	<0.0005		
2/28/2017		<0.0005				
3/1/2017						<0.0005
3/2/2017					<0.0005	
4/26/2017						<0.0005
5/2/2017					<0.0005	
5/8/2017	<0.0005	<0.0005		<0.0005		
5/9/2017			<0.0005			
6/28/2017						<0.0005
6/29/2017					<0.0005	
7/11/2017	<0.0005					
7/13/2017		<0.0005	<0.0005	<0.0005		
10/10/2017	<0.0005	<0.0005	<0.0005			
10/11/2017				<0.0005		
3/28/2018					<0.0005	<0.0005
4/2/2018	<0.0005					
4/3/2018			<0.0005			
4/4/2018		<0.0005		<0.0005		
9/19/2018	5.3E-05 (J)	6E-05 (J)	7.1E-05 (J)	7E-05 (J)		
9/25/2018					<0.0005	<0.0005
3/5/2019					<0.0005	
3/6/2019						<0.0005
8/20/2019	<0.0005	<0.0005	<0.0005			
8/21/2019				<0.0005		

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.0005
6/6/2016	<0.0005					
6/7/2016		9.6E-05 (J)	9.6E-05 (J)			
7/26/2016						<0.0005
7/27/2016	<0.0005	<0.0005				
7/28/2016			<0.0005			
9/14/2016						<0.0005
9/16/2016	<0.0005					
9/19/2016		<0.0005	<0.0005			
11/2/2016		<0.0005				<0.0005
11/3/2016	<0.0005		<0.0005			
1/11/2017	<0.0005					
1/13/2017		<0.0005	<0.0005			<0.0005
3/1/2017	<0.0005					
3/6/2017		<0.0005	<0.0005			<0.0005
4/26/2017	<0.0005	<0.0005	<0.0005			
5/1/2017						<0.0005
6/28/2017	<0.0005					
6/29/2017		<0.0005	<0.0005			<0.0005
10/11/2017				<0.0005		
10/12/2017					<0.0005	
11/20/2017				7E-05 (J)	8E-05 (J)	
1/10/2018					<0.0005	
1/11/2018				<0.0005		
2/19/2018					<0.0005	
2/20/2018				<0.0005		
3/28/2018	<0.0005					
3/29/2018		<0.0005	<0.0005			<0.0005
4/3/2018				<0.0005	<0.0005	
6/28/2018				<0.0005	3.6E-05 (J)	
8/7/2018				<0.0005	<0.0005	
9/24/2018				<0.0005	<0.0005	
9/25/2018	<0.0005	<0.0005	<0.0005			
9/26/2018						<0.0005
3/4/2019						<0.0005
3/5/2019	<0.0005	<0.0005	<0.0005			
8/21/2019				<0.0005	<0.0005	

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
5/1/2007			<0.0005			
9/11/2007			<0.0005			
3/20/2008			<0.0005			
8/27/2008			<0.0005			
3/3/2009			<0.0005			
11/18/2009			<0.0005			
3/3/2010			<0.0005			
9/8/2010			<0.0005			
3/10/2011			<0.0005			
9/8/2011			<0.0005			
3/5/2012			<0.0005			
9/10/2012			<0.0005			
2/6/2013			<0.0005			
8/12/2013			<0.0005			
2/5/2014			<0.0005			
8/5/2014			<0.0005			
2/4/2015			<0.0005			
8/3/2015			<0.0005			
2/16/2016			1.36E-05 (J)			
6/1/2016					<0.0005	<0.0005
6/2/2016	<0.0005	<0.0005		<0.0005		
7/25/2016						<0.0005
7/26/2016	<0.0005	<0.0005		<0.0005	<0.0005	
8/31/2016			<0.0005			
9/13/2016					<0.0005	<0.0005
9/14/2016	<0.0005	<0.0005				
9/15/2016				<0.0005		
11/1/2016					<0.0005	
11/2/2016	<0.0005			<0.0005		
11/4/2016		<0.0005				<0.0005
11/28/2016			<0.0005			
1/10/2017				<0.0005		
1/11/2017					<0.0005	
1/12/2017	<0.0005	<0.0005				
1/16/2017						<0.0005
2/22/2017			<0.0005			
3/2/2017					<0.0005	<0.0005
3/7/2017	<0.0005	<0.0005				
3/8/2017				<0.0005		
4/26/2017				<0.0005		
4/27/2017					<0.0005	<0.0005
5/1/2017	<0.0005					
5/2/2017		<0.0005				
5/8/2017			<0.0005			
6/27/2017	<0.0005	<0.0005			<0.0005	<0.0005
6/30/2017				<0.0005		
7/17/2017			<0.0005			
10/16/2017			<0.0005			
2/19/2018			<0.0005			
3/27/2018				<0.0005		<0.0005
3/29/2018	<0.0005	<0.0005			<0.0005	
8/6/2018			<0.0005			

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/26/2018	<0.0005	<0.0005				
2/25/2019			7.4E-05 (J)			
2/26/2019				6.1E-05 (J)		
2/27/2019					5.1E-05 (J)	5.4E-05 (J)
3/4/2019	<0.0005	<0.0005				
3/28/2019					4E-05 (J)	<0.0005
3/29/2019				<0.0005		
6/12/2019			<0.0005			
8/19/2019			<0.0005			
9/24/2019					<0.0005	<0.0005
9/25/2019				<0.0005		
10/8/2019			<0.0005			
2/10/2020					<0.0005	<0.0005
2/12/2020				<0.0005		
5/6/2020			<0.0005			

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				<0.0005
6/2/2016		<0.0005	<0.0005	
7/25/2016		<0.0005		<0.0005
7/26/2016			<0.0005	
9/14/2016	<0.0005			<0.0005
9/15/2016			<0.0005	
9/19/2016		<0.0005		
11/1/2016		<0.0005	<0.0005	<0.0005
11/4/2016	<0.0005			
12/15/2016	<0.0005			
1/11/2017			<0.0005	<0.0005
1/16/2017	<0.0005	<0.0005		
2/21/2017		<0.0005		
3/1/2017				<0.0005
3/2/2017			<0.0005	
3/3/2017	<0.0005			
4/26/2017		<0.0005	<0.0005	<0.0005
4/28/2017	<0.0005			
5/26/2017	<0.0005			
6/28/2017	<0.0005		<0.0005	<0.0005
6/30/2017		<0.0005		
3/27/2018		<0.0005		
3/28/2018	<0.0005		<0.0005	<0.0005
2/26/2019		6.8E-05 (J)		
2/27/2019	<0.0005		6.2E-05 (J)	6.1E-05 (J)
3/29/2019	<0.0005			
4/1/2019		8.2E-05 (J)	9.6E-05 (J)	8.4E-05 (J)
9/24/2019	<0.0005			
9/25/2019		<0.0005	<0.0005	<0.0005
2/11/2020	<0.0005			<0.0005
2/12/2020		<0.0005	<0.0005	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.01
6/7/2016					<0.01	
7/27/2016					<0.01	<0.01
8/30/2016	<0.01					
8/31/2016		<0.01	0.0024 (J)			
9/1/2016				<0.01		
9/16/2016					<0.01	
9/19/2016						<0.01
11/3/2016					<0.01	<0.01
11/14/2016	<0.01		<0.01			
11/15/2016		<0.01				
11/16/2016				<0.01		
1/11/2017					<0.01	<0.01
2/24/2017	<0.01					
2/27/2017			0.0018 (J)	<0.01		
2/28/2017		0.0005 (J)				
3/1/2017						<0.01
3/2/2017					<0.01	
4/26/2017						<0.01
5/2/2017					<0.01	
5/8/2017	<0.01	<0.01		0.0008 (J)		
5/9/2017			0.0015 (J)			
6/28/2017						<0.01
6/29/2017					<0.01	
7/11/2017	<0.01					
7/13/2017		<0.01	0.0015 (J)	0.0015 (J)		
10/10/2017	<0.01	<0.01	0.0015 (J)			
10/11/2017				0.002 (J)		
3/28/2018					<0.01	<0.01
4/2/2018	<0.01					
4/3/2018			<0.01			
4/4/2018		<0.01		0.0021 (J)		
9/19/2018	<0.01	<0.01	<0.01	0.0039 (J)		
3/5/2019					<0.01	
3/6/2019						<0.01
8/20/2019	<0.01	<0.01	0.0011 (J)			
8/21/2019				0.0012 (J)		
10/8/2019	<0.01	<0.01				
10/9/2019			0.0012 (J)	0.0013 (J)		
3/17/2020	<0.01	<0.01	0.0016 (J)	0.0015 (J)		
3/24/2020					<0.01	<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.01
6/6/2016	<0.01					
6/7/2016		<0.01	<0.01			
7/26/2016						<0.01
7/27/2016	<0.01	<0.01				
7/28/2016			<0.01			
9/14/2016						<0.01
9/16/2016	<0.01					
9/19/2016		<0.01	<0.01			
11/2/2016		<0.01				<0.01
11/3/2016	<0.01		<0.01			
1/11/2017	<0.01					
1/13/2017		<0.01	<0.01			<0.01
3/1/2017	<0.01					
3/6/2017		<0.01	0.0007 (J)			<0.01
4/26/2017	<0.01	<0.01	0.0008 (J)			
5/1/2017						<0.01
6/28/2017	<0.01					
6/29/2017		<0.01	<0.01			<0.01
10/11/2017				0.0094 (J)		
10/12/2017					<0.01	
11/20/2017				0.0081 (J)	<0.01	
1/10/2018					<0.01	
1/11/2018				0.0074 (J)		
2/19/2018					<0.01	
2/20/2018				<0.01		
3/28/2018	<0.01					
3/29/2018		<0.01	<0.01			<0.01
4/3/2018				0.006 (J)	<0.01	
6/28/2018				0.005 (J)	<0.01	
8/7/2018				0.0045 (J)	<0.01	
9/24/2018				0.0035 (J)	<0.01	
3/4/2019						<0.01
3/5/2019	<0.01	<0.01	<0.01			
8/21/2019				0.0021 (J)	<0.01	
10/9/2019				0.0018 (J)	<0.01	
3/24/2020	<0.01	<0.01	<0.01		<0.01	
3/25/2020				0.002 (J)		<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/1/2016					0.014 (J)	0.012 (J)
6/2/2016	0.0035 (J)	<0.01		<0.01		
7/25/2016						0.0098 (J)
7/26/2016	0.0042 (J)	<0.01		<0.01	0.0132	
8/31/2016			<0.01			
9/13/2016					0.0127	0.01 (J)
9/14/2016	0.0041 (J)	<0.01				
9/15/2016				<0.01		
11/1/2016					0.0092 (J)	
11/2/2016	0.0039 (J)			<0.01		
11/4/2016		<0.01				0.01
11/28/2016			<0.01			
1/10/2017				<0.01		
1/11/2017					0.0093 (J)	
1/12/2017	0.0041 (J)	<0.01				
1/16/2017						0.0086 (J)
2/22/2017			<0.01			
3/2/2017					0.0099 (J)	0.01
3/7/2017	0.0047 (J)	<0.01				
3/8/2017				<0.01		
4/26/2017				<0.01		
4/27/2017					0.0103	0.0101
5/1/2017	0.0045 (J)					
5/2/2017		<0.01				
5/8/2017			<0.01			
6/27/2017	0.004 (J)	<0.01			0.0097 (J)	0.0093 (J)
6/30/2017				<0.01		
7/17/2017			<0.01			
10/16/2017			<0.01			
2/19/2018			<0.01			
3/27/2018				<0.01		0.0074 (J)
3/29/2018	<0.01	<0.01			0.0076 (J)	
6/5/2018					0.0092 (J)	
6/6/2018						0.0073 (J)
6/8/2018				<0.01		
8/6/2018			<0.01			
10/1/2018				<0.01	0.0085 (J)	0.0076 (J)
2/26/2019				<0.01		
2/27/2019					0.0087 (J)	0.0078 (J)
3/4/2019	<0.01	<0.01				
3/28/2019					0.0092 (J)	0.0082 (J)
3/29/2019				<0.01		
8/19/2019			<0.01			
9/24/2019					0.0072 (J)	0.0074 (J)
9/25/2019				<0.01		
2/10/2020					0.0087 (J)	0.0062 (J)
2/12/2020				<0.01		
3/18/2020				<0.01		0.0056 (J)
3/19/2020					0.0088 (J)	
3/24/2020	0.0011 (J)	<0.01				

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				0.0055 (J)
6/2/2016		<0.01	0.0093 (J)	
7/25/2016		<0.01		0.0037 (J)
7/26/2016			0.0113	
9/14/2016	0.0039 (J)			0.0034 (J)
9/15/2016			0.0112	
9/19/2016		<0.01		
11/1/2016		<0.01	0.0099 (J)	0.0025 (J)
11/4/2016	0.0077 (J)			
12/15/2016	0.0066 (J)			
1/11/2017			0.0093 (J)	0.0033 (J)
1/16/2017	0.0056 (J)	<0.01		
2/21/2017		<0.01		
3/1/2017				0.0044 (J)
3/2/2017			0.0103	
3/3/2017	0.0049 (J)			
4/26/2017		<0.01	0.01	0.0075 (J)
4/28/2017	0.004 (J)			
5/26/2017	0.0029 (J)			
6/28/2017	0.0036 (J)		0.0102	0.008 (J)
6/30/2017		<0.01		
3/27/2018		<0.01		
3/28/2018	0.0038 (J)		0.011	0.0025 (J)
6/7/2018	0.004 (J)		0.011	
6/8/2018				0.0041 (J)
6/11/2018		<0.01		
10/1/2018	0.0042 (J)		0.012	0.0037 (J)
10/2/2018		<0.01		
2/26/2019		<0.01		
2/27/2019	0.0041 (J)		0.011	0.0027 (J)
3/29/2019	0.0041 (J)			
4/1/2019		<0.01	0.012	0.0021 (J)
9/24/2019	0.0054 (J)			
9/25/2019		<0.01	0.012	0.0087 (J)
2/11/2020	0.0057 (J)			0.003 (J)
2/12/2020		<0.01	0.013	
3/19/2020	0.0046 (J)	<0.01	0.013	0.0043 (J)

Time Series

Constituent: pH (S.U.) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						6.17
6/7/2016					5.62	
7/27/2016					5.59	6.14
8/30/2016	5.75					
8/31/2016		6.01	7.15			
9/1/2016				6.19		
9/16/2016					5.58	
9/19/2016						6.04
11/3/2016					5.59	5.97
11/14/2016	5.59		6.96			
11/15/2016		5.91				
11/16/2016				6.05		
1/11/2017					5.59	6.05
2/24/2017	5.49					
2/27/2017			6.79	6.01		
2/28/2017		5.85				
3/1/2017						5.94
3/2/2017					5.54	
4/26/2017						5.99
5/2/2017					5.47	
5/8/2017	5.58	5.91		6.1		
5/9/2017			6.9			
6/28/2017						6
6/29/2017					5.56	
7/11/2017	5.58					
7/13/2017		5.8	6.77	6.07		
10/4/2017					5.57	
10/5/2017						6.11
10/10/2017	5.49	5.76	6.9			
10/11/2017				5.93		
3/28/2018					5.59	6.1
4/2/2018	6.3 (o)					
4/3/2018			6.44			
4/4/2018		5.77		6.01		
6/7/2018						5.98
6/11/2018					5.58	
9/19/2018	5.48	5.77	6.47	6.09		
9/25/2018					5.59	5.81
3/5/2019					5.48	
3/6/2019						5.99
3/27/2019	5.83	6.1	7.18	6.2		
4/2/2019					5.74	
4/3/2019						6.29
8/20/2019	5.58	5.78	6.48			
8/21/2019				5.82		
9/25/2019					5.49	
9/26/2019						6.04
10/8/2019	5.59	5.84				
10/9/2019			6.55	5.96		
3/17/2020	5.57	5.9	6.69	5.99		
3/24/2020					5.57	5.98

Time Series

Constituent: pH (S.U.) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						6.36
6/6/2016	5.71					
6/7/2016		5.77	6.1			
7/26/2016						6.22
7/27/2016	5.46	5.79				
7/28/2016			6.12			
9/14/2016						6.23
9/19/2016	5.59	5.73	6.12			
11/2/2016		5.67				6.08
11/3/2016	5.39		6.07			
1/11/2017	5.48					
1/13/2017		5.79	6.41			6.19
3/1/2017	5.41					
3/6/2017		5.63	6.34			6.2
4/26/2017	5.4	5.66	6.32			
5/1/2017						6.21
6/28/2017	5.36					
6/29/2017		5.85	6.47			6.21
10/3/2017			6.56			
10/4/2017	5.32	5.83				
10/5/2017						6.16
10/11/2017				6.4		
10/12/2017					5.43	
11/20/2017				6.33	5.1	
1/10/2018					4.97	
1/11/2018				6.29		
2/19/2018					5.6	
2/20/2018				7.22		
3/28/2018	5.34					
3/29/2018		5.93	6.75			6.09
4/3/2018				6.87	5.84	
6/5/2018			6.09			
6/6/2018		5.86				
6/7/2018						6.12
6/11/2018	5.28					
6/28/2018				6.18	5.24	
8/7/2018				6.08	5.18	
9/24/2018				5.81	5.14	
9/25/2018	4.86	5.84	6.67			
9/26/2018						5.84
3/4/2019						6.18
3/5/2019	5.26	6.07	7.22			
3/26/2019					5.3	
3/27/2019				5.84		
4/2/2019			6.94			
4/3/2019	5.47	5.71				6.43
8/21/2019				5.96	5.26	
9/24/2019			6.87			
9/25/2019		5.86				6.2
9/26/2019	5.2					
10/9/2019				5.81	5.22	
3/24/2020	5.33	5.86	6.35		5.29	

Time Series

Constituent: pH (S.U.) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

3/25/2020	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
				5.78		6.26

Time Series

Constituent: pH (S.U.) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
8/27/2008			6.53			
3/3/2009			6.35			
11/18/2009			6.47			
3/3/2010			6.53			
3/10/2011			5.83			
9/8/2011			5.69			
3/5/2012			6.27			
9/10/2012			6.23			
2/6/2013			7.56			
8/12/2013			6.68			
2/5/2014			6.32			
8/3/2015			6.13 (D)			
2/16/2016			5.64			
6/1/2016					7.46	6.33
6/2/2016	7.67	5.75		5.46		
7/25/2016						6.21
7/26/2016	7.66	5.72		5.45	7.43	
9/13/2016					7.44	6.16
9/14/2016	7.6	5.74				
9/15/2016				5.45		
11/1/2016					7.24	
11/2/2016	7.35			5.41		
11/4/2016		5.61				6.29
11/28/2016			6.23			
1/10/2017				5.37		
1/11/2017					7.3	
1/12/2017	7.49	5.71				
1/16/2017						6.29
2/22/2017			6.21			
3/2/2017					7.23	6.28
3/7/2017	7.43	5.66				
3/8/2017				5.41		
4/26/2017				5.02		
4/27/2017					6.99	6.09
5/1/2017	7.22					
5/2/2017		5.65				
5/8/2017			6.12			
6/27/2017	7.32	5.7			6.87	6.21
6/30/2017				5.39		
7/17/2017			6.03			
10/3/2017	7.48	5.79			6.81	5.98
10/5/2017				5.49		
10/16/2017			6.12			
2/19/2018			6.13			
3/27/2018				5.47		6.25
3/29/2018	7.02	5.63			7.38	
6/5/2018					7.16	
6/6/2018	7.43					6.17
6/7/2018		5.63				
6/8/2018				5.45		
8/6/2018			6.01			
9/26/2018	7.13	5.63				

Time Series

Constituent: pH (S.U.) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
10/1/2018				5.39	6.8	5.9
2/25/2019			6.51			
2/26/2019				5.46		
2/27/2019					6.84	5.8
3/4/2019	7.46	5.75				
3/28/2019					6.99	6.15
3/29/2019				5.34		
4/3/2019	7.11	5.63				
6/12/2019			6.3			
8/19/2019			6.23			
9/24/2019	6.93	5.6			7.07	6.23
9/25/2019				5.19		
10/8/2019			6.28			
2/10/2020					7.2	6.1
2/12/2020				5.48		
3/17/2020			6.14			
3/18/2020				5.38		6.19
3/19/2020					7.03	
3/24/2020	7.34	5.81				
5/6/2020			6.24			

Time Series

Constituent: pH (S.U.) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				7.72
6/2/2016		5.75	7.84	
7/25/2016		5.82		7.74
7/26/2016			7.88	
9/13/2016	7.41			
9/14/2016				7.65
9/15/2016			7.74	
9/19/2016		5.78 (D)		
11/1/2016		5.62	7.75	7.7
11/4/2016	7.12			
12/15/2016	7.24			
1/11/2017			7.66	7.53
1/16/2017	7.24	5.72		
2/21/2017		5.67		
3/1/2017				7.42
3/2/2017			7.68	
3/3/2017	7.22			
4/26/2017		5.56	7.45	7.4
4/28/2017	7.21			
5/26/2017	7.13			
6/28/2017	7.06		7.65	7.5
6/30/2017		5.72		
10/3/2017	6.99			
10/4/2017		5.87	7.49	7.45
3/27/2018		5.83		
3/28/2018	7.3		7.91	7.74
6/7/2018	7.29		7.69	
6/8/2018				7.64
6/11/2018		5.69		
10/1/2018	7.07		7.39	7.47
10/2/2018		5.39		
2/26/2019		5.77		
2/27/2019	7.27		7.55	7.54
3/29/2019	7.06			
4/1/2019		5.62	7.87	7.74
9/24/2019	7.01			
9/25/2019		5.69	7.64	7.47
2/11/2020	7.38			7.09
2/12/2020		5.8	7.83	
3/19/2020	7.22	6	7.65	7.31

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.01
6/7/2016					0.001 (J)	
7/27/2016					0.0012 (J)	<0.01
8/30/2016	0.0017 (J)					
8/31/2016		<0.01	<0.01			
9/1/2016				<0.01		
9/16/2016					0.0015 (J)	
9/19/2016						<0.01
11/3/2016					0.0015 (J)	<0.01
11/14/2016	<0.01		<0.01			
11/15/2016		<0.01				
11/16/2016				<0.01		
1/11/2017					0.0014 (J)	<0.01
2/24/2017	0.0011 (J)					
2/27/2017			<0.01	<0.01		
2/28/2017		<0.01				
3/1/2017						<0.01
3/2/2017					0.0017 (J)	
4/26/2017						<0.01
5/2/2017					<0.01	
5/8/2017	<0.01	<0.01		<0.01		
5/9/2017			<0.01			
6/28/2017						<0.01
6/29/2017					<0.01	
7/11/2017	<0.01					
7/13/2017		<0.01	<0.01	<0.01		
10/10/2017	<0.01	<0.01	<0.01			
10/11/2017				<0.01		
3/28/2018					<0.01	<0.01
4/2/2018	<0.01					
4/3/2018			<0.01			
4/4/2018		<0.01		<0.01		
6/7/2018						<0.01
6/11/2018					<0.01	
9/19/2018	<0.01	<0.01	<0.01	<0.01		
9/25/2018					<0.01	<0.01
3/5/2019					<0.01	
3/6/2019						<0.01
4/2/2019					<0.01	
4/3/2019						<0.01
8/20/2019	<0.01	<0.01	<0.01			
8/21/2019				<0.01		
9/25/2019					<0.01	
9/26/2019						<0.01
3/24/2020					<0.01	<0.01

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.01
6/6/2016	<0.01					
6/7/2016		<0.01	0.00048 (J)			
7/26/2016						0.0009 (J)
7/27/2016	<0.01	<0.01				
7/28/2016			<0.01			
9/14/2016						<0.01
9/16/2016	<0.01					
9/19/2016		<0.01	0.0014 (J)			
11/2/2016		<0.01				<0.01
11/3/2016	<0.01		<0.01			
1/11/2017	<0.01					
1/13/2017		<0.01	<0.01			<0.01
3/1/2017	<0.01					
3/6/2017		<0.01	<0.01			<0.01
4/26/2017	<0.01	<0.01	<0.01			
5/1/2017						<0.01
6/28/2017	<0.01					
6/29/2017		<0.01	<0.01			<0.01
10/11/2017				<0.01		
10/12/2017					<0.01	
11/20/2017				<0.01	0.0042 (J)	
1/10/2018					0.0043 (J)	
1/11/2018				<0.01		
2/19/2018					<0.01	
2/20/2018				<0.01		
3/28/2018	<0.01					
3/29/2018		<0.01	<0.01			<0.01
4/3/2018				<0.01	<0.01	
6/5/2018			<0.01			
6/6/2018		<0.01				
6/7/2018						<0.01
6/11/2018	<0.01					
6/28/2018				<0.01	0.0032 (J)	
8/7/2018				<0.01	0.0031 (J)	
9/24/2018				0.0015 (J)	0.0026 (J)	
9/25/2018	<0.01	<0.01	<0.01			
9/26/2018						<0.01
3/4/2019						<0.01
3/5/2019	<0.01	<0.01	<0.01			
4/2/2019			<0.01			
4/3/2019	<0.01	<0.01				<0.01
8/21/2019				<0.01	0.0024 (J)	
9/24/2019			<0.01			
9/25/2019		<0.01				<0.01
9/26/2019	<0.01					
10/9/2019				<0.01	0.0026 (J)	
3/24/2020	<0.01	<0.01	<0.01		0.002 (J)	
3/25/2020				<0.01		<0.01

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
5/1/2007			<0.01			
9/11/2007			<0.01			
3/20/2008			<0.01			
8/27/2008			<0.01			
3/3/2009			<0.01			
11/18/2009			<0.01			
3/3/2010			<0.01			
9/8/2010			<0.01			
3/10/2011			<0.01			
9/8/2011			<0.01			
3/5/2012			<0.01			
9/10/2012			<0.01			
2/6/2013			<0.01			
8/12/2013			<0.01			
2/5/2014			<0.01			
8/5/2014			<0.01			
2/4/2015			<0.01			
8/3/2015			<0.01			
2/16/2016			<0.01			
6/1/2016					<0.01	<0.01
6/2/2016	<0.01	<0.01		0.0011 (J)		
7/25/2016						<0.01
7/26/2016	<0.01	0.0009 (J)		0.0016 (J)	<0.01	
8/31/2016			<0.01			
9/13/2016					<0.01	<0.01
9/14/2016	<0.01	<0.01				
9/15/2016				0.0014 (J)		
11/1/2016					<0.01	
11/2/2016	<0.01			<0.01		
11/4/2016		<0.01				<0.01
11/28/2016			<0.01			
1/10/2017				0.0012 (J)		
1/11/2017					<0.01	
1/12/2017	<0.01	<0.01				
1/16/2017						<0.01
2/22/2017			<0.01			
3/2/2017					<0.01	<0.01
3/7/2017	<0.01	<0.01				
3/8/2017				<0.01		
4/26/2017				<0.01		
4/27/2017					<0.01	<0.01
5/1/2017	<0.01					
5/2/2017		<0.01				
5/8/2017			<0.01			
6/27/2017	<0.01	<0.01			<0.01	<0.01
6/30/2017				<0.01		
7/17/2017			<0.01			
10/16/2017			<0.01			
2/19/2018			<0.01			
3/27/2018				<0.01		<0.01
3/29/2018	<0.01	<0.01			<0.01	
6/6/2018	<0.01					

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/7/2018		<0.01				
8/6/2018			<0.01			
9/26/2018	<0.01	<0.01				
2/25/2019			<0.01			
2/26/2019				<0.01		
2/27/2019					<0.01	<0.01
3/4/2019	<0.01	<0.01				
3/28/2019					<0.01	<0.01
3/29/2019				0.0019 (J)		
4/3/2019	<0.01	<0.01				
6/12/2019			<0.01			
8/19/2019			<0.01			
9/24/2019	<0.01	<0.01			<0.01	<0.01
9/25/2019				<0.01		
10/8/2019			<0.01			
2/10/2020					<0.01	<0.01
2/12/2020				<0.01		
3/17/2020			<0.01			
3/18/2020				<0.01		<0.01
3/19/2020					<0.01	
3/24/2020	<0.01	<0.01				

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				<0.01
6/2/2016		<0.01	<0.01	
7/25/2016		<0.01		<0.01
7/26/2016			<0.01	
9/14/2016	<0.01			<0.01
9/15/2016			<0.01	
9/19/2016		<0.01		
11/1/2016		<0.01	<0.01	<0.01
11/4/2016	<0.01			
12/15/2016	<0.01			
1/11/2017			<0.01	<0.01
1/16/2017	<0.01	<0.01		
2/21/2017		<0.01		
3/1/2017				<0.01
3/2/2017			<0.01	
3/3/2017	<0.01			
4/26/2017		<0.01	<0.01	<0.01
4/28/2017	<0.01			
5/26/2017	<0.01			
6/28/2017	<0.01		<0.01	<0.01
6/30/2017		<0.01		
3/27/2018		<0.01		
3/28/2018	<0.01		<0.01	<0.01
2/26/2019		<0.01		
2/27/2019	<0.01		<0.01	<0.01
3/29/2019	<0.01			
4/1/2019		<0.01	<0.01	<0.01
9/24/2019	<0.01			
9/25/2019		<0.01	<0.01	<0.01
2/11/2020	<0.01			<0.01
2/12/2020		<0.01	<0.01	
3/19/2020	<0.01	<0.01	<0.01	<0.01

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						1.2
6/7/2016					4.4	
7/27/2016					4.7	1.7
8/30/2016	160					
8/31/2016		150	190			
9/1/2016				770		
9/16/2016					4.8	
9/19/2016						1.8
11/3/2016					5.3	0.69 (J)
11/14/2016	150		200			
11/15/2016		150				
11/16/2016				780		
1/11/2017					5.2	<1
2/24/2017	120					
2/27/2017			190	650		
2/28/2017		130				
3/1/2017						1.8
3/2/2017					5	
4/26/2017						1.6
5/2/2017					5	
5/8/2017	120	150		770		
5/9/2017			190			
6/28/2017						<1
6/29/2017					5.2	
7/11/2017	110					
7/13/2017		150	180	630		
10/4/2017					5.3	
10/5/2017						1.6
10/10/2017	93	140	180			
10/11/2017				540		
4/2/2018	88.8					
4/3/2018			183			
4/4/2018		137		430		
6/7/2018						0.68 (J)
6/11/2018					5.2	
9/19/2018	75	137	192	395		
9/25/2018					6.1	1
3/27/2019	65.9	146	188	437		
4/2/2019					5.1	
4/3/2019						0.82 (J)
9/25/2019					5.5	
9/26/2019						0.64 (J)
10/8/2019	52.3	142				
10/9/2019			183	<1		
3/17/2020	71.6	121	161	439		
3/24/2020					5.4	<1

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						8
6/6/2016	1.8					
6/7/2016		<1	5.2			
7/26/2016						7.7
7/27/2016	1.9	0.08 (J)				
7/28/2016			5.1			
9/14/2016						7.5
9/16/2016	1.7					
9/19/2016		0.08 (J)	4.8			
11/2/2016		0.1 (J)				8.2
11/3/2016	1.9		5			
1/11/2017	1.7					
1/13/2017		<1	4.3			8.1
3/1/2017	<1					
3/6/2017		<1	4.5			8
4/26/2017	1.9	<1	4.9			
5/1/2017						8.4
6/28/2017	<1					
6/29/2017		<1	5.5			9.2
10/3/2017			5.8			
10/4/2017	1.7	<1				
10/5/2017						9.6
10/11/2017				20		
10/12/2017					17	
11/20/2017				24	71	
1/10/2018					66	
1/11/2018				23		
2/19/2018					57.2	
2/20/2018				20.6		
4/3/2018				24.5	49.4	
6/5/2018			6.1			
6/6/2018		0.049 (J)				
6/7/2018						8.5
6/11/2018	0.95 (J)					
6/28/2018				22	43.8	
8/7/2018				20.7	40.5	
9/24/2018				21.2	39.7	
9/25/2018	1.5	0.13 (J)	7			
9/26/2018						10.2
3/26/2019					34.3	
3/27/2019				17.7		
4/2/2019			3.8			
4/3/2019	1.3	0.12 (J)				8.5
9/24/2019			1			
9/25/2019		<1				8.5
9/26/2019	1					
10/9/2019				15	27.9	
3/24/2020	0.99 (J)	<1	3		25.2	
3/25/2020				14.3		8.8

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 4:01 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/1/2016					5	4.2
6/2/2016	20	1.9		6.6		
7/25/2016						3.7
7/26/2016	20	1.8		6.1	5.4	
8/31/2016			29			
9/13/2016					2.9	5.2
9/14/2016	19	1.8				
9/15/2016				6.1		
11/1/2016					3.9	
11/2/2016	20			6.3		
11/4/2016		2				5
11/28/2016			36			
1/10/2017				5.9		
1/11/2017					3.7	
1/12/2017	19	1.9				
1/16/2017						7.9
2/22/2017			43			
3/2/2017					4.6	7.4
3/7/2017	20	2.1				
3/8/2017				7		
4/26/2017				7		
4/27/2017					5.2	7.4
5/1/2017	20					
5/2/2017		2				
5/8/2017			60			
6/27/2017	18	2.1			5.9	6.4
6/30/2017				6.5		
7/17/2017			63			
10/3/2017	16	2.3			6.6	5.9
10/5/2017				7.9		
10/16/2017			62			
2/19/2018			64.6			
6/5/2018					6.4	
6/6/2018	8.3					4.4
6/7/2018		2				
6/8/2018				6.4		
8/6/2018			42.1			
9/26/2018	7.9	2.3				
10/1/2018				6.8	5.6	4
2/25/2019			42.1			
3/28/2019					8	4.3
3/29/2019				7.3		
4/3/2019	7	2.1				
6/12/2019			83.4			
9/24/2019	5.5	2.4			5.3	4.3
9/25/2019				6.6		
10/8/2019			128			
3/17/2020			98.6			
3/18/2020				8.1		5.3
3/19/2020					10	
3/24/2020	5.9	2.1				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				12
6/2/2016		1.3	5.8	
7/25/2016		1.2		8.4
7/26/2016			6.7	
9/14/2016	9.4			8.6
9/15/2016			6	
9/19/2016		1.2		
11/1/2016		1.3	4.9	8.9
11/4/2016	13			
12/15/2016	1.8			
1/11/2017			4.5	8.6
1/16/2017	11	<1		
2/21/2017		1.4		
3/1/2017				9.3
3/2/2017			4.4	
3/3/2017	8.8			
4/26/2017		1.4	5.1	11
4/28/2017	10			
5/26/2017	12			
6/28/2017	11		5.4	12
6/30/2017		<1		
10/3/2017	7.9			
10/4/2017		1.4	6.2	12
6/7/2018	8.8		6.7	
6/8/2018				9.6
6/11/2018		1.1		
10/1/2018	9.1		7.1	9.1
10/2/2018		1		
3/29/2019	9			
4/1/2019		0.96 (J)	7.2	8.5
9/24/2019	9.1			
9/25/2019		0.81 (J)	7	13.8
3/19/2020	12.4	1.6	9	12.9

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						<0.001
6/7/2016					<0.001	
7/27/2016					<0.001	<0.001
8/30/2016	<0.001					
8/31/2016		<0.001	<0.001			
9/1/2016				<0.001		
9/16/2016					<0.001	
9/19/2016						<0.001
11/3/2016					<0.001	<0.001
11/14/2016	<0.001		<0.001			
11/15/2016		<0.001				
11/16/2016				<0.001		
1/11/2017					<0.001	<0.001
2/24/2017	<0.001					
2/27/2017			<0.001	<0.001		
2/28/2017		<0.001				
3/1/2017						<0.001
3/2/2017					<0.001	
4/26/2017						<0.001
5/2/2017					<0.001	
5/8/2017	<0.001	<0.001		<0.001		
5/9/2017			<0.001			
6/28/2017						<0.001
6/29/2017					<0.001	
7/11/2017	<0.001					
7/13/2017		<0.001	<0.001	<0.001		
10/10/2017	<0.001	<0.001	<0.001			
10/11/2017				<0.001		
3/28/2018					<0.001	<0.001
4/2/2018	<0.001					
4/3/2018			<0.001			
4/4/2018		<0.001		<0.001		
9/19/2018	<0.001	<0.001	<0.001	<0.001		
3/5/2019					<0.001	
3/6/2019						<0.001
4/2/2019					<0.001	
4/3/2019						<0.001
8/20/2019	5.8E-05 (J)	<0.001	<0.001			
8/21/2019				<0.001		
9/25/2019					<0.001	
9/26/2019						<0.001
10/8/2019	8.4E-05 (J)	<0.001				
10/9/2019			<0.001	<0.001		
3/17/2020	<0.001	8E-05 (J)	<0.001	<0.001		
3/24/2020					<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						<0.001
6/6/2016	<0.001					
6/7/2016		<0.001	<0.001			
7/26/2016						<0.001
7/27/2016	<0.001	<0.001				
7/28/2016			<0.001			
9/14/2016						<0.001
9/16/2016	<0.001					
9/19/2016		<0.001	<0.001			
11/2/2016		<0.001				<0.001
11/3/2016	<0.001		<0.001			
1/11/2017	<0.001					
1/13/2017		<0.001	<0.001			<0.001
3/1/2017	<0.001					
3/6/2017		<0.001	<0.001			<0.001
4/26/2017	<0.001	<0.001	<0.001			
5/1/2017						<0.001
6/28/2017	<0.001					
6/29/2017		<0.001	<0.001			<0.001
10/11/2017				<0.001		
10/12/2017					<0.001	
11/20/2017				<0.001	<0.001	
1/10/2018					<0.001	
1/11/2018				<0.001		
2/19/2018					<0.001	
2/20/2018				<0.001		
3/28/2018	<0.001					
3/29/2018		<0.001	<0.001			<0.001
4/3/2018				<0.001	<0.001	
6/28/2018				<0.001	<0.001	
8/7/2018				<0.001	<0.001	
9/24/2018				<0.001	<0.001	
9/25/2018			<0.001			
3/4/2019						<0.001
3/5/2019	<0.001	<0.001	<0.001			
4/2/2019			<0.001			
4/3/2019	<0.001	<0.001				<0.001
8/21/2019				<0.001	<0.001	
9/24/2019			<0.001			
9/25/2019		<0.001				<0.001
9/26/2019	<0.001					
3/24/2020	<0.001	<0.001	<0.001		<0.001	
3/25/2020				<0.001		<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
5/1/2007			<0.001			
9/11/2007			<0.001			
3/20/2008			<0.001			
8/27/2008			<0.001			
3/3/2009			<0.001			
11/18/2009			<0.001			
3/3/2010			<0.001			
9/8/2010			<0.001			
3/10/2011			<0.001			
9/8/2011			<0.001			
3/5/2012			<0.001			
9/10/2012			<0.001			
2/6/2013			<0.001			
8/12/2013			<0.001			
2/5/2014			<0.001			
8/5/2014			<0.001			
2/4/2015			<0.001			
2/16/2016			<0.001			
6/1/2016					<0.001	<0.001
6/2/2016	<0.001	<0.001		<0.001		
7/25/2016						<0.001
7/26/2016	<0.001	<0.001		<0.001	<0.001	
8/31/2016			<0.001			
9/13/2016					<0.001	<0.001
9/14/2016	<0.001	<0.001				
9/15/2016				<0.001		
11/1/2016					<0.001	
11/2/2016	<0.001			<0.001		
11/4/2016		<0.001				<0.001
11/28/2016			<0.001			
1/10/2017				<0.001		
1/11/2017					<0.001	
1/12/2017	<0.001	<0.001				
1/16/2017						<0.001
2/22/2017			<0.001			
3/2/2017					<0.001	<0.001
3/7/2017	<0.001	<0.001				
3/8/2017				<0.001		
4/26/2017				<0.001		
4/27/2017					<0.001	<0.001
5/1/2017	<0.001					
5/2/2017		<0.001				
5/8/2017			6E-05 (J)			
6/27/2017	<0.001	<0.001			<0.001	<0.001
6/30/2017				<0.001		
7/17/2017			6E-05 (J)			
10/16/2017			7E-05 (J)			
2/19/2018			<0.001			
3/27/2018				<0.001		<0.001
3/29/2018	<0.001	<0.001			<0.001	
8/6/2018			<0.001			
2/25/2019			<0.001			

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
2/26/2019				<0.001		
2/27/2019					<0.001	<0.001
3/4/2019	<0.001	<0.001				
4/3/2019	<0.001	<0.001				
6/12/2019			<0.001			
8/19/2019			5.5E-05 (J)			
9/24/2019	<0.001	<0.001				
10/8/2019			<0.001			
2/10/2020					<0.001	5.5E-05 (J)
2/12/2020				8.9E-05 (J)		
3/17/2020			<0.001			
3/18/2020				<0.001		<0.001
3/19/2020					<0.001	
3/24/2020	<0.001	<0.001				

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/27/2020 4:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				<0.001
6/2/2016		<0.001	<0.001	
7/25/2016		<0.001		<0.001
7/26/2016			0.0001 (J)	
9/14/2016	<0.001			<0.001
9/15/2016			<0.001	
9/19/2016		<0.001		
11/1/2016		<0.001	<0.001	<0.001
11/4/2016	<0.001			
12/15/2016	<0.001			
1/11/2017			<0.001	<0.001
1/16/2017	<0.001	<0.001		
2/21/2017		<0.001		
3/1/2017				<0.001
3/2/2017			<0.001	
3/3/2017	<0.001			
4/26/2017		<0.001	<0.001	<0.001
4/28/2017	<0.001			
5/26/2017	<0.001			
6/28/2017	<0.001		<0.001	<0.001
6/30/2017		<0.001		
3/27/2018		<0.001		
3/28/2018	<0.001		<0.001	<0.001
2/26/2019		<0.001		
2/27/2019	<0.001		<0.001	<0.001
2/11/2020	<0.001			<0.001
2/12/2020		<0.001	<0.001	
3/19/2020	<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46	YGWA-17S (bg)	YGWA-18I (bg)
6/6/2016						120
6/7/2016					28	
7/27/2016					74	94
8/30/2016	319					
8/31/2016		332	402			
9/1/2016				1240		
9/16/2016					67	
9/19/2016						92
11/3/2016					41	104
11/14/2016	280		445			
11/15/2016		356				
11/16/2016				1220		
1/11/2017					104	133
2/24/2017	162					
2/27/2017			346	1060		
2/28/2017		483				
3/1/2017						119
3/2/2017					77	
4/26/2017						162
5/2/2017					142	
5/8/2017	194	296		1160		
5/9/2017			388			
6/28/2017						98
6/29/2017					53	
7/11/2017	193					
7/13/2017		345	433	996		
10/4/2017					61	
10/5/2017						104
10/10/2017	175	311	396			
10/11/2017				835		
4/2/2018	192					
4/3/2018			418			
4/4/2018		313		1470		
6/7/2018						68
6/11/2018					70	
9/19/2018	186	326	413	702		
9/25/2018					86	109
3/27/2019	170	302	383	641		
4/2/2019					72	
4/3/2019						89
9/25/2019					81	
9/26/2019						126
10/8/2019	172	324				
10/9/2019			432	809		
3/17/2020	165	283	391	733		
3/24/2020					71	91

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)
6/2/2016						96
6/6/2016	58					
6/7/2016		38	60			
7/26/2016						92
7/27/2016	35	74				
7/28/2016			81			
9/14/2016						102
9/16/2016	35					
9/19/2016		45	68			
11/2/2016		53				115
11/3/2016	48		61			
1/11/2017	95					
1/13/2017		46	76			67
3/1/2017	79					
3/6/2017		164	167			159
4/26/2017	36	34	50			
5/1/2017						107
6/28/2017	45					
6/29/2017		68	94			79
10/3/2017			149			
10/4/2017	45	54				
10/5/2017						95
10/11/2017				68		
10/12/2017					74	
11/20/2017				139	179	
1/10/2018					140	
1/11/2018				153		
2/19/2018					119	
2/20/2018				87		
4/3/2018				85	106	
6/5/2018			109			
6/6/2018		79				
6/7/2018						90
6/11/2018	74					
6/28/2018				88	112	
8/7/2018				89	103	
9/24/2018				82	107	
9/25/2018	63	73	122			
9/26/2018						116
3/26/2019					90	
3/27/2019				75		
4/2/2019			134			
4/3/2019	63	57				111
9/24/2019			157			
9/25/2019		75				117
9/26/2019	72					
10/9/2019				119	98	
3/24/2020	59	76	117		84	
3/25/2020				158		146

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
6/1/2016					120	54
6/2/2016	160	66		46		
7/25/2016						48
7/26/2016	177	78		54	94	
8/31/2016			209			
9/13/2016					105	67
9/14/2016	187	73				
9/15/2016				54		
11/1/2016					44	
11/2/2016	181			71		
11/4/2016		75				60
11/28/2016			102			
1/10/2017				45		
1/11/2017					107	
1/12/2017	202	86				
1/16/2017						65
2/22/2017			164			
3/2/2017					98	61
3/7/2017	257	108				
3/8/2017				178		
4/26/2017				52		
4/27/2017					116	31
5/1/2017	165					
5/2/2017		103				
5/8/2017			145			
6/27/2017	189	73			89	42
6/30/2017				45		
7/17/2017			185			
10/3/2017	170	89			119	58
10/5/2017				40		
10/16/2017			218			
2/19/2018			173			
6/5/2018					127	
6/6/2018	151					96
6/7/2018		142				
6/8/2018				114		
8/6/2018			158			
9/26/2018	144	86				
10/1/2018				50	117	60
2/25/2019			92			
3/28/2019					87	87
3/29/2019				63		
4/3/2019	142	83				
6/12/2019			226			
9/24/2019	129	79			124	54
9/25/2019				64		
10/8/2019			276			
3/17/2020			185			
3/18/2020				57		35
3/19/2020					116	
3/24/2020	139	68				

Time Series

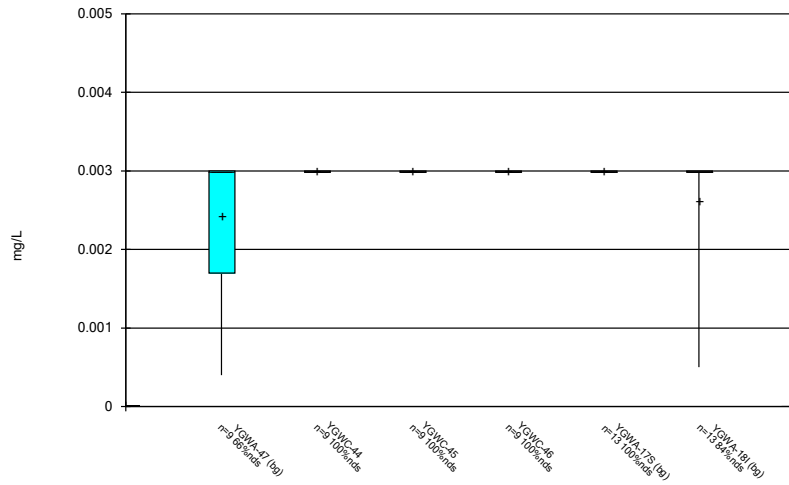
Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/27/2020 4:01 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016				150
6/2/2016		36	130	
7/25/2016		50		135
7/26/2016			141	
9/14/2016	152			127
9/15/2016			153	
9/19/2016		35		
11/1/2016		<25	92	75
11/4/2016	148			
12/15/2016	191			
1/11/2017			159	148
1/16/2017	180	47		
2/21/2017		<25		
3/1/2017				182
3/2/2017			117	
3/3/2017	156			
4/26/2017		55	181	92
4/28/2017	130			
5/26/2017	223			
6/28/2017	166		169	126
6/30/2017		42		
10/3/2017	153			
10/4/2017		31	141	147
6/7/2018	146		95	
6/8/2018				158
6/11/2018		59		
10/1/2018	155		165	138
10/2/2018		57		
3/29/2019	150			
4/1/2019		54	149	19 (J)
9/24/2019	146			
9/25/2019		51	157	159
3/19/2020	148	47	146	148

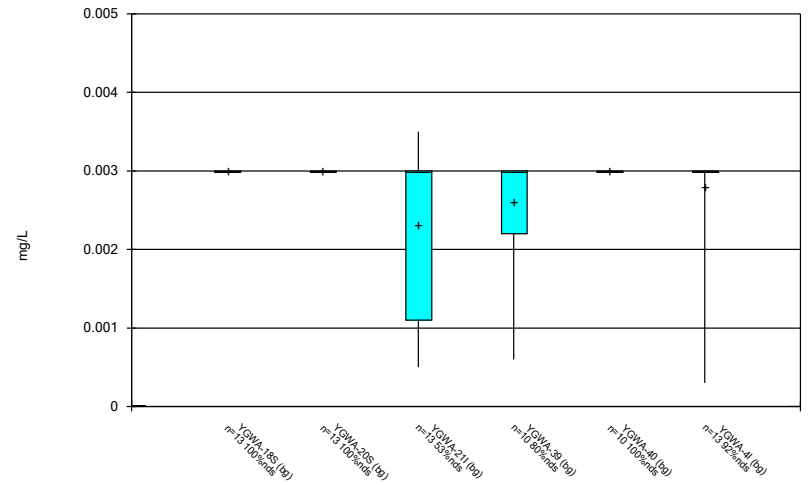
FIGURE B.

Box & Whiskers Plot



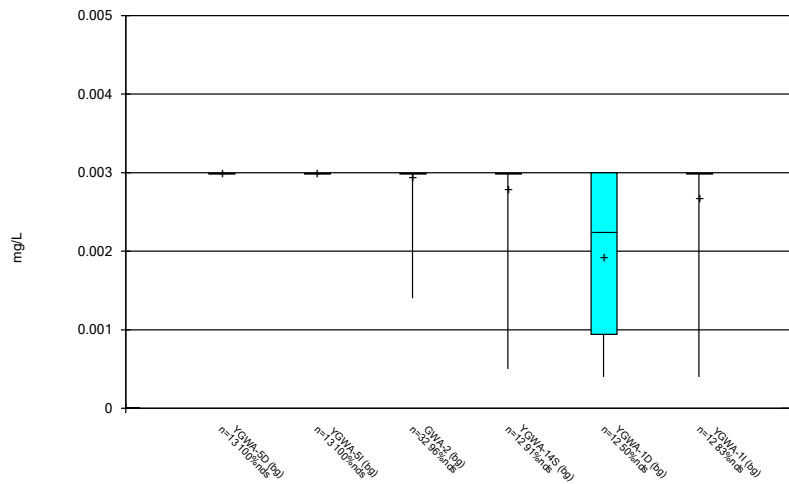
Constituent: Antimony Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



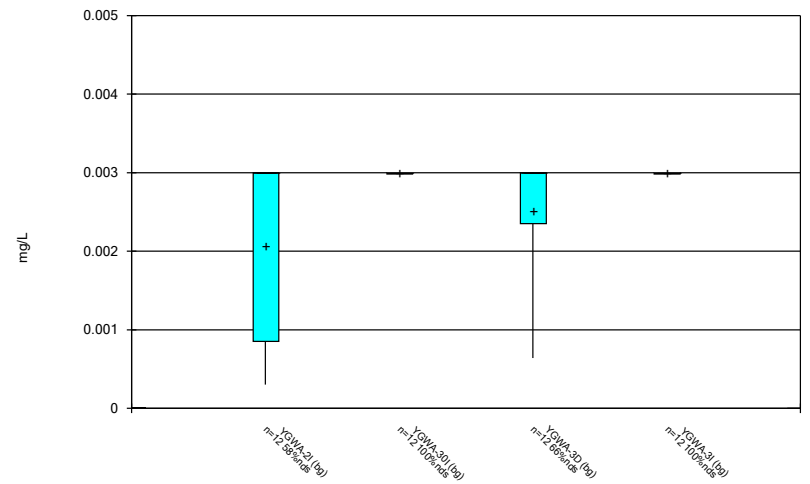
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



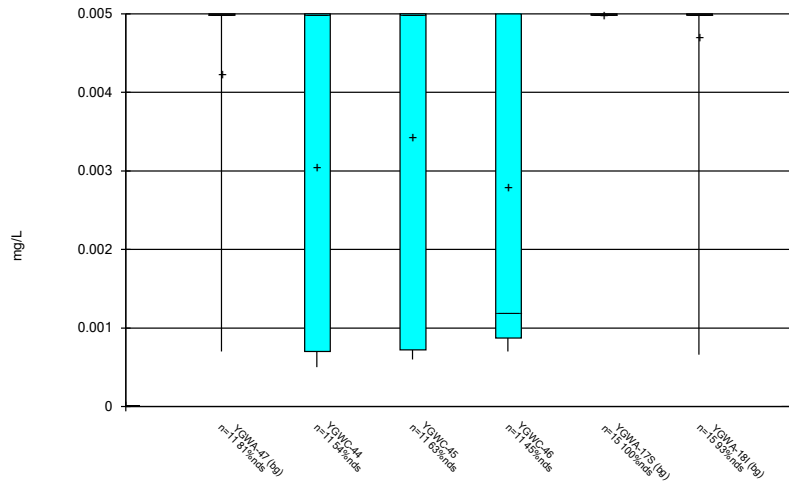
Constituent: Antimony Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



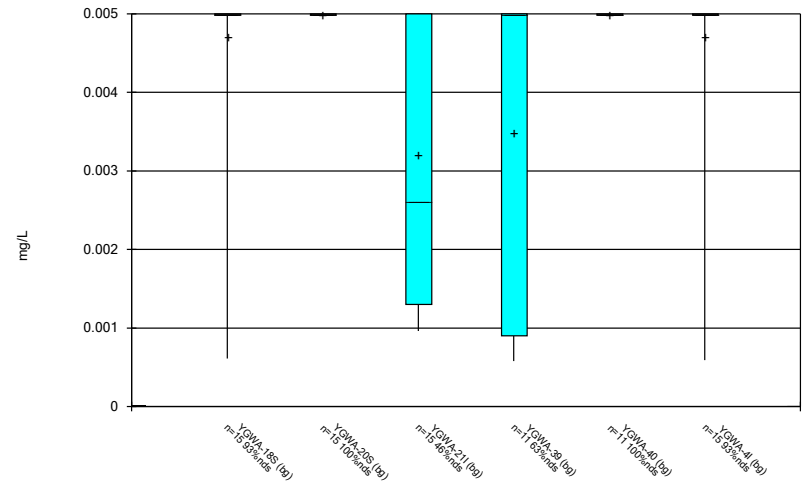
Constituent: Antimony Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



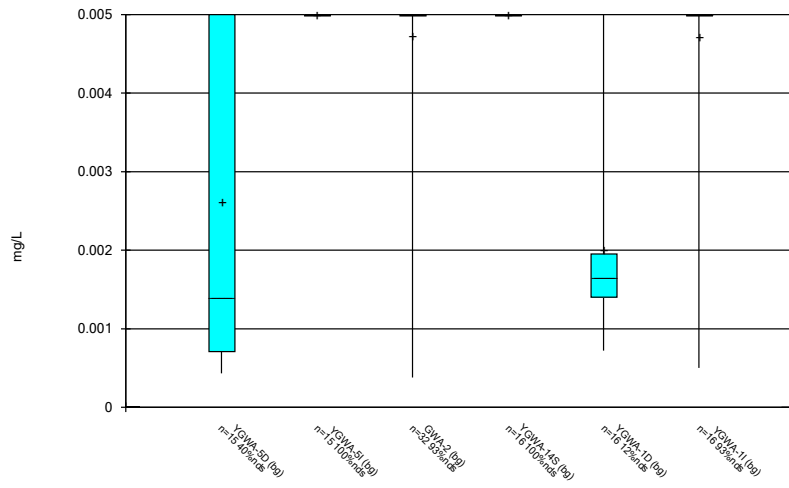
Constituent: Arsenic Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



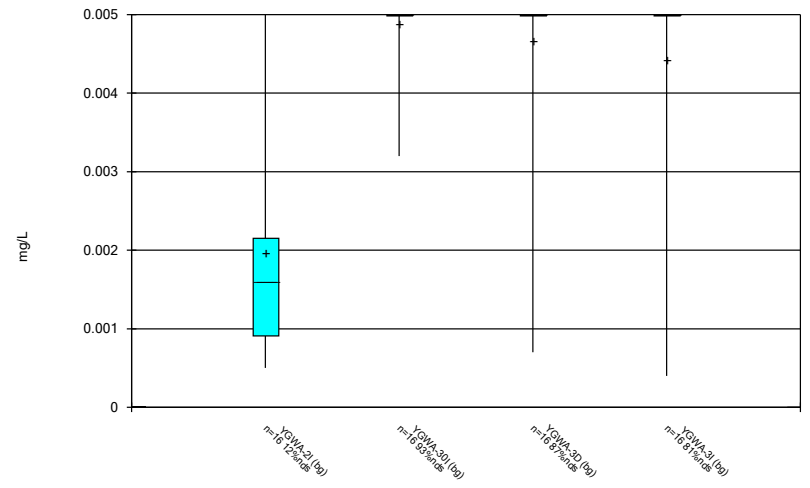
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



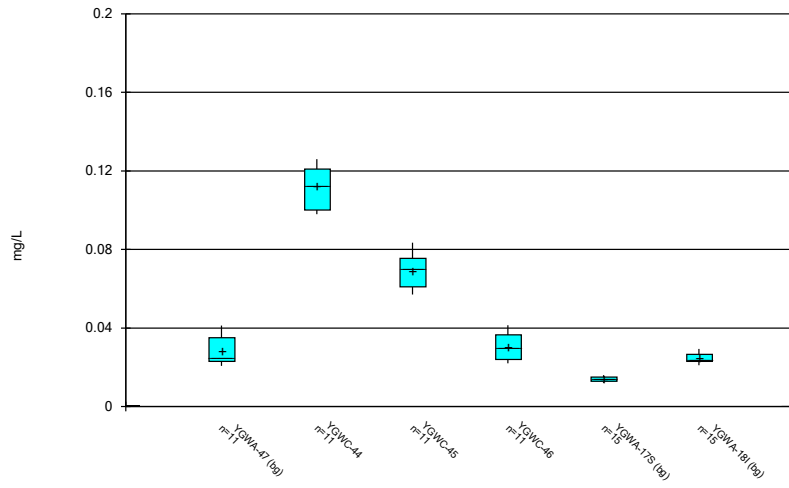
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



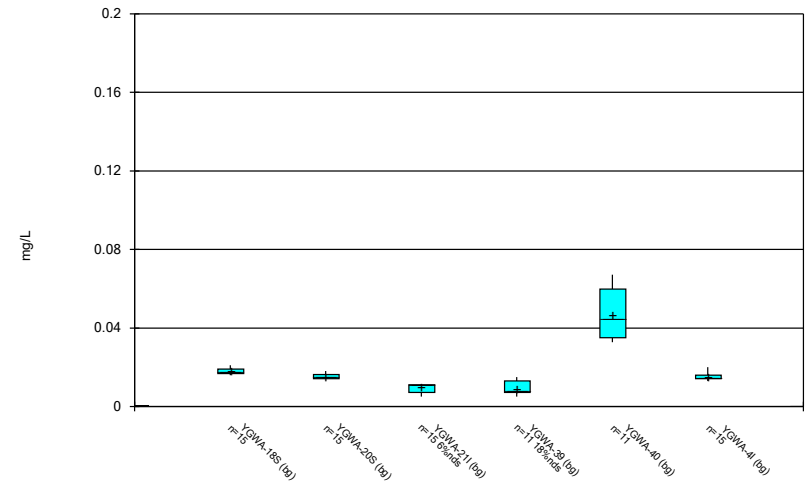
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



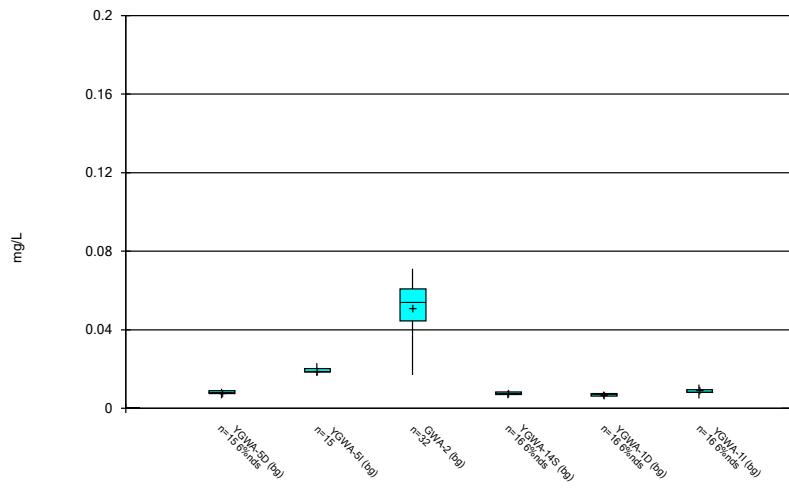
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



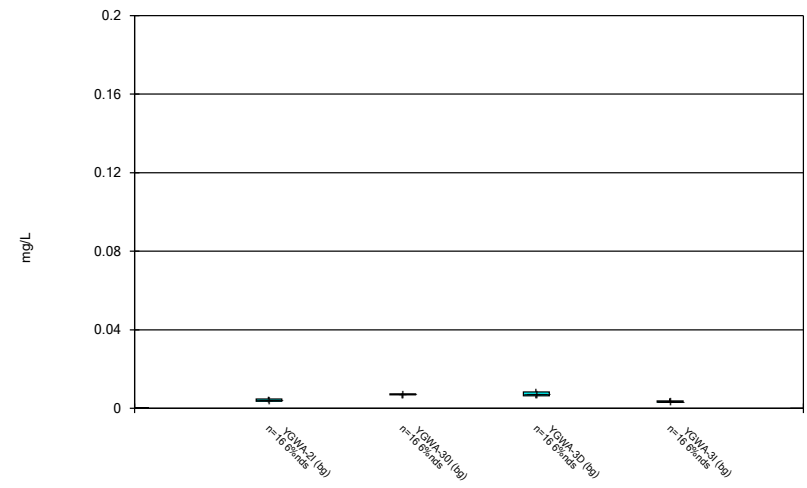
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



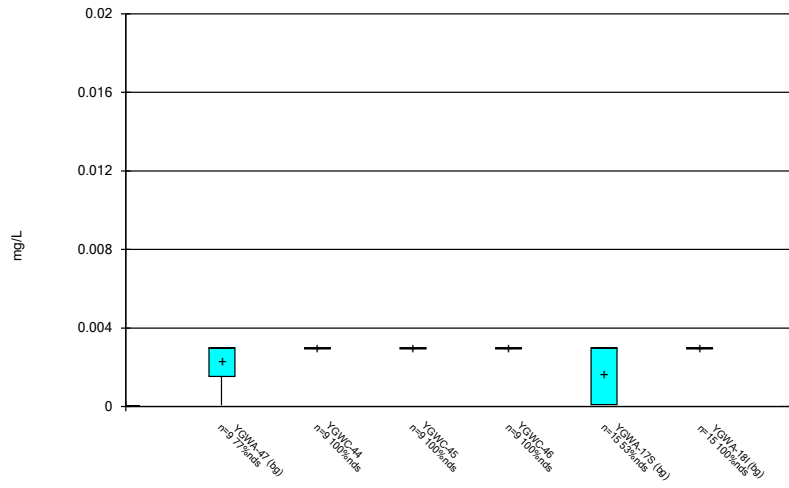
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



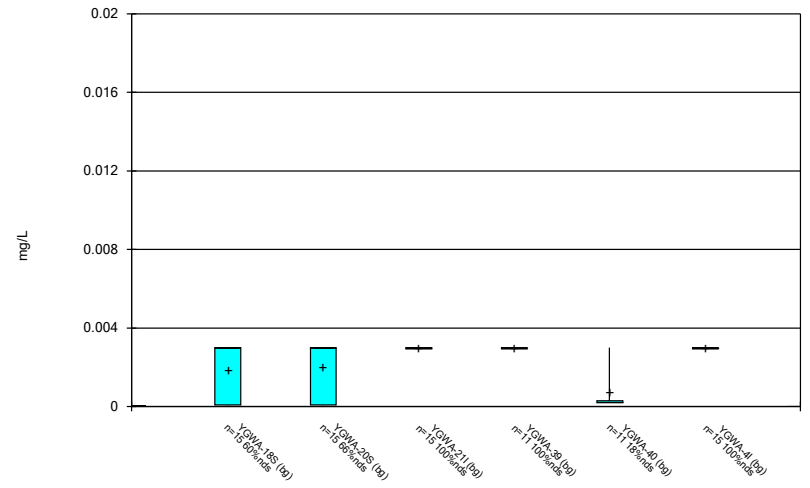
Constituent: Barium Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



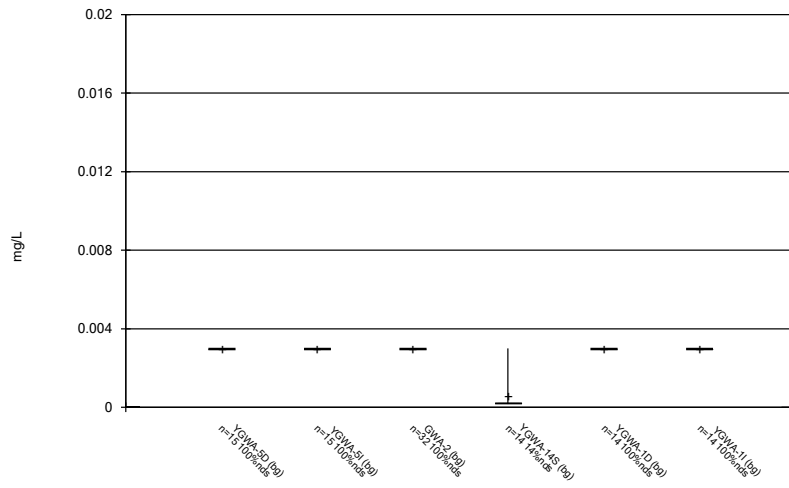
Constituent: Beryllium Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



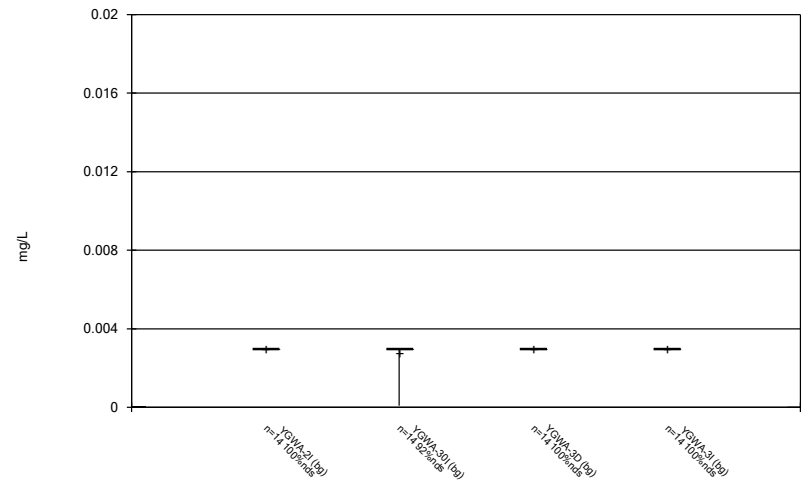
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



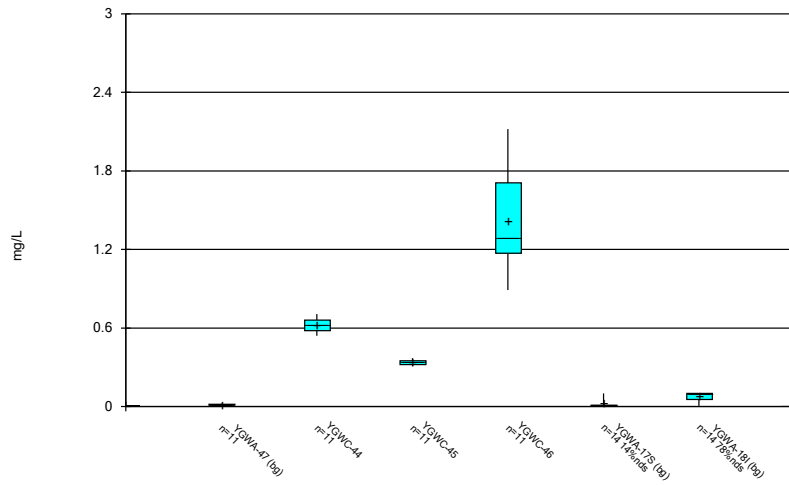
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



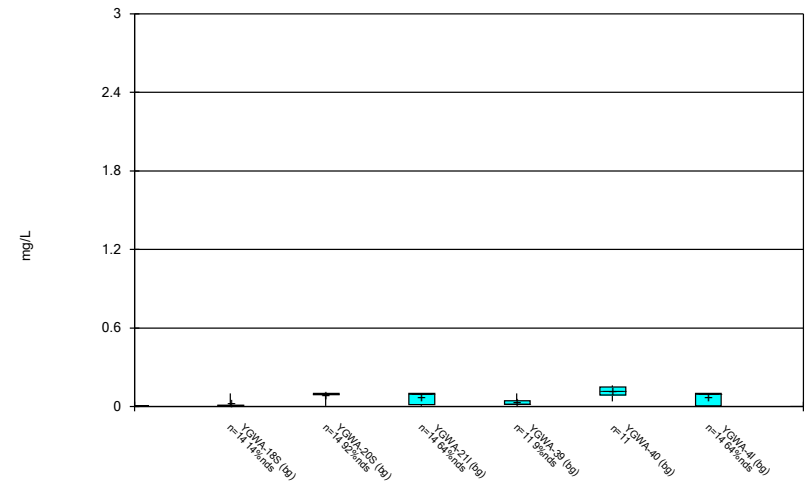
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



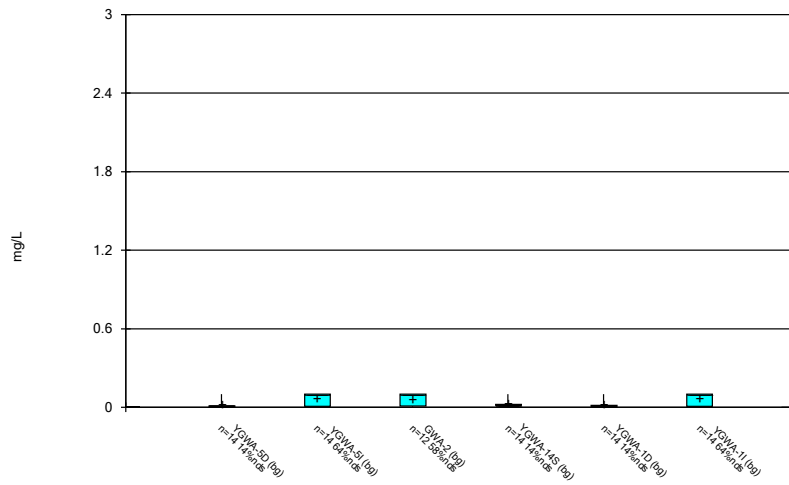
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



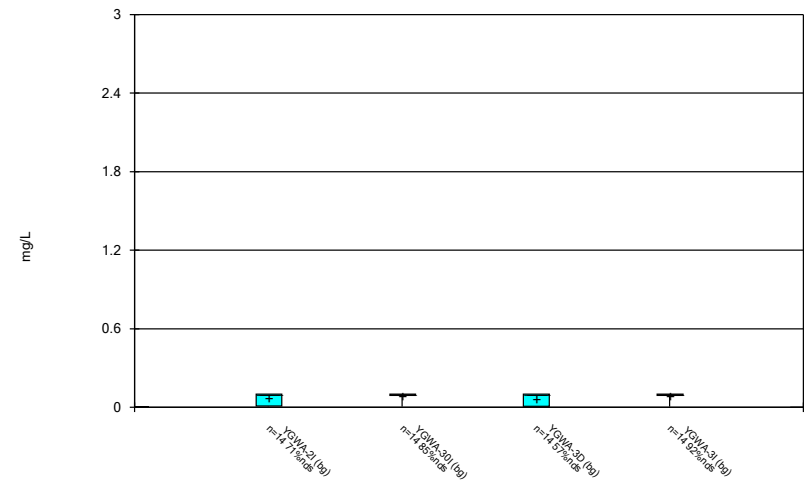
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Box & Whiskers Plot



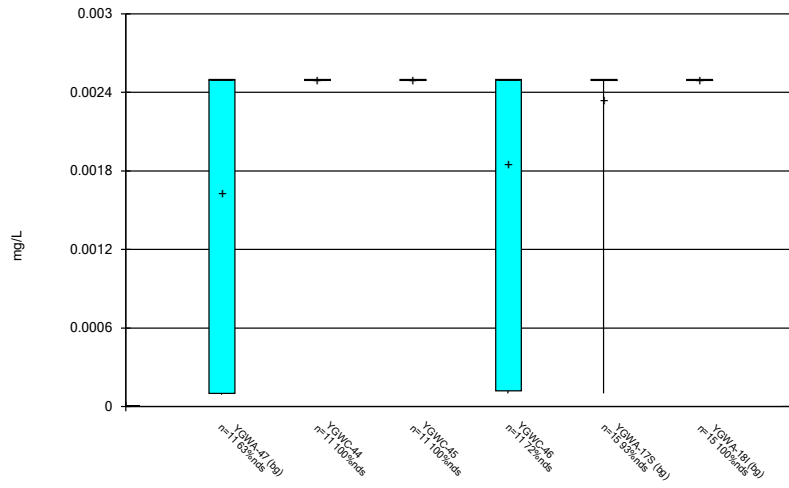
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



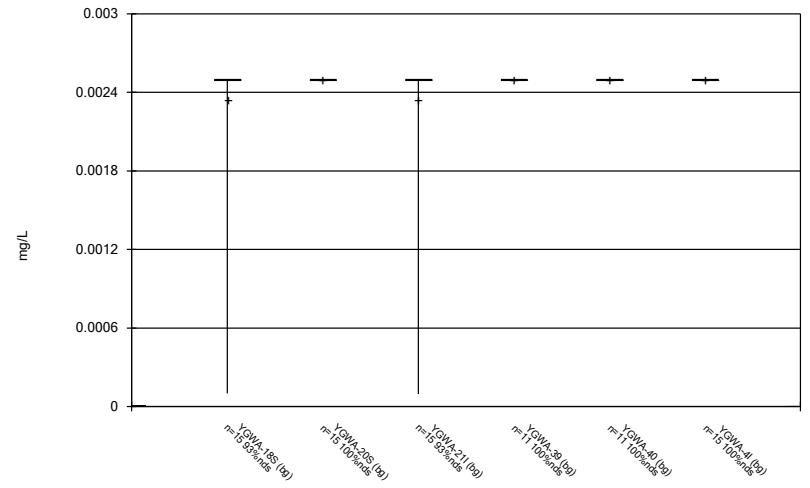
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



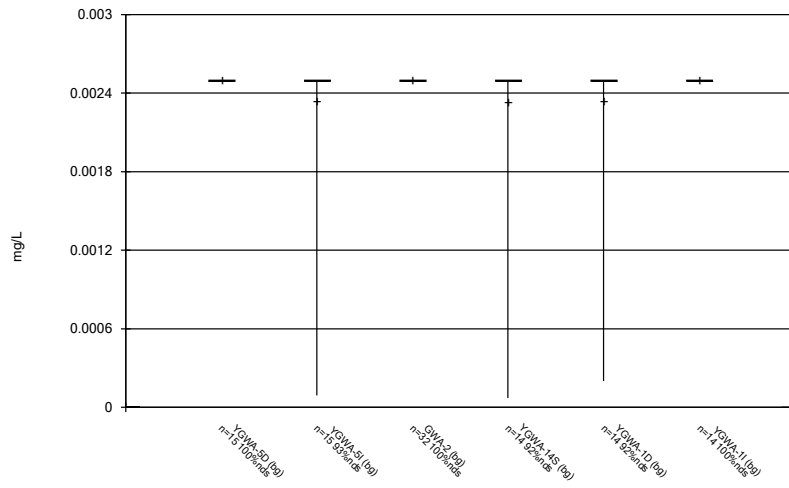
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



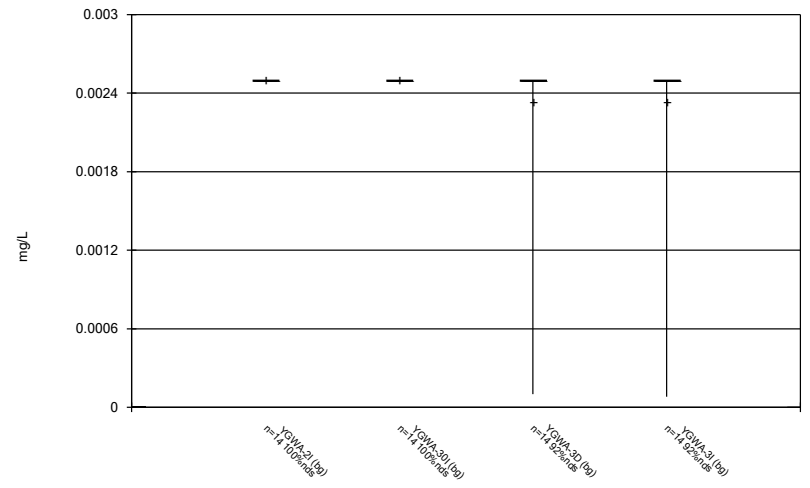
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



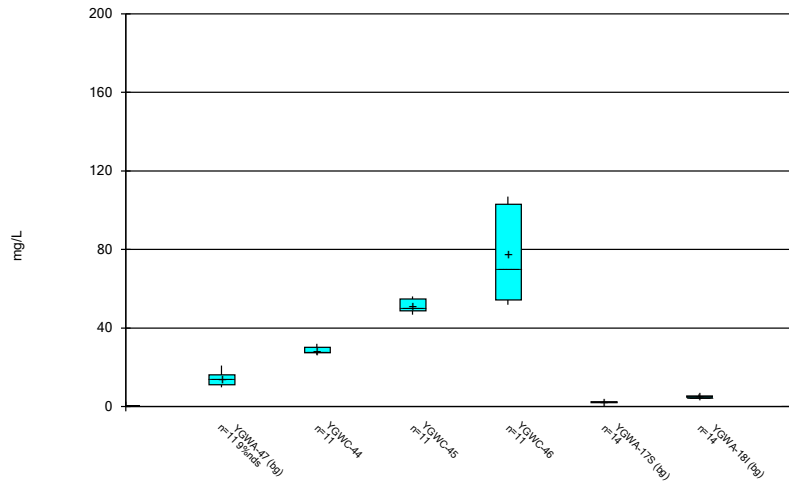
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



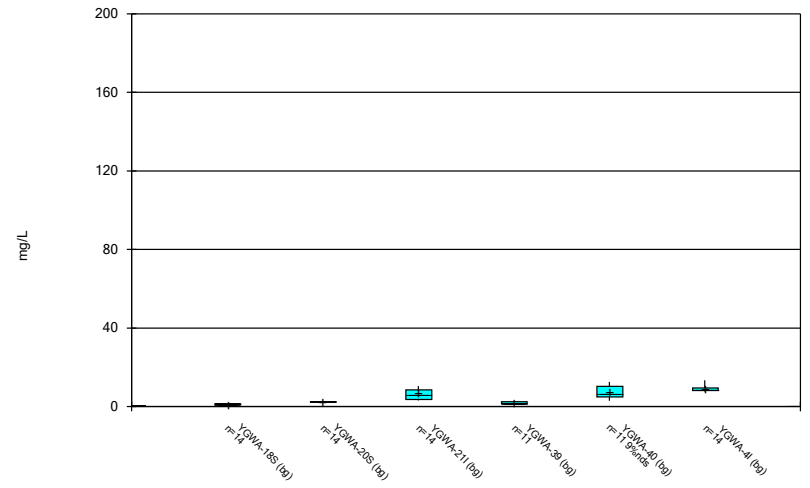
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



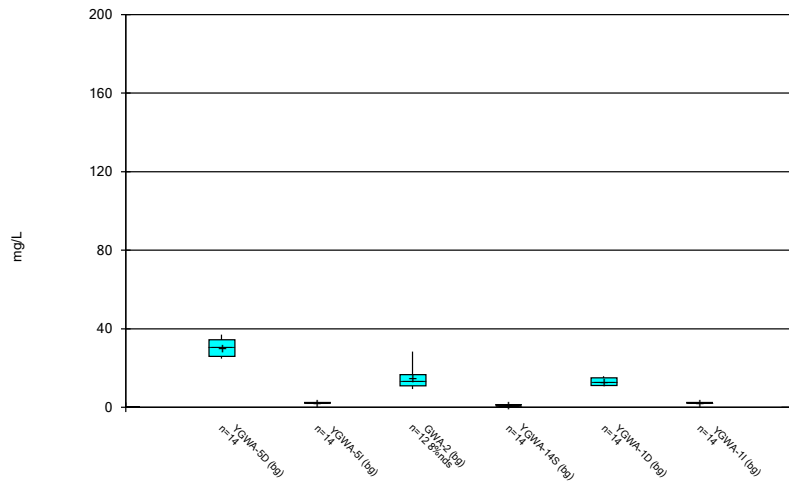
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



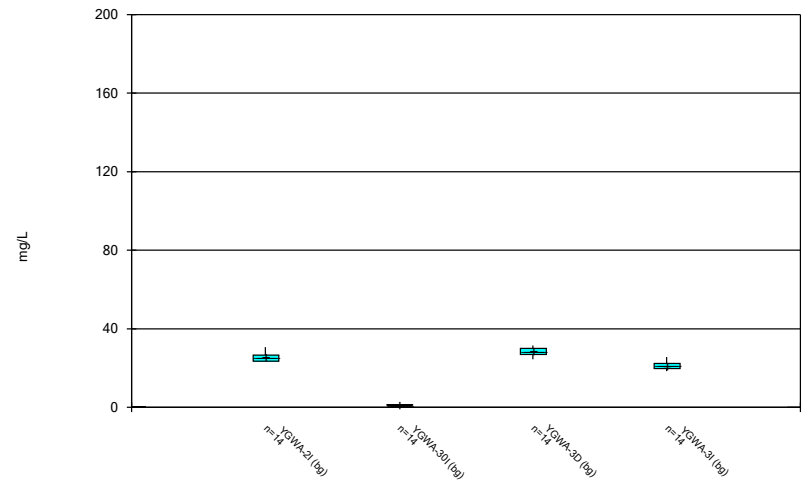
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



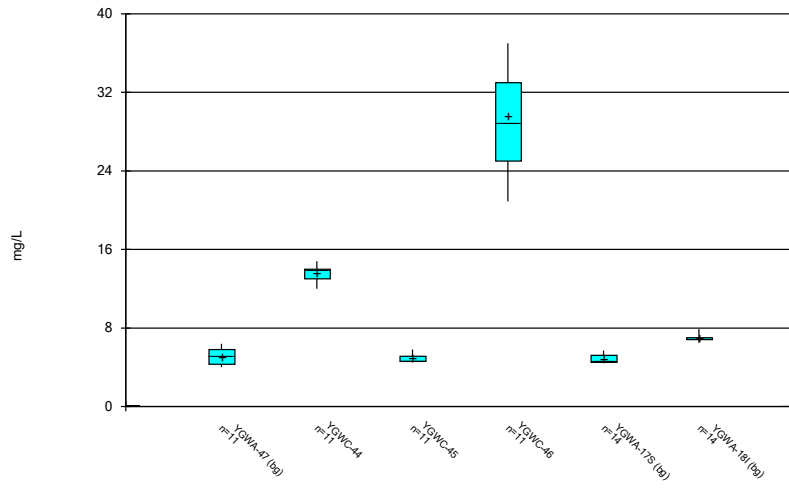
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



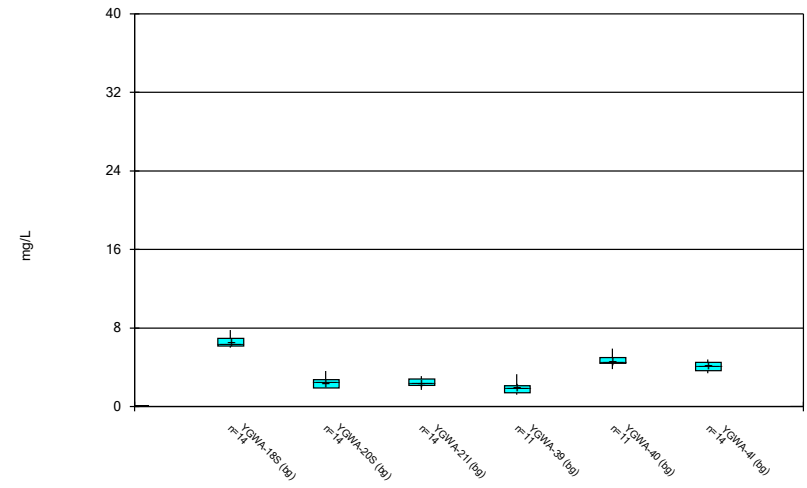
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



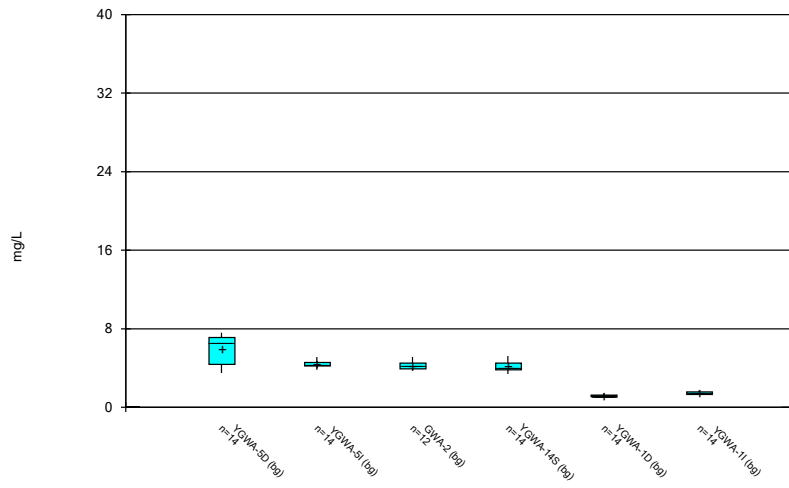
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



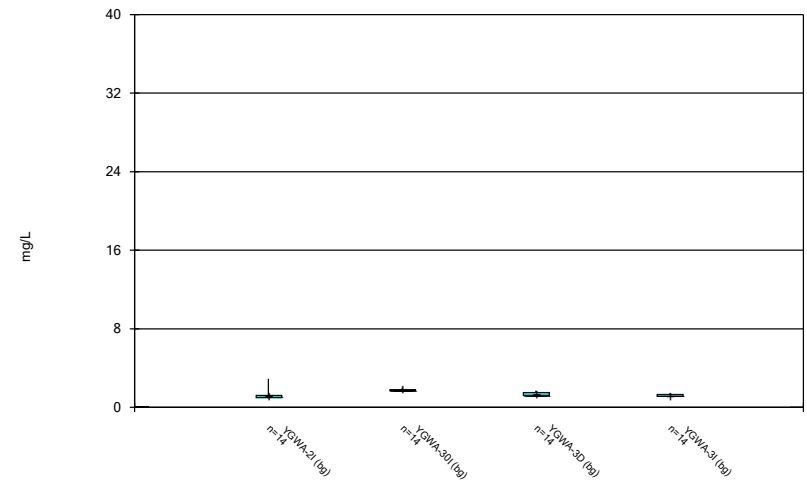
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



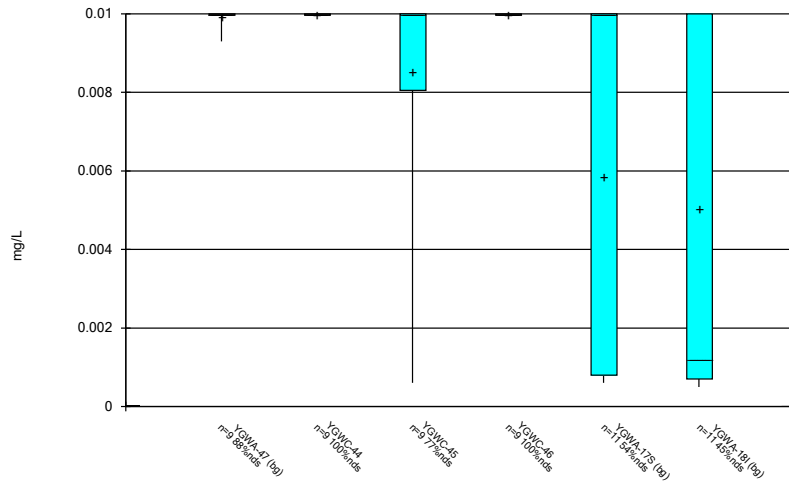
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



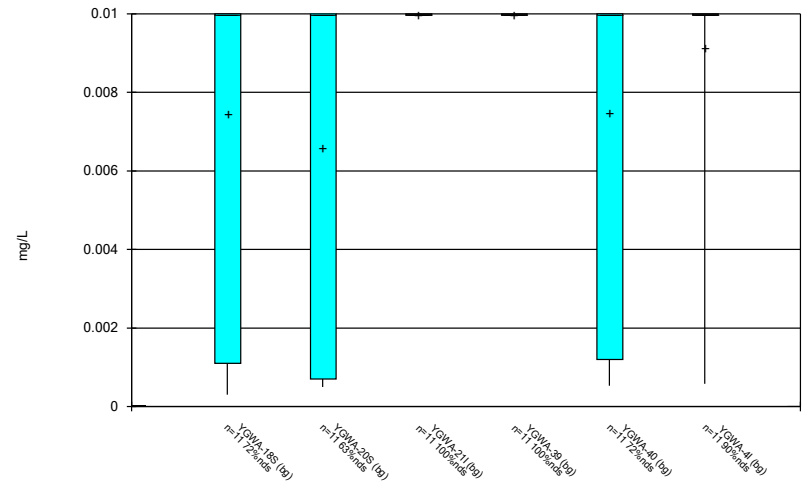
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



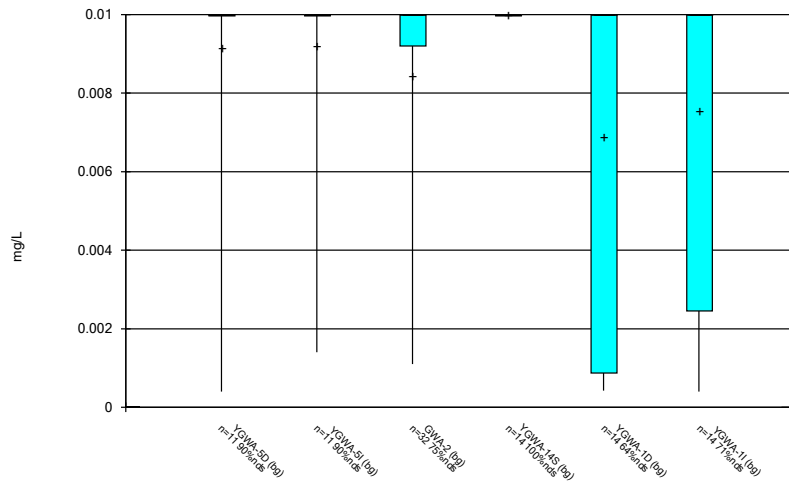
Constituent: Chromium Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



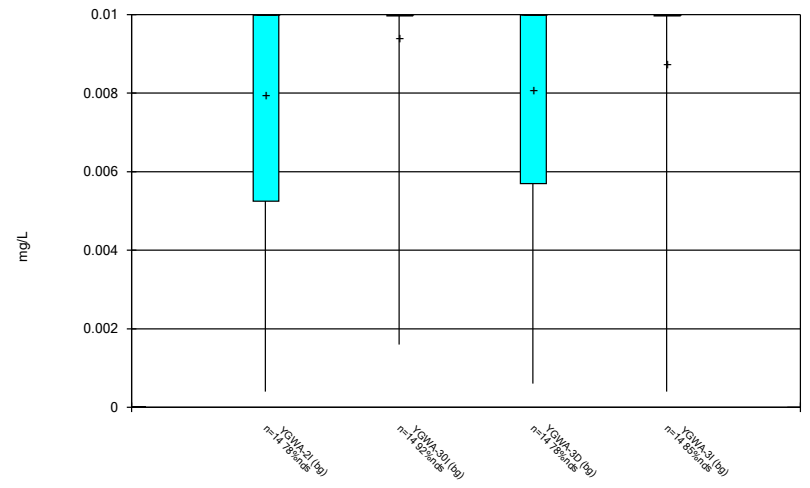
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



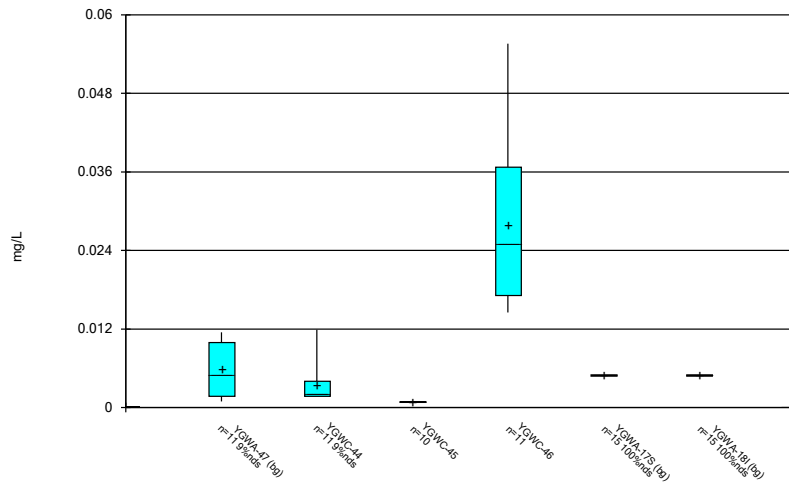
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



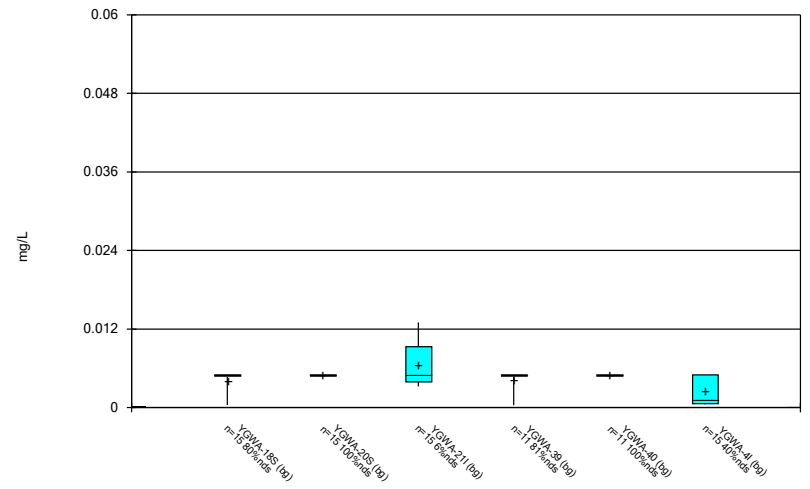
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



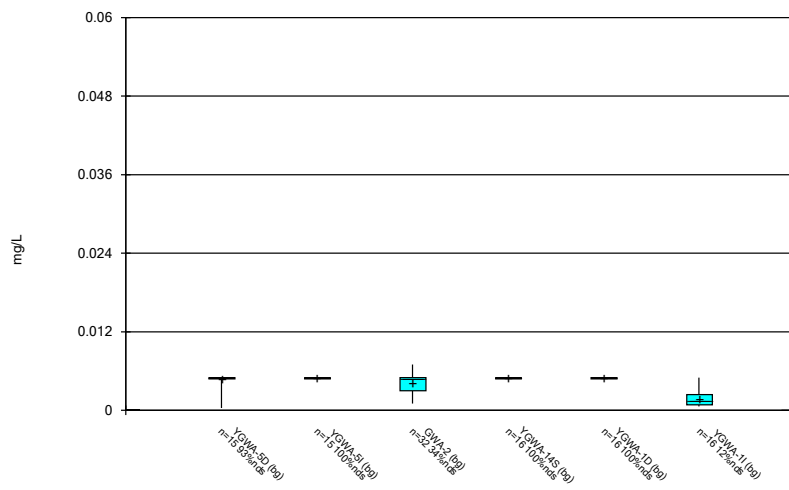
Constituent: Cobalt Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



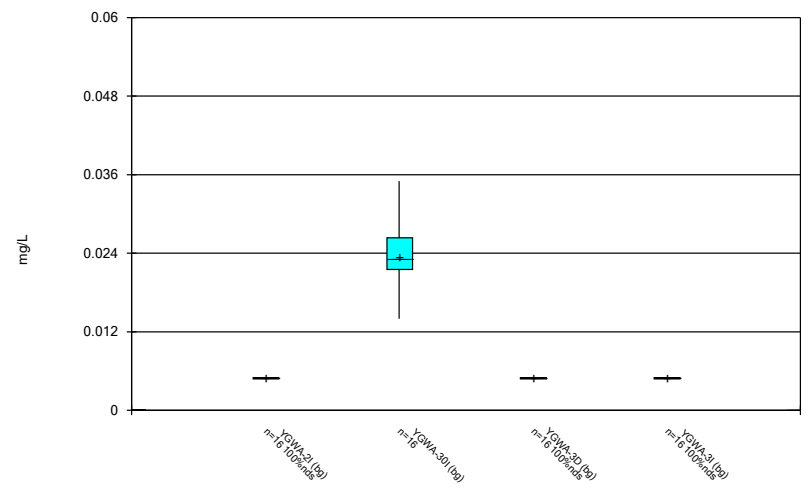
Constituent: Cobalt Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



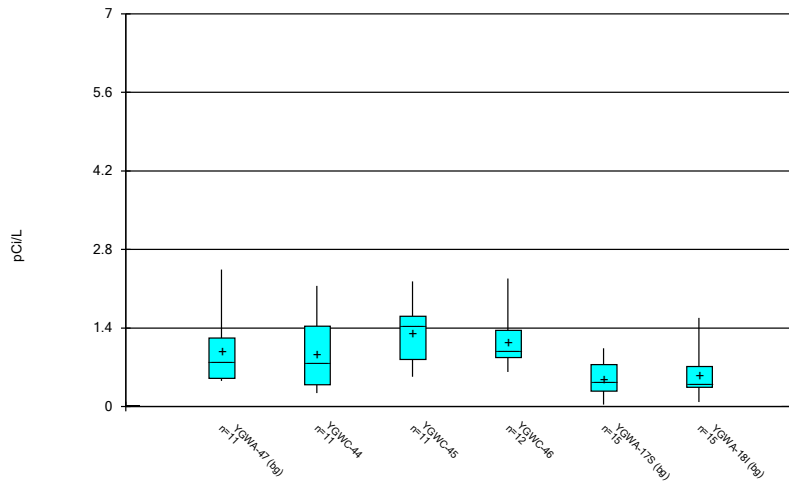
Constituent: Cobalt Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



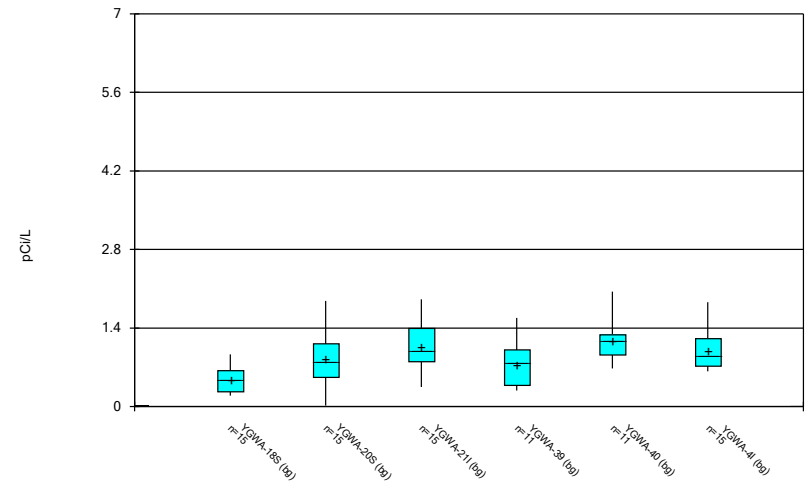
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



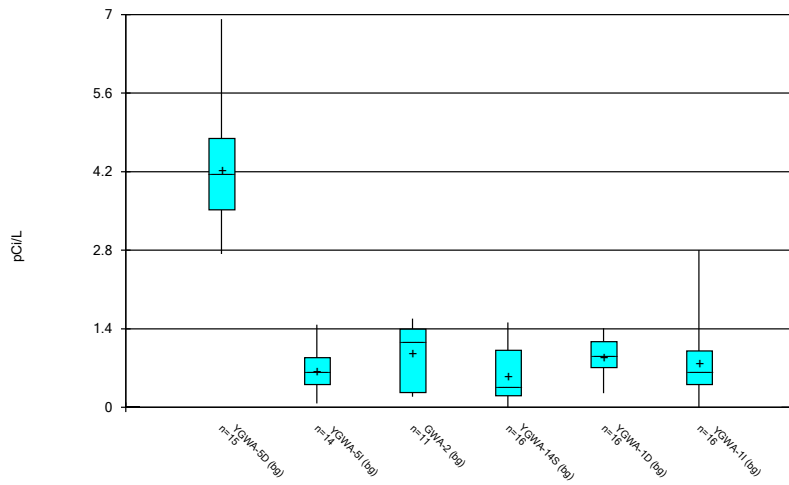
Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



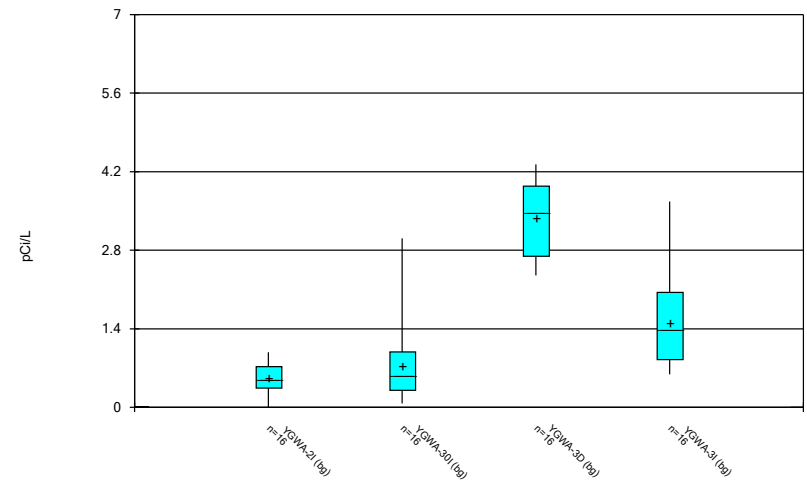
Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



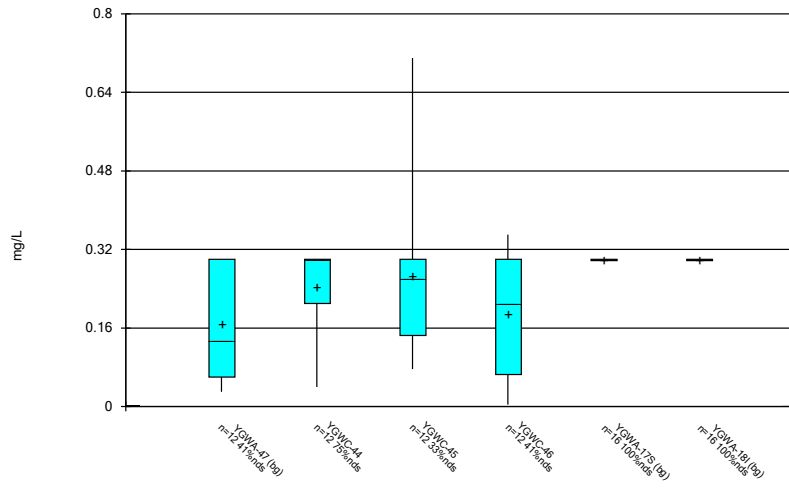
Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



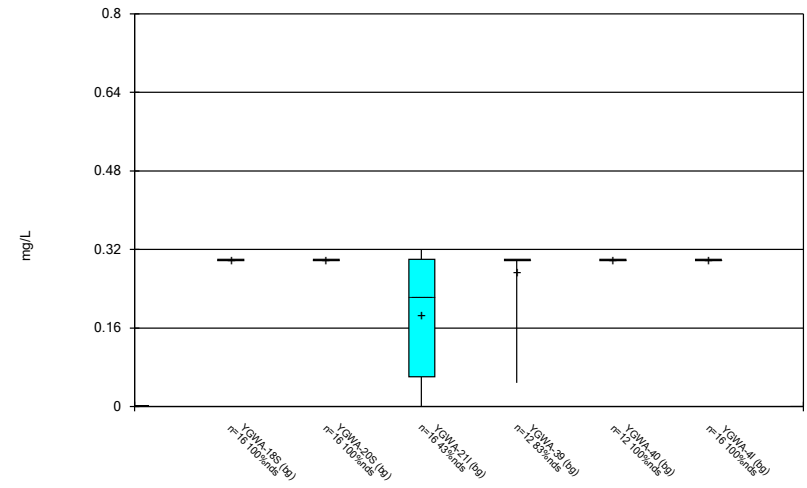
Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



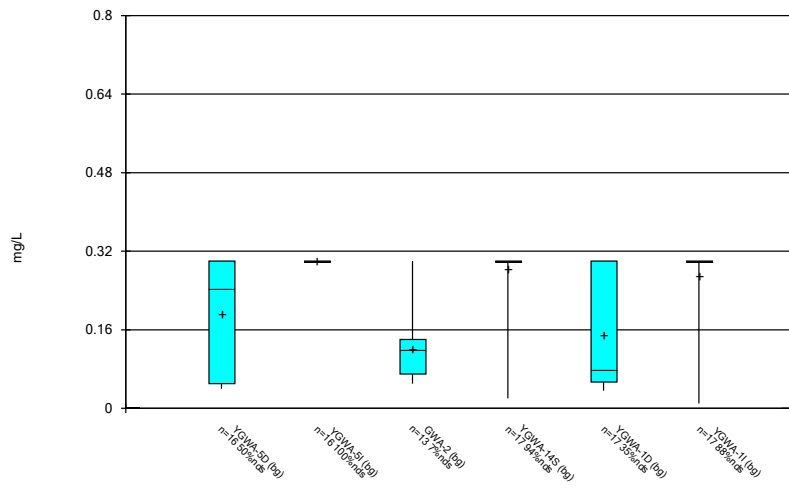
Constituent: Fluoride Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



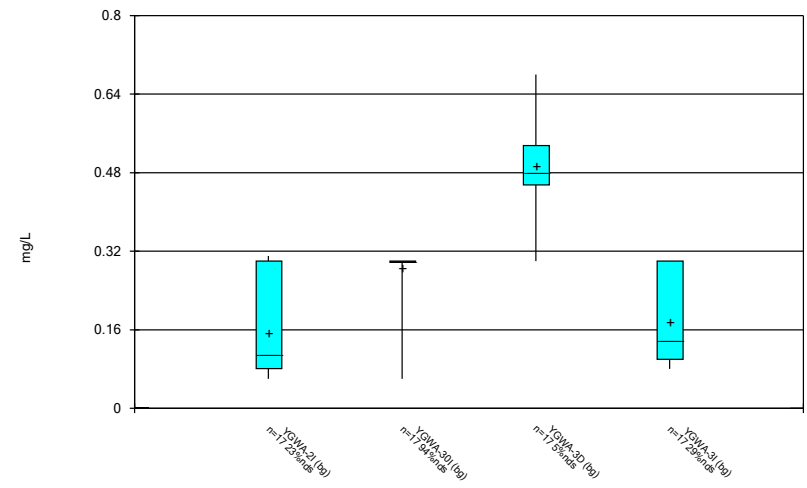
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



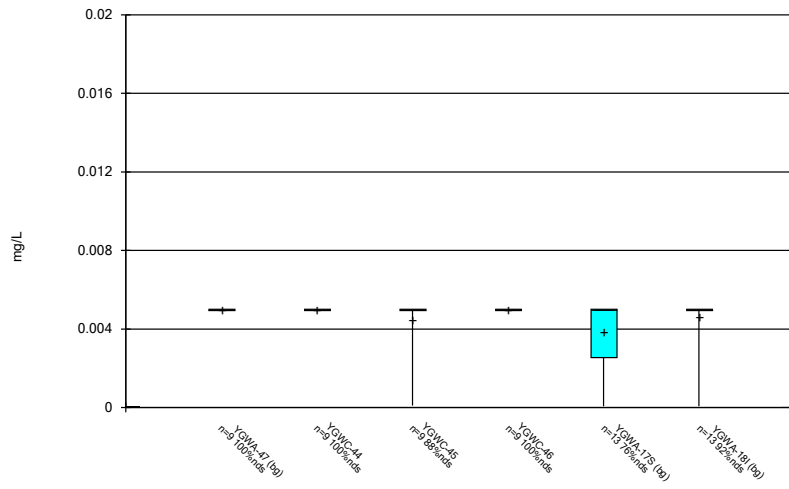
Constituent: Fluoride Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



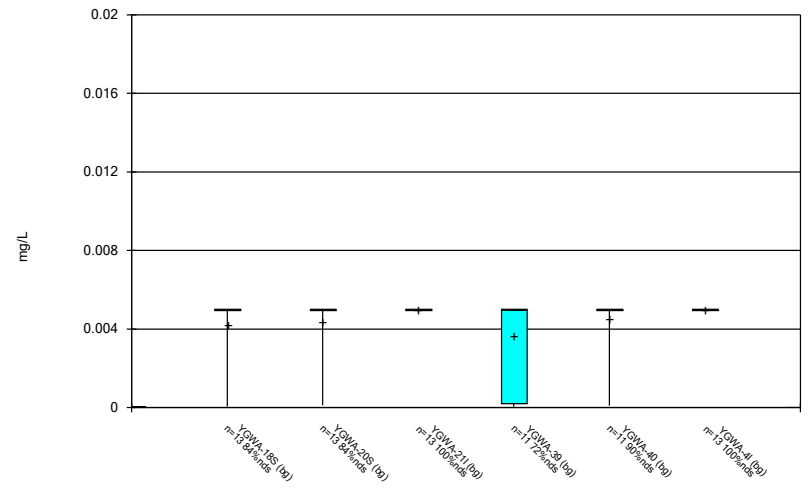
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



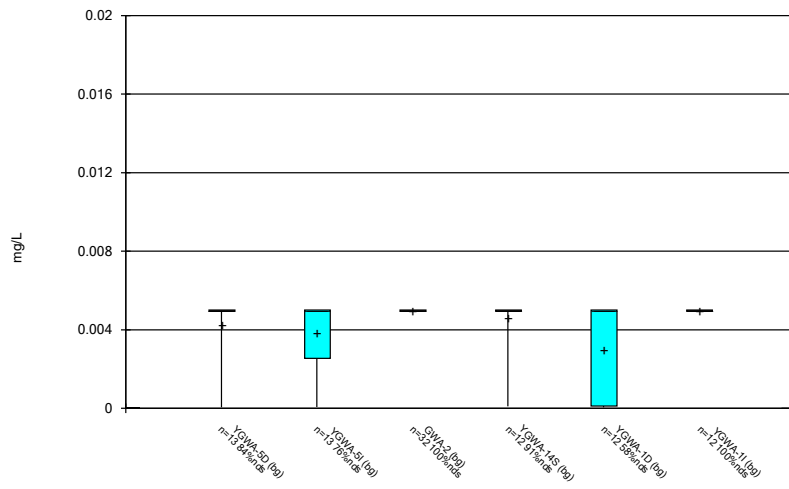
Constituent: Lead Analysis Run 7/27/2020 4:02 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



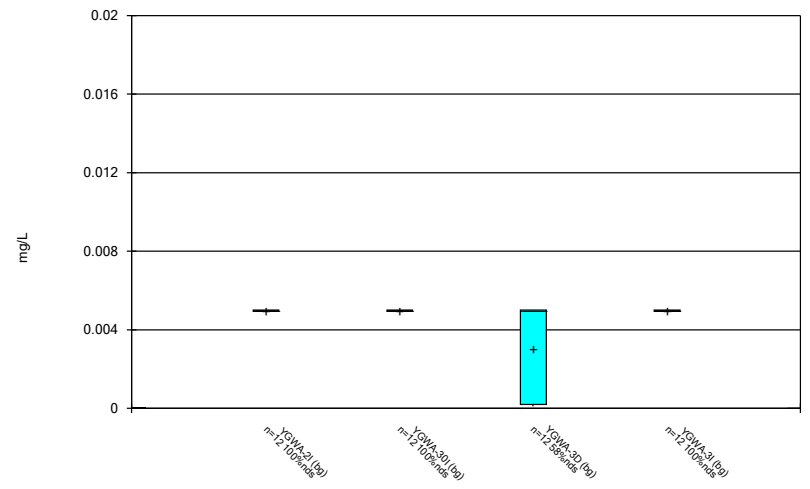
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



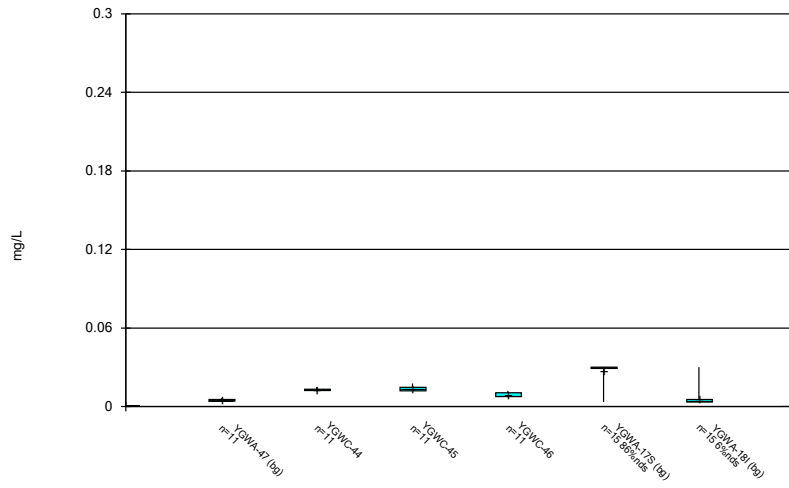
Constituent: Lead Analysis Run 7/27/2020 4:03 PM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



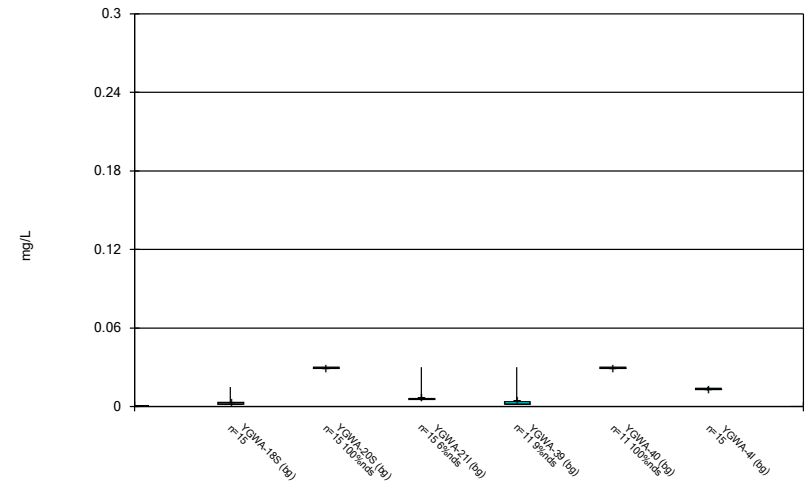
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



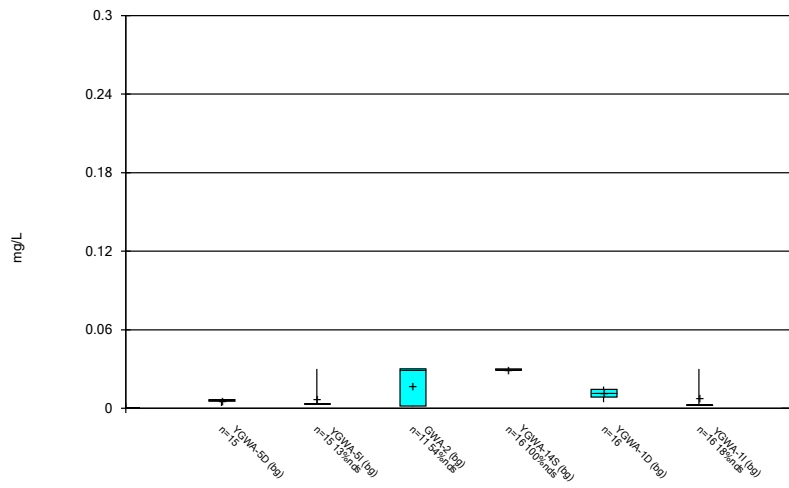
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Box & Whiskers Plot



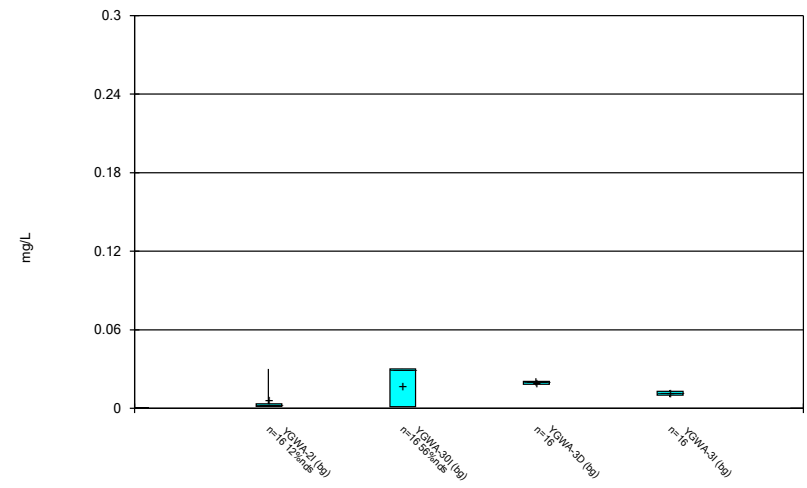
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Box & Whiskers Plot



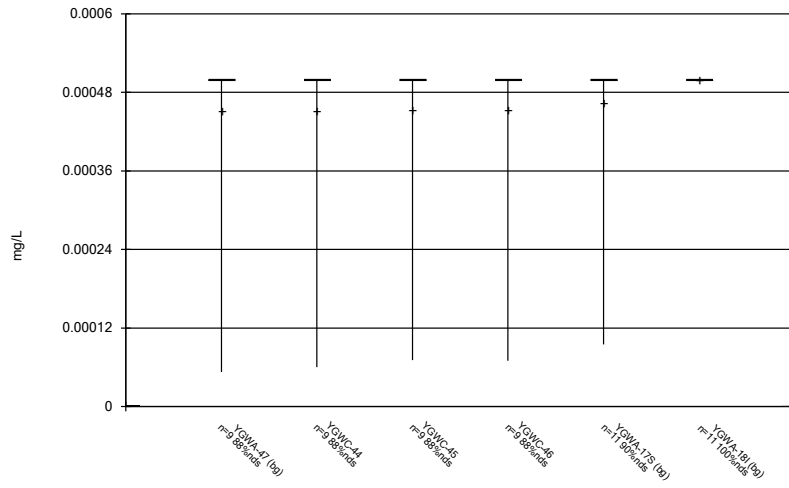
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Box & Whiskers Plot



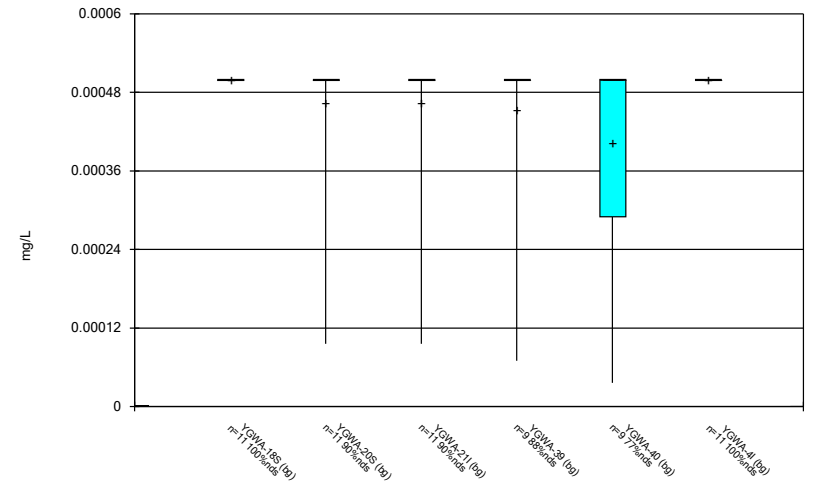
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Box & Whiskers Plot



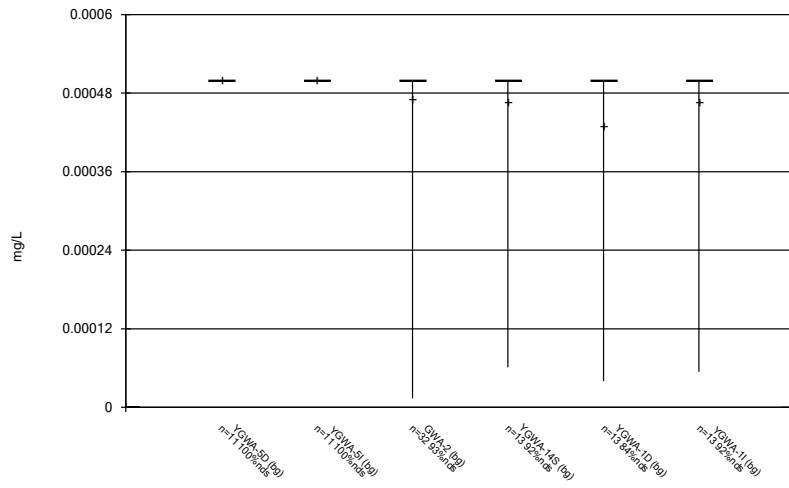
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



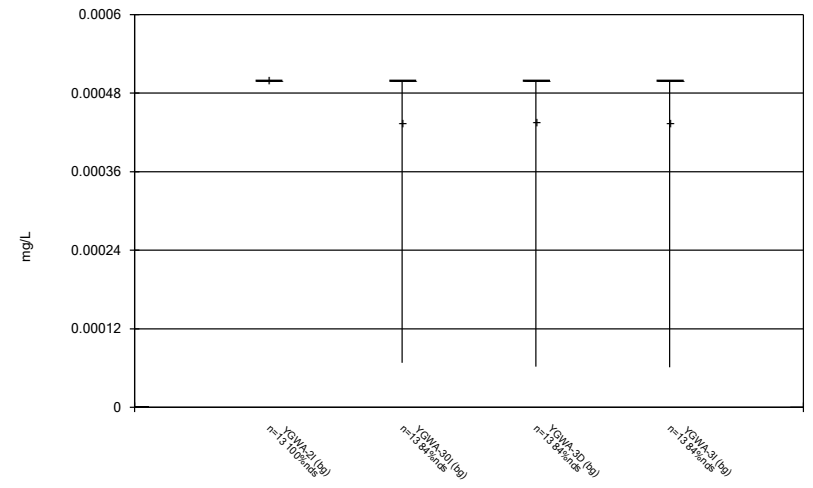
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Box & Whiskers Plot



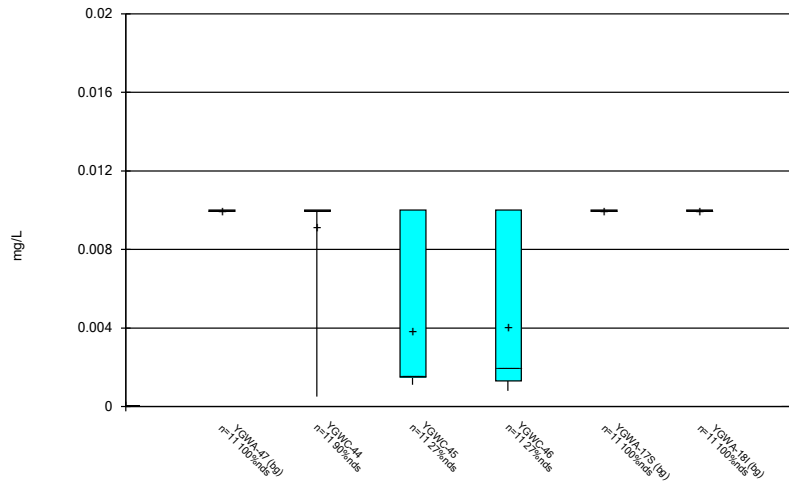
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Box & Whiskers Plot



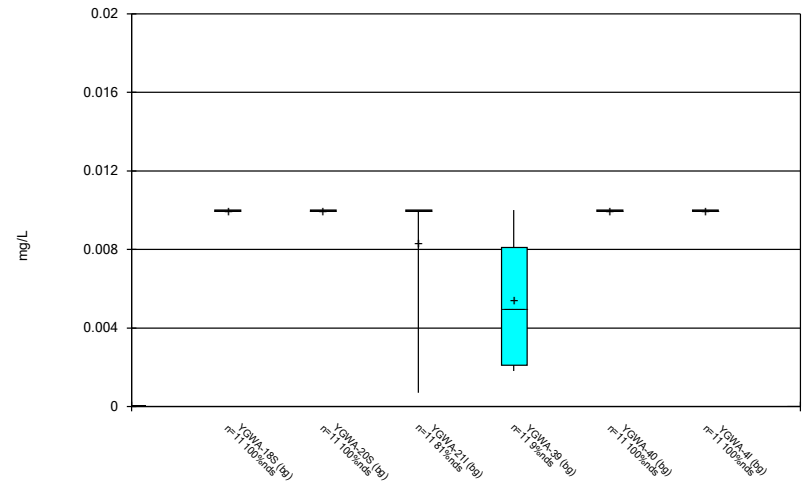
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Box & Whiskers Plot



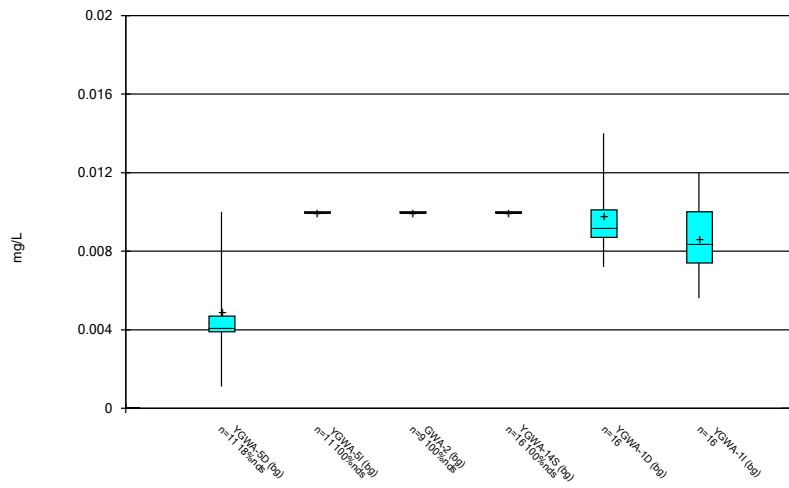
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Box & Whiskers Plot



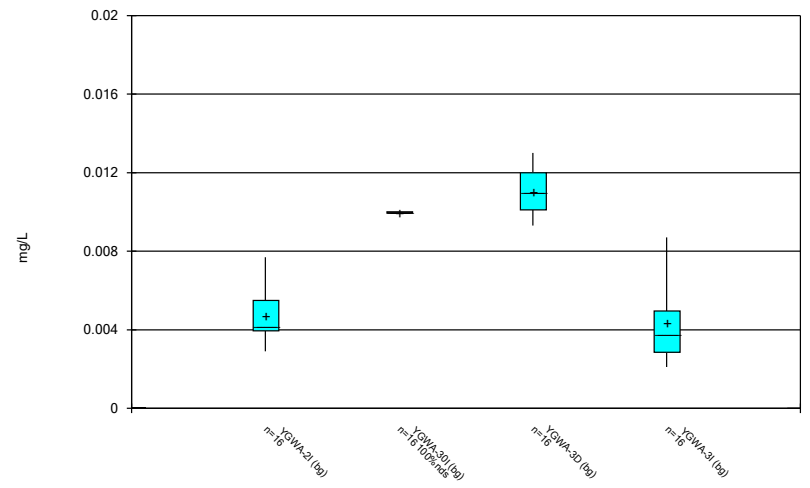
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Box & Whiskers Plot



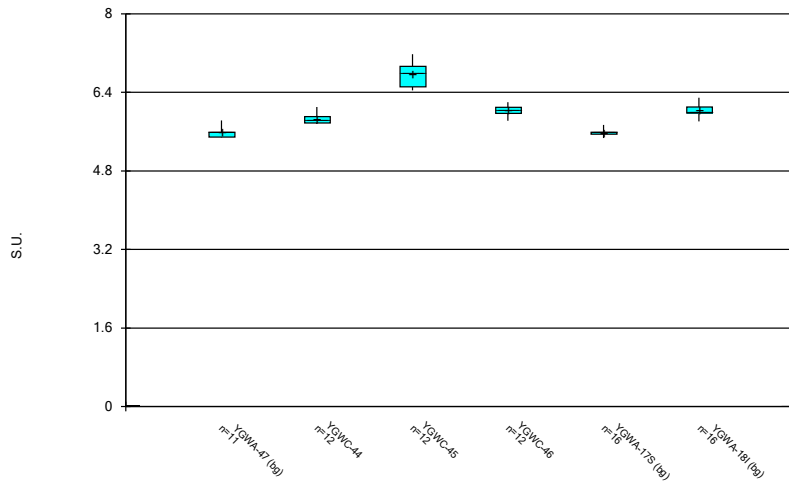
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



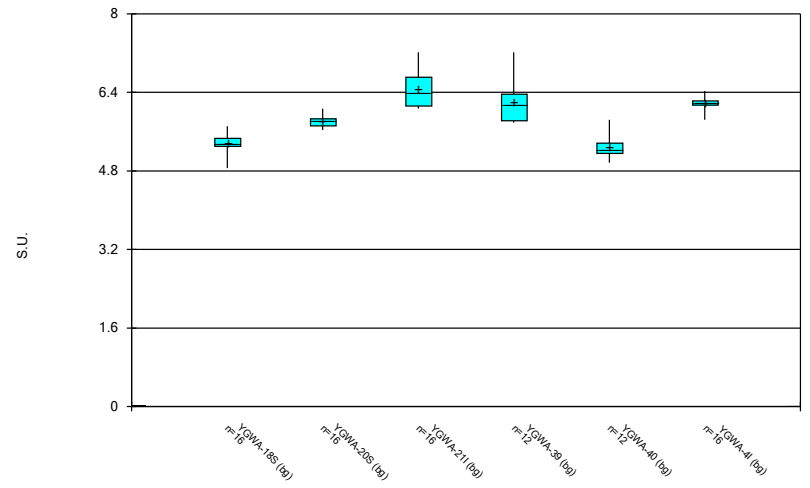
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Box & Whiskers Plot



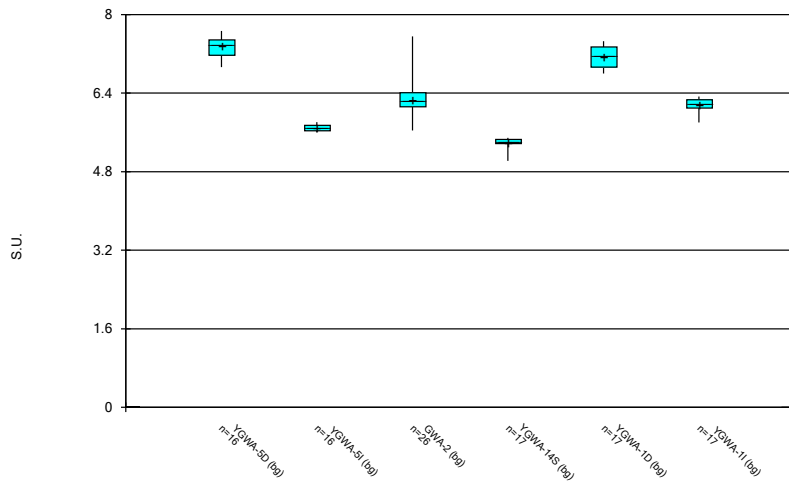
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Box & Whiskers Plot



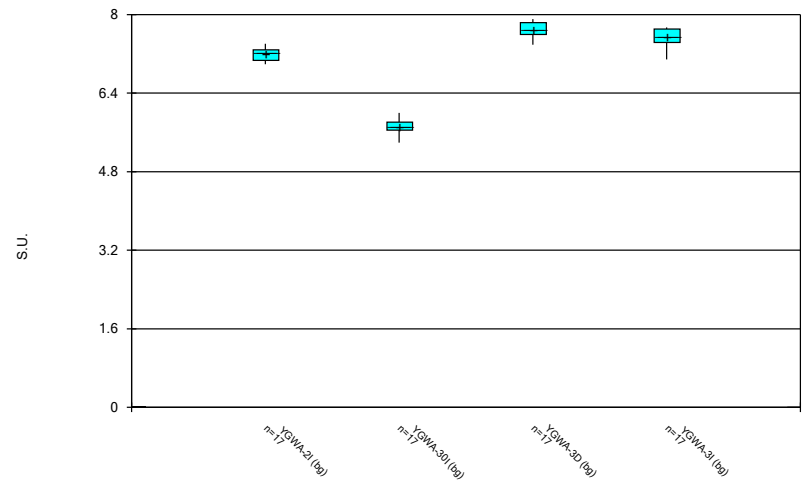
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Box & Whiskers Plot



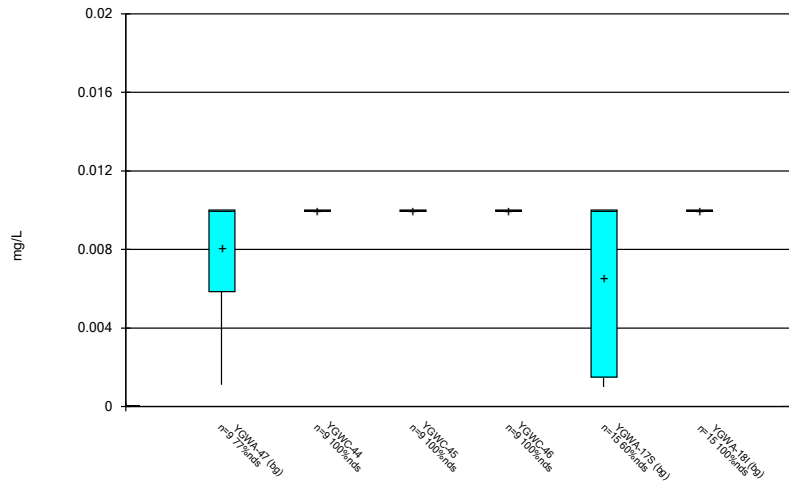
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Box & Whiskers Plot



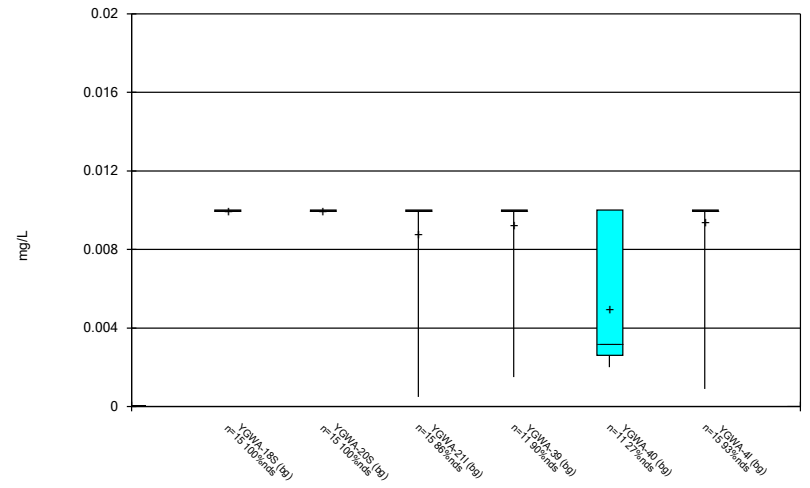
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



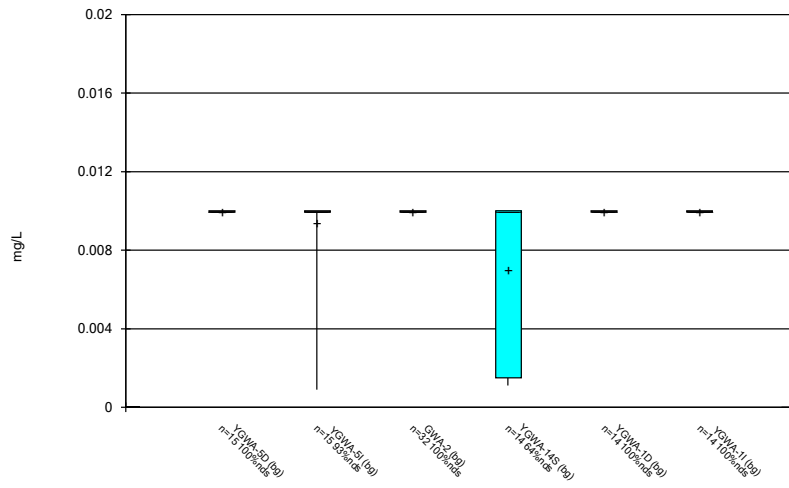
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



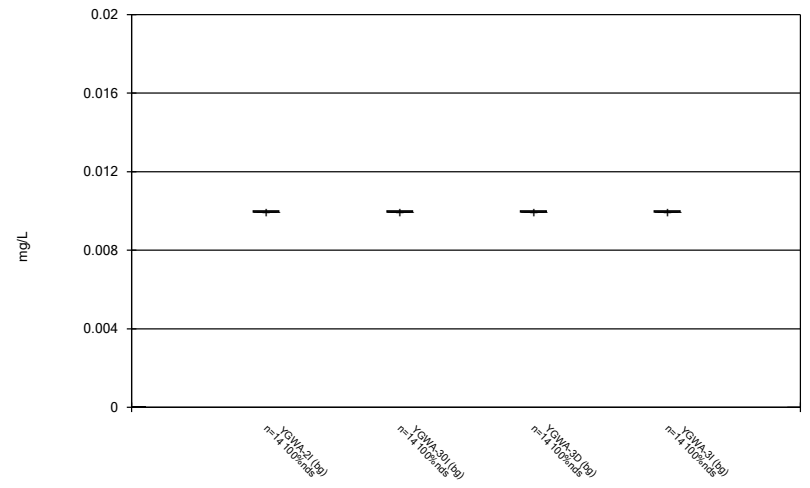
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Box & Whiskers Plot



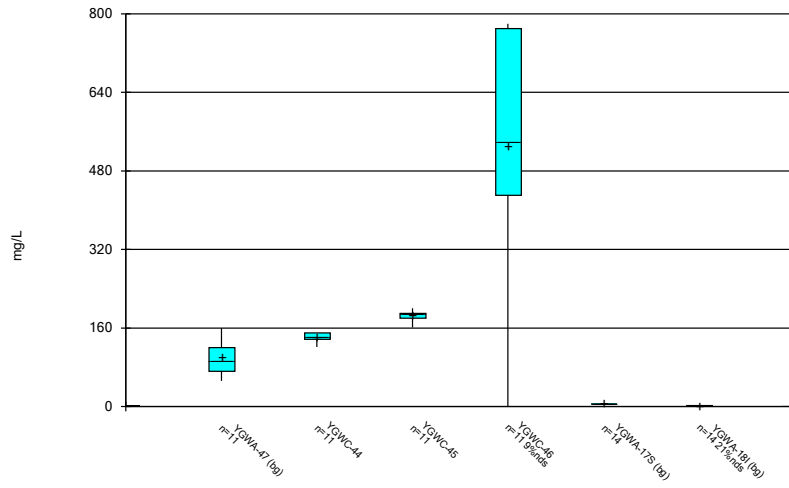
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Box & Whiskers Plot



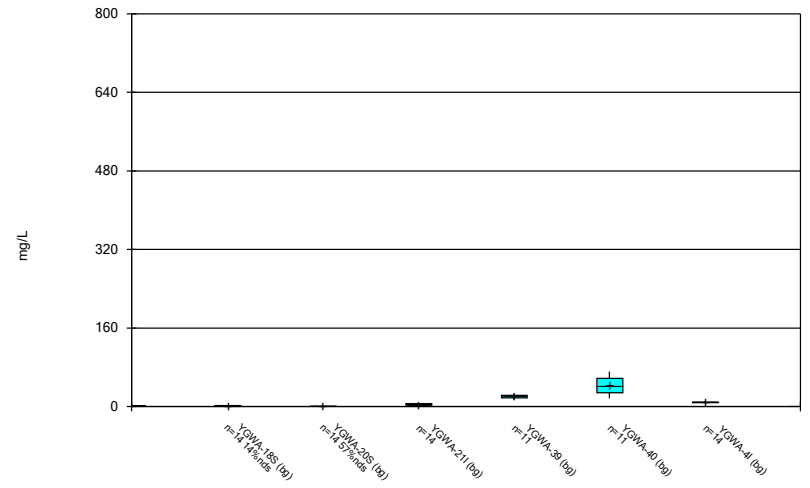
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Box & Whiskers Plot



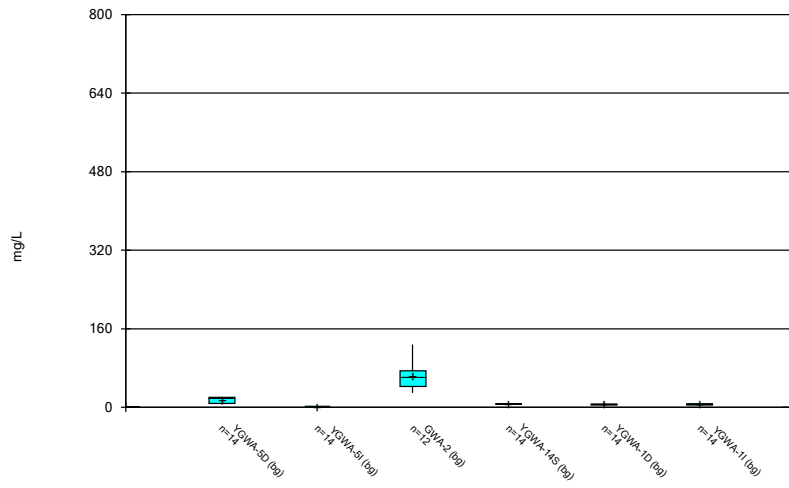
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Box & Whiskers Plot



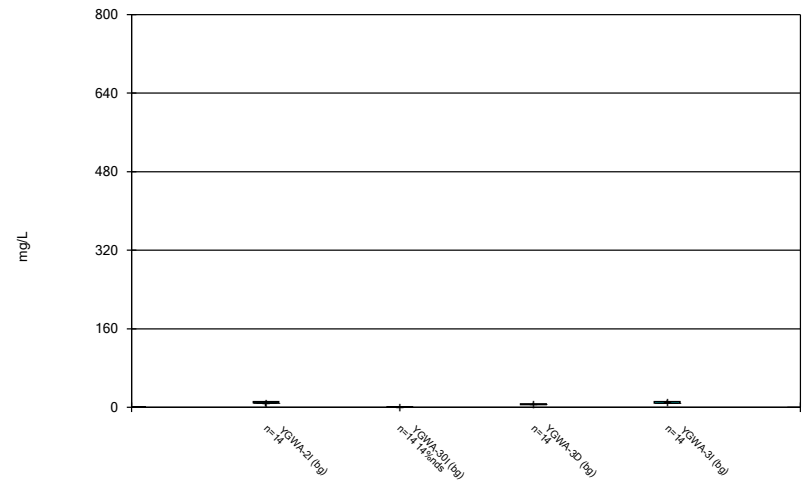
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



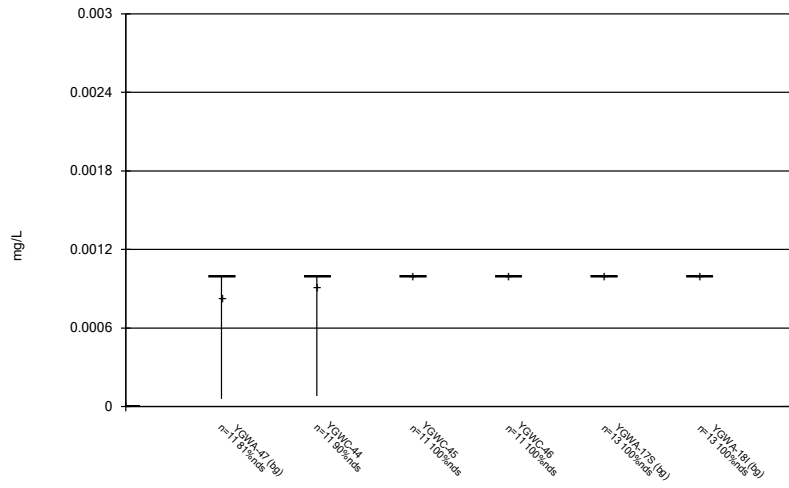
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



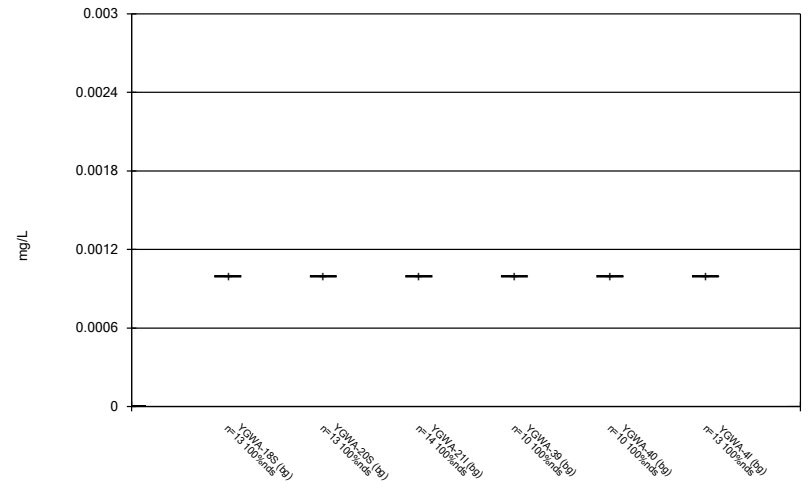
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Box & Whiskers Plot



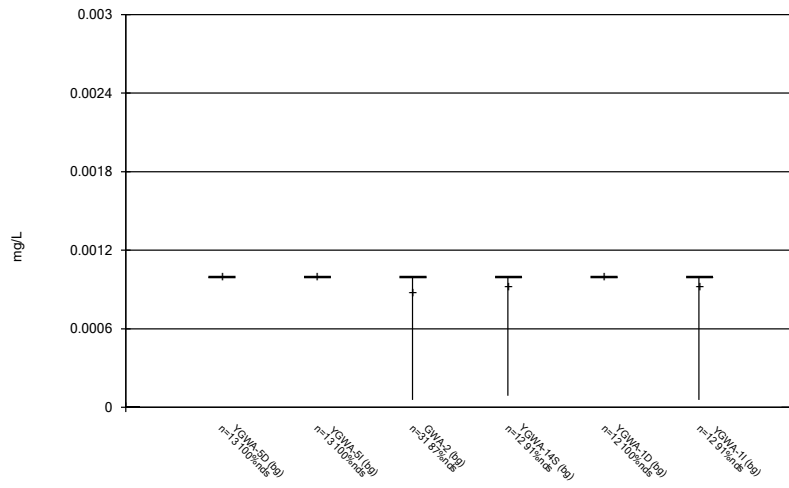
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Box & Whiskers Plot



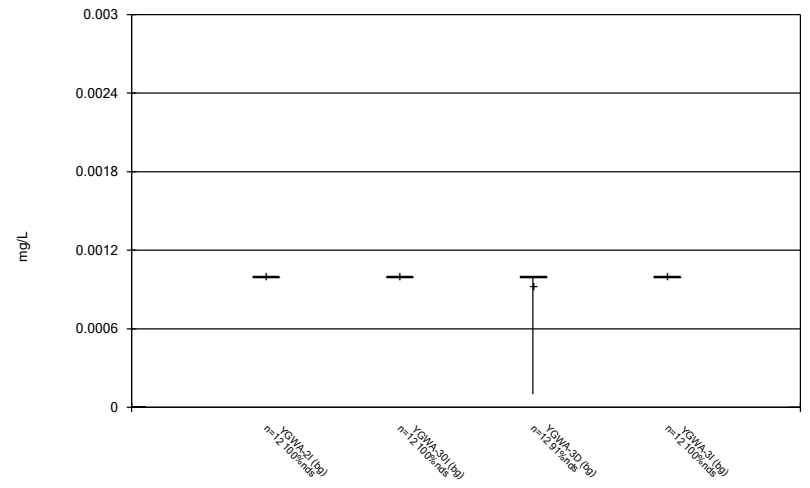
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Box & Whiskers Plot



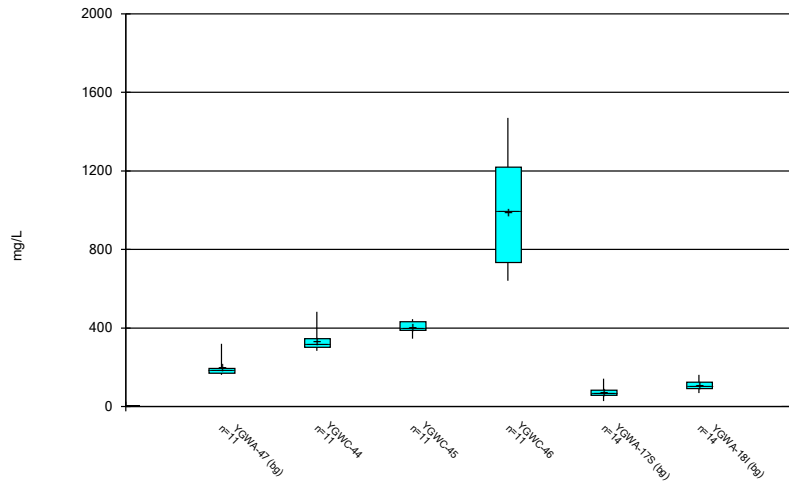
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Box & Whiskers Plot



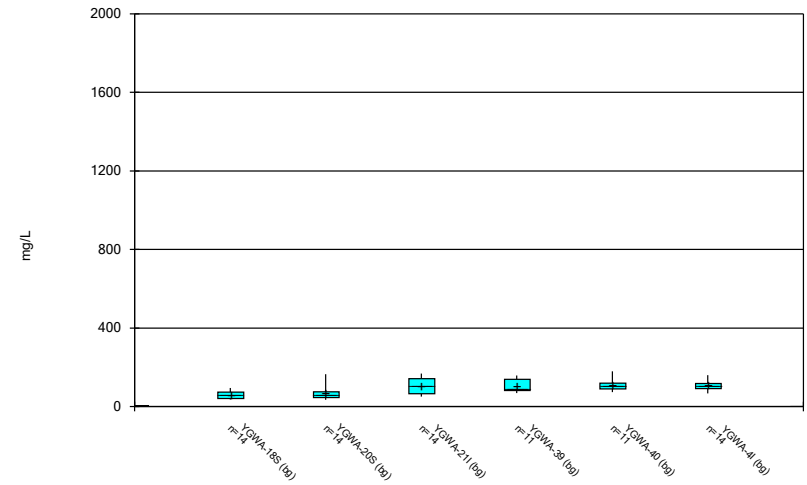
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 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



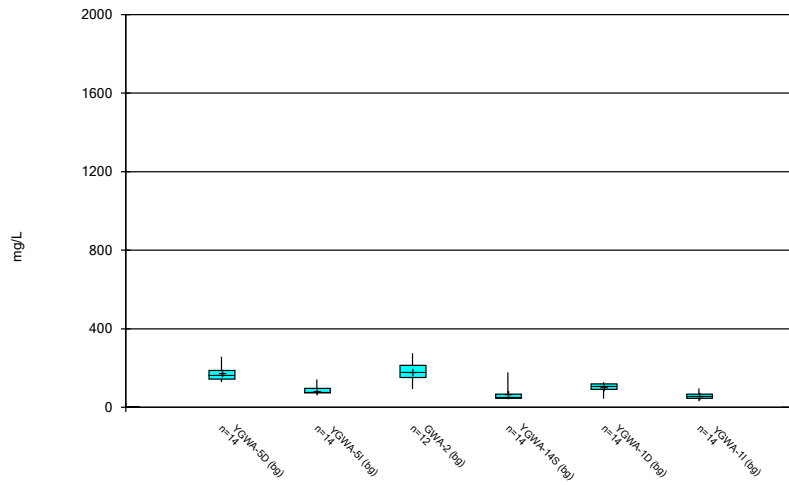
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



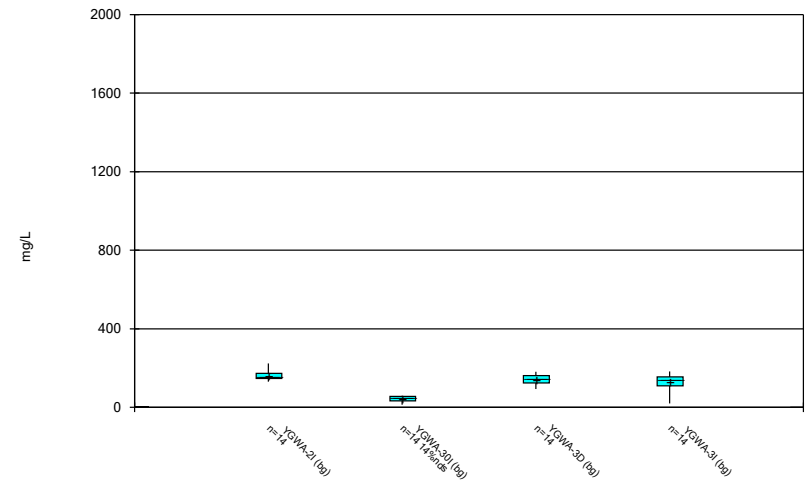
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:03 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:03 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

FIGURE C.

Outlier Summary

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:05 PM

YGWC-45 Cobalt (mg/L)
YGWA-47 pH (S.U.)

4/2/2018	6.3 (o)
4/3/2018	<0.01 (o)

FIGURE D.

Appendix III - Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig. Bg	NBq Mean	Std. Dev.	%NDs	ND Adj.	TransformAlpha	Method
Boron (mg/L)	YGWC-44	0.16	n/a	3/17/2020	0.61	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-45	0.16	n/a	3/17/2020	0.37	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-46	0.16	n/a	3/17/2020	1.3	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-45	37	n/a	3/17/2020	54.8	Yes	255 n/a	n/a	1.176	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-46	37	n/a	3/17/2020	70.4	Yes	255 n/a	n/a	1.176	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-44	7.9	n/a	3/17/2020	14	Yes	255 n/a	n/a	0	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-46	7.9	n/a	3/17/2020	24.8	Yes	255 n/a	n/a	0	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-45	160	n/a	3/17/2020	161	Yes	255 n/a	n/a	5.882	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-46	160	n/a	3/17/2020	439	Yes	255 n/a	n/a	5.882	n/a	n/a	0.00004923 NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-44	200	n/a	3/17/2020	283	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-45	200	n/a	3/17/2020	391	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-46	200	n/a	3/17/2020	733	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2

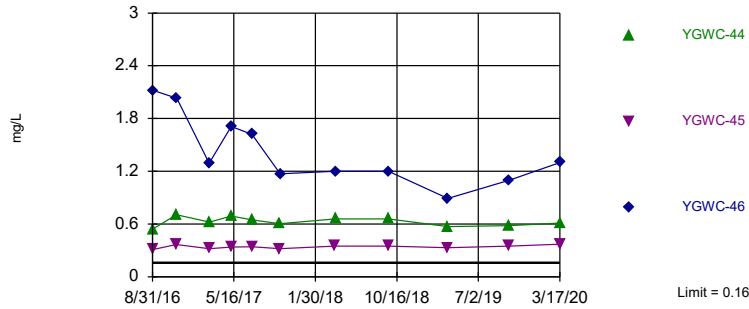
Appendix III - Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:10 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig. Bg	NBq Mean	Std. Dev.	%NDs	ND Adj.	TransformAlpha	Method
Boron (mg/L)	YGWC-44	0.16	n/a	3/17/2020	0.61	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-45	0.16	n/a	3/17/2020	0.37	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-46	0.16	n/a	3/17/2020	1.3	Yes	255 n/a	n/a	47.45	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-44	37	n/a	3/17/2020	31.9	No	255 n/a	n/a	1.176	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-45	37	n/a	3/17/2020	54.8	Yes	255 n/a	n/a	1.176	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-46	37	n/a	3/17/2020	70.4	Yes	255 n/a	n/a	1.176	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-44	7.9	n/a	3/17/2020	14	Yes	255 n/a	n/a	0	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-45	7.9	n/a	3/17/2020	4.6	No	255 n/a	n/a	0	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-46	7.9	n/a	3/17/2020	24.8	Yes	255 n/a	n/a	0	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Fluoride (mg/L)	YGWC-44	0.68	n/a	3/17/2020	0.3ND	No	296 n/a	n/a	68.24	n/a	n/a	0.00004923NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-45	0.68	n/a	3/17/2020	0.076J	No	296 n/a	n/a	68.24	n/a	n/a	0.00004923NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-46	0.68	n/a	3/17/2020	0.3ND	No	296 n/a	n/a	68.24	n/a	n/a	0.00004923NP Inter (NDs) 1 of 2
pH (S.U.)	YGWC-44	7.9	4.9	3/17/2020	5.9	No	308 n/a	n/a	0	n/a	n/a	0.00009847NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-45	7.9	4.9	3/17/2020	6.69	No	308 n/a	n/a	0	n/a	n/a	0.00009847NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-46	7.9	4.9	3/17/2020	5.99	No	308 n/a	n/a	0	n/a	n/a	0.00009847NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-44	160	n/a	3/17/2020	121	No	255 n/a	n/a	5.882	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-45	160	n/a	3/17/2020	161	Yes	255 n/a	n/a	5.882	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-46	160	n/a	3/17/2020	439	Yes	255 n/a	n/a	5.882	n/a	n/a	0.00004923NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-44	200	n/a	3/17/2020	283	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-45	200	n/a	3/17/2020	391	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-46	200	n/a	3/17/2020	733	Yes	255 10.04	2.535	0.7843	None	sqrt(x)	0.002505 Param Inter 1 of 2

Exceeds Limit: YGWC-44, YGWC-45, YGWC-46

Prediction Limit
Interwell Non-parametric

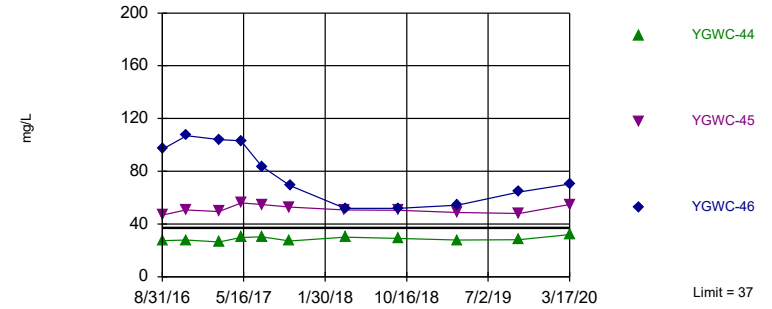


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 255 background values. 47.45% NDs. Annual per-constituent alpha = 0.0002954. Individual comparison alpha = 0.00004923 (1 of 2). Comparing 3 points to limit.

Constituent: Boron Analysis Run 7/27/2020 4:09 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Exceeds Limit: YGWC-45, YGWC-46

Prediction Limit
Interwell Non-parametric

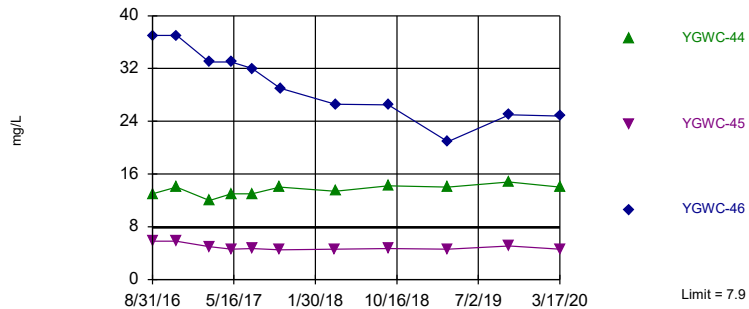


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 255 background values. 1.176% NDs. Annual per-constituent alpha = 0.0002954. Individual comparison alpha = 0.00004923 (1 of 2). Comparing 3 points to limit.

Constituent: Calcium Analysis Run 7/27/2020 4:09 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Exceeds Limit: YGWC-44, YGWC-46

Prediction Limit
Interwell Non-parametric



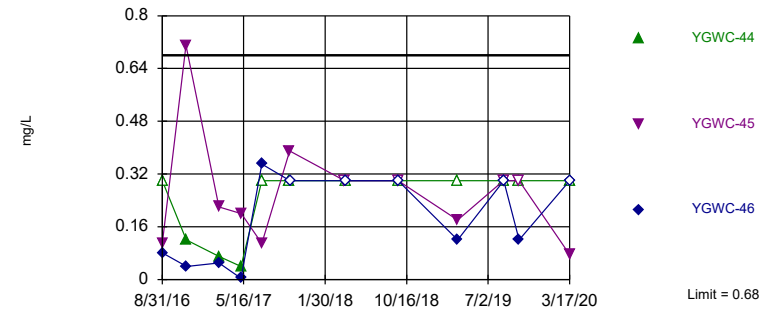
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 255 background values. Annual per-constituent alpha = 0.0002954. Individual comparison alpha = 0.00004923 (1 of 2). Comparing 3 points to limit.

Constituent: Chloride Analysis Run 7/27/2020 4:09 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interwell Non-parametric

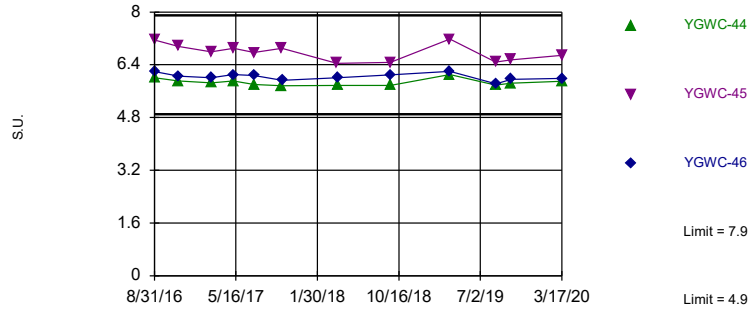


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 296 background values. 68.24% NDs. Annual per-constituent alpha = 0.0002954. Individual comparison alpha = 0.00004923 (1 of 2). Comparing 3 points to limit.

Constituent: Fluoride Analysis Run 7/27/2020 4:09 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Within Limits

Prediction Limit
Interwell Non-parametric



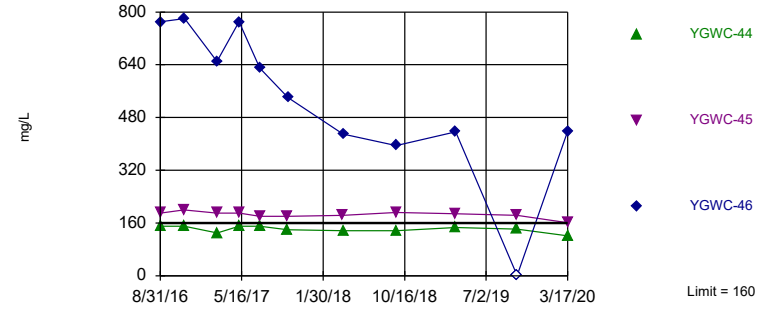
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 308 background values. Annual per-constituent alpha = 0.0005907. Individual comparison alpha = 0.00009847 (1 of 2). Comparing 3 points to limit.

Constituent: pH Analysis Run 7/27/2020 4:09 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Hollow symbols indicate censored values.

Exceeds Limit: YGWC-45, YGWC-46

Prediction Limit
Interwell Non-parametric

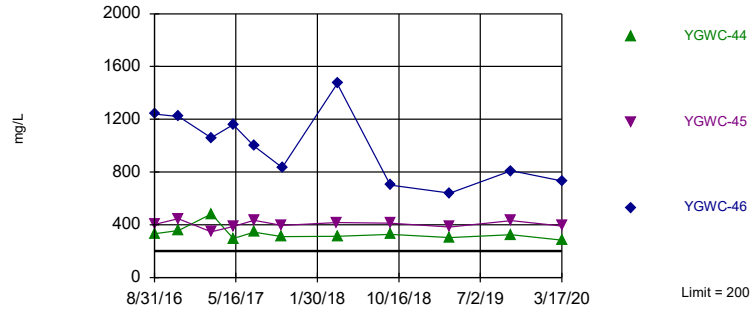


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 255 background values. 5.882% NDs. Annual per-constituent alpha = 0.0002954. Individual comparison alpha = 0.00004923 (1 of 2). Comparing 3 points to limit.

Constituent: Sulfate Analysis Run 7/27/2020 4:09 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Exceeds Limit: YGWC-44, YGWC-45, YGWC-46

Prediction Limit
Interwell Parametric



Background Data Summary (based on square root transformation): Mean=10.04, Std. Dev.=2.535, n=255, 0.7843% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 11.31, critical = 14.07. Kappa = 1.658 (c=7, w=3, 1 of 2, event alpha = 0.05132). N exceeds UG tables; Kappa based on n=150. Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:09 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/1/2016	<0.1	<0.1	<0.1						
6/2/2016				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
6/6/2016									
6/7/2016									
7/25/2016	<0.1	<0.1			<0.1				
7/26/2016			0.0055 (J)	0.0047 (J)		0.0177 (J)	0.0097 (J)	0.0052 (J)	<0.1
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	<0.1		<0.1						
9/14/2016		<0.1		<0.1				0.0071 (J)	0.01 (J)
9/15/2016						0.0214 (J)	0.0102 (J)		
9/16/2016									
9/19/2016					<0.1				
11/1/2016		<0.1	0.0086 (J)		<0.1		<0.1		
11/2/2016				<0.1		<0.1		<0.1	
11/3/2016									
11/4/2016	<0.1								<0.1
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017						0.0198 (J)			
1/11/2017		<0.1	0.0074 (J)				<0.1		
1/12/2017								0.0076 (J)	<0.1
1/13/2017				<0.1					
1/16/2017	<0.1				<0.1				
2/21/2017					<0.1				
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017		<0.1							
3/2/2017	<0.1		0.008 (J)				0.0084 (J)		
3/3/2017									
3/6/2017				<0.1					
3/7/2017								0.0089 (J)	<0.1
3/8/2017						0.0189 (J)			
4/26/2017		<0.1			<0.1	0.0161 (J)	<0.1		
4/27/2017	<0.1		0.0066 (J)						
4/28/2017									
5/1/2017				<0.1				0.0061 (J)	
5/2/2017									<0.1
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	0.006 (J)		0.0087 (J)					0.0079 (J)	<0.1
6/28/2017		<0.1					<0.1		
6/29/2017				<0.1					

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/30/2017					<0.1	0.0173 (J)			
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	0.0071 (J)		0.0072 (J)					0.0094 (J)	<0.1
10/4/2017		<0.1			<0.1		<0.1		
10/5/2017				<0.1		0.0173 (J)			
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018			0.0052 (J)						
6/6/2018	<0.1							0.0098 (J)	
6/7/2018				0.0045 (J)			0.004 (J)		<0.1
6/8/2018		<0.1				0.013 (J)			
6/11/2018					0.014 (J)				
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018				0.005 (J)				0.01 (J)	0.0057 (J)
10/1/2018	0.0049 (J)	<0.1	0.021 (J)			0.015 (J)	<0.1		
10/2/2018					<0.1				
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	<0.1		0.005 (J)						
3/29/2019						0.014 (J)			
4/1/2019		<0.1			<0.1		<0.1		
4/2/2019									
4/3/2019				0.0055 (J)				0.0076 (J)	0.0044 (J)
6/12/2019									
9/24/2019	0.0055 (J)		0.0064 (J)					0.01 (J)	0.0049 (J)
9/25/2019		<0.1		<0.1	<0.1	0.018 (J)	0.0054 (J)		
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020	0.0087 (J)					0.02 (J)			
3/19/2020		0.0053 (J)	0.0085 (J)		0.0052 (J)		0.0073 (J)		
3/24/2020								0.011 (J)	0.0068 (J)
3/25/2020				0.011 (J)					

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	YGWC-45	GWA-2 (bg)	YGWC-44
6/1/2016									
6/2/2016									
6/6/2016	<0.1	<0.1							
6/7/2016			<0.1	<0.1	<0.1				
7/25/2016									
7/26/2016									
7/27/2016	<0.1	0.0059 (J)	<0.1	0.008 (J)					
7/28/2016					<0.1				
8/30/2016						0.0166 (J)			
8/31/2016							0.308	0.0315 (J)	0.541
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		0.0079 (J)		0.0086 (J)					
9/19/2016	<0.1		<0.1		<0.1				
11/1/2016									
11/2/2016			<0.1						
11/3/2016	<0.1	0.0082 (J)		0.0077 (J)	<0.1				
11/4/2016									
11/14/2016						0.0166 (J)	0.368		
11/15/2016									0.706
11/16/2016									
11/28/2016								0.0095 (J)	
12/15/2016									
1/10/2017									
1/11/2017	<0.1	0.0096 (J)		0.0092 (J)					
1/12/2017									
1/13/2017			<0.1		<0.1				
1/16/2017									
2/21/2017									
2/22/2017								<0.1	
2/24/2017						0.0145 (J)			
2/27/2017							0.321		
2/28/2017									0.623
3/1/2017	<0.1	<0.1							
3/2/2017				0.0095 (J)					
3/3/2017									
3/6/2017			<0.1		<0.1				
3/7/2017									
3/8/2017									
4/26/2017	<0.1	0.0091 (J)	<0.1		<0.1				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017				<0.1					
5/8/2017						0.0141 (J)		0.0084 (J)	0.69
5/9/2017							0.338		
5/26/2017									
6/27/2017									
6/28/2017	<0.1	0.0079 (J)							
6/29/2017			<0.1	0.0074 (J)	<0.1				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016				
6/2/2016				
6/6/2016				
6/7/2016				
7/25/2016				
7/26/2016				
7/27/2016				
7/28/2016				
8/30/2016				
8/31/2016				
9/1/2016	2.12			
9/13/2016				
9/14/2016		<0.1		
9/15/2016				
9/16/2016				
9/19/2016				
11/1/2016				
11/2/2016				
11/3/2016				
11/4/2016		<0.1		
11/14/2016				
11/15/2016				
11/16/2016	2.03			
11/28/2016				
12/15/2016		0.0107 (J)		
1/10/2017				
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017		<0.1		
2/21/2017				
2/22/2017				
2/24/2017				
2/27/2017	1.29			
2/28/2017				
3/1/2017				
3/2/2017				
3/3/2017		<0.1		
3/6/2017				
3/7/2017				
3/8/2017				
4/26/2017				
4/27/2017				
4/28/2017		<0.1		
5/1/2017				
5/2/2017				
5/8/2017	1.71			
5/9/2017				
5/26/2017		<0.1		
6/27/2017				
6/28/2017		<0.1		
6/29/2017				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/30/2017				
7/11/2017				
7/13/2017	1.62			
7/17/2017				
10/3/2017		<0.1		
10/4/2017				
10/5/2017				
10/10/2017				
10/11/2017	1.17		0.0135 (J)	
10/12/2017				0.0401
10/16/2017				
11/20/2017			0.0251 (J)	0.156
1/10/2018				0.15
1/11/2018			0.0255 (J)	
2/19/2018				0.146
2/20/2018			<0.1	
4/2/2018				
4/3/2018			0.033 (J)	0.12
4/4/2018	1.2			
6/5/2018				
6/6/2018				
6/7/2018		<0.1		
6/8/2018				
6/11/2018				
6/28/2018			0.053	0.16
8/6/2018				
8/7/2018			0.024 (J)	0.12
9/19/2018	1.2			
9/24/2018			0.028 (J)	0.099
9/25/2018				
9/26/2018				
10/1/2018		<0.1		
10/2/2018				
2/25/2019				
3/26/2019				0.096
3/27/2019	0.89		0.017 (J)	
3/28/2019				
3/29/2019		0.0065 (J)		
4/1/2019				
4/2/2019				
4/3/2019				
6/12/2019				
9/24/2019		0.0076 (J)		
9/25/2019				
9/26/2019				
10/8/2019				
10/9/2019	1.1		0.017 (J)	0.079
3/17/2020	1.3			
3/18/2020				
3/19/2020		0.0073 (J)		
3/24/2020				0.088 (J)
3/25/2020			0.043 (J)	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/1/2016	2.5	21	12						
6/2/2016				8.8	1.3	1.3	28	33	2.4
6/6/2016									
6/7/2016									
7/25/2016	2.16	20.3			1.17				
7/26/2016			11	7.69		1.24	24.5	32.3	2.12
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	2.21		11.8						
9/14/2016		19.7		8.49				31	2.18
9/15/2016						1.17	27		
9/16/2016									
9/19/2016					1.05				
11/1/2016		18.4	11		1.14		25.6		
11/2/2016				7.83		1.23		30.9	
11/3/2016									
11/4/2016	2.67								2.17 (J)
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017						1.24			
1/11/2017		20.3	11.2				27.5		
1/12/2017								35.7	2.37
1/13/2017				8.08					
1/16/2017	2.45				1.23				
2/21/2017					1.25				
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017		18.6							
3/2/2017	2.57		11				27.5		
3/3/2017									
3/6/2017				8.64					
3/7/2017								32.7	2.34
3/8/2017						1.21			
4/26/2017		25.6			1.03	1.14	30.4		
4/27/2017	2.38		11.1						
4/28/2017									
5/1/2017				13.4				37	
5/2/2017									2.17
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	2.36		13.8					36.5	2.13
6/28/2017		23.9					29.8		
6/29/2017				8.81					

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/30/2017					1.13	1.24			
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	2.21		14					30.9	2.15
10/4/2017		22.1			1.09		29.7		
10/5/2017				9.29		1.11			
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018			15.2 (J)						
6/6/2018	2.3							26.2	
6/7/2018				8.2			29.1		2.3
6/8/2018		21.9 (J)				1.1			
6/11/2018					1.1				
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018				9.5 (J)				25.8	2.3
10/1/2018	1.8	19.7	15.1			0.99	26.9		
10/2/2018					1.1				
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	2.2		13.3 (J)						
3/29/2019						1.1			
4/1/2019		20.4 (J)			1.3		30.1		
4/2/2019									
4/3/2019				8.4				24.7 (J)	2.8
6/12/2019									
9/24/2019	2.3		15.8					25.8	2.5
9/25/2019		22.4		9.5	1.1	1.1	29.5		
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020	2.1					1.1			
3/19/2020		21.9	15		1.2		31.5		
3/24/2020								26.1	2.5
3/25/2020				10.5					

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	YGWC-45	GWA-2 (bg)	YGWC-44
6/1/2016									
6/2/2016									
6/6/2016	6.2	1.4							
6/7/2016			2.3	2.2	3.7				
7/25/2016									
7/26/2016									
7/27/2016	4.73	1.19	2.08	2					
7/28/2016					3.15				
8/30/2016						20.9			
8/31/2016							46.7	9.31	27.3
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		1.5		1.97					
9/19/2016	4.76		1.97		3.17				
11/1/2016									
11/2/2016			2.13						
11/3/2016	5.25	1.31		1.99	3.4				
11/4/2016									
11/14/2016						18.6	50.6		
11/15/2016									27.8
11/16/2016									
11/28/2016								9.47 (B)	
12/15/2016									
1/10/2017									
1/11/2017	4.74	1.25		2.28					
1/12/2017									
1/13/2017			2.45		4.98				
1/16/2017									
2/21/2017									
2/22/2017								10.4	
2/24/2017						16.1			
2/27/2017							49.4		
2/28/2017									26.4
3/1/2017	5.37	1.26							
3/2/2017				2.15					
3/3/2017									
3/6/2017			2.48		6.28				
3/7/2017									
3/8/2017									
4/26/2017	4.28	1.05	2.3		6.65				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017				1.95					
5/8/2017						14.6		14.2	29.9
5/9/2017							56		
5/26/2017									
6/27/2017									
6/28/2017	4.95	1.06							
6/29/2017			2.54	2.02	6.04				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016				
6/2/2016				
6/6/2016				
6/7/2016				
7/25/2016				
7/26/2016				
7/27/2016				
7/28/2016				
8/30/2016				
8/31/2016				
9/1/2016	96.8			
9/13/2016				
9/14/2016		23.5		
9/15/2016				
9/16/2016				
9/19/2016				
11/1/2016				
11/2/2016				
11/3/2016				
11/4/2016		23.7		
11/14/2016				
11/15/2016				
11/16/2016	107			
11/28/2016				
12/15/2016		23.1		
1/10/2017				
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017		23.3		
2/21/2017				
2/22/2017				
2/24/2017				
2/27/2017	104			
2/28/2017				
3/1/2017				
3/2/2017				
3/3/2017		25.1		
3/6/2017				
3/7/2017				
3/8/2017				
4/26/2017				
4/27/2017				
4/28/2017		30.7		
5/1/2017				
5/2/2017				
5/8/2017	103			
5/9/2017				
5/26/2017		26.2		
6/27/2017				
6/28/2017		26.1		
6/29/2017				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/30/2017				
7/11/2017				
7/13/2017	83.7			
7/17/2017				
10/3/2017		26.7		
10/4/2017				
10/5/2017				
10/10/2017				
10/11/2017	69		2.74	
10/12/2017				2.9
10/16/2017				
11/20/2017			1.81	10.4
1/10/2018				10.2
1/11/2018			1.54	
2/19/2018				<25
2/20/2018			1.71	
4/2/2018				
4/3/2018			1.4	6.3
4/4/2018	51.9			
6/5/2018				
6/6/2018				
6/7/2018		25		
6/8/2018				
6/11/2018				
6/28/2018			1.4	6.7
8/6/2018				
8/7/2018			1.2	6.3
9/19/2018	51.9			
9/24/2018			1.1	5.7
9/25/2018				
9/26/2018				
10/1/2018		25		
10/2/2018				
2/25/2019				
3/26/2019				5.6
3/27/2019	54.2		1.5	
3/28/2019				
3/29/2019		23.5 (J)		
4/1/2019				
4/2/2019				
4/3/2019				
6/12/2019				
9/24/2019		26.4		
9/25/2019				
9/26/2019				
10/8/2019				
10/9/2019	64.2		2.4	4.9
3/17/2020	70.4			
3/18/2020				
3/19/2020		27.4		
3/24/2020				4.8
3/25/2020			2.7	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/1/2016	1.6	1.3	1.3						
6/2/2016				3.7	1.9	4.1	1.4	7.2	4.3
6/6/2016									
6/7/2016									
7/25/2016	1.4	1.3			1.7				
7/26/2016			1.2	3.6		4	1.6	6.6	4.4
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	1.3		1.1						
9/14/2016		1.3		3.4				6.6	3.8
9/15/2016						4.2	1.5		
9/16/2016									
9/19/2016					1.6				
11/1/2016		1.4	1.3		1.8		1.7		
11/2/2016				4.5		4.9		7.6	
11/3/2016									
11/4/2016	1.6								4.8
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017						4.1			
1/11/2017		1.1	1.1				1.2		
1/12/2017								6.8	3.8
1/13/2017				4.2					
1/16/2017	1.4				1.7				
2/21/2017					1.7				
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017		1.1							
3/2/2017	1.3		1				1.2		
3/3/2017									
3/6/2017				3.6					
3/7/2017								6.8	4.5
3/8/2017						4.2			
4/26/2017		1.1			1.7	4.1	1.2		
4/27/2017	1.3		1						
4/28/2017									
5/1/2017				4.3				7.2	
5/2/2017									4.6
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	1.4		1.1					7	4.3
6/28/2017		1.2					1.3		
6/29/2017				4.2					

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/30/2017					1.8	3.7			
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	1.7		1.1					6.5	4.2
10/4/2017		1.2			1.8		1.5		
10/5/2017				4.7		3.8			
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018			1.1						
6/6/2018	1.4							4.7	
6/7/2018				4.4			1.2		4.5
6/8/2018		1.2				3.4			
6/11/2018					2				
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018				4.8				4.8	5.1
10/1/2018	1.4	1.2	1.1			3.8	1.5		
10/2/2018					1.8				
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	1.5		1.4						
3/29/2019						4.2			
4/1/2019		1.1			1.7		1.2		
4/2/2019									
4/3/2019				4.3				4	4.2
6/12/2019									
9/24/2019	1.3		1.1					3.7	4.5
9/25/2019		1.1		4.5	1.6	4.8	1.1		
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020	1.4					5.2			
3/19/2020		1.1	1.1		1.8		1.2		
3/24/2020								3.5	4.3
3/25/2020				3.9					

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	YGWC-45	GWA-2 (bg)	YGWC-44
6/1/2016									
6/2/2016									
6/6/2016	6.8	6.4							
6/7/2016			1.9	4.5	2.8				
7/25/2016									
7/26/2016									
7/27/2016	6.7	6.2	1.9	4.5					
7/28/2016					2.6				
8/30/2016						5.2			
8/31/2016							5.8	4	13
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		6.1		4.5					
9/19/2016	7		1.9		2.4				
11/1/2016									
11/2/2016			2.6						
11/3/2016	7.5	7.4		5.4	2.9				
11/4/2016									
11/14/2016						6.4	5.8		
11/15/2016									14
11/16/2016									
11/28/2016								4.2	
12/15/2016									
1/10/2017									
1/11/2017	6.5	6.1		4.7					
1/12/2017									
1/13/2017			2.3		2.5				
1/16/2017									
2/21/2017									
2/22/2017								3.7	
2/24/2017						5.5			
2/27/2017							5		
2/28/2017									12
3/1/2017	6.9	6							
3/2/2017				4.8					
3/3/2017									
3/6/2017			1.9		2.1				
3/7/2017									
3/8/2017									
4/26/2017	7	6.5	2		2.1				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017				4.6					
5/8/2017						5.8		4.2	13
5/9/2017							4.6		
5/26/2017									
6/27/2017									
6/28/2017	7	6.4							
6/29/2017			2.6	4.5	2.8				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016				
6/2/2016				
6/6/2016				
6/7/2016				
7/25/2016				
7/26/2016				
7/27/2016				
7/28/2016				
8/30/2016				
8/31/2016				
9/1/2016	37			
9/13/2016				
9/14/2016		1.1		
9/15/2016				
9/16/2016				
9/19/2016				
11/1/2016				
11/2/2016				
11/3/2016				
11/4/2016		1.4		
11/14/2016				
11/15/2016				
11/16/2016	37			
11/28/2016				
12/15/2016		2.9		
1/10/2017				
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017		0.98		
2/21/2017				
2/22/2017				
2/24/2017				
2/27/2017	33			
2/28/2017				
3/1/2017				
3/2/2017				
3/3/2017		1.1		
3/6/2017				
3/7/2017				
3/8/2017				
4/26/2017				
4/27/2017				
4/28/2017		0.91		
5/1/2017				
5/2/2017				
5/8/2017	33			
5/9/2017				
5/26/2017		0.93		
6/27/2017				
6/28/2017		1		
6/29/2017				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/30/2017				
7/11/2017				
7/13/2017	32			
7/17/2017				
10/3/2017		1.2		
10/4/2017				
10/5/2017				
10/10/2017				
10/11/2017	29		2.4	
10/12/2017				3.8
10/16/2017				
11/20/2017			1.8	4.4
1/10/2018				4.6
1/11/2018			1.6	
2/19/2018				4.6
2/20/2018			2	
4/2/2018				
4/3/2018			3.3	5.9
4/4/2018	26.6			
6/5/2018				
6/6/2018				
6/7/2018		1		
6/8/2018				
6/11/2018				
6/28/2018			2.1	5
8/6/2018				
8/7/2018			1.2	4.3
9/19/2018	26.5			
9/24/2018			1.3	4.9
9/25/2018				
9/26/2018				
10/1/2018		1.1		
10/2/2018				
2/25/2019				
3/26/2019				4.4
3/27/2019	20.9		1.4	
3/28/2019				
3/29/2019		1.2		
4/1/2019				
4/2/2019				
4/3/2019				
6/12/2019				
9/24/2019		0.95 (J)		
9/25/2019				
9/26/2019				
10/8/2019				
10/9/2019	25		2.1	5.1
3/17/2020	24.8			
3/18/2020				
3/19/2020		0.97 (J)		
3/24/2020				4.7
3/25/2020			1.9	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44	GWA-2 (bg)
6/1/2016									
6/2/2016									
6/6/2016	<0.3	<0.3							
6/7/2016			<0.3	<0.3	<0.3				
7/25/2016									
7/26/2016									
7/27/2016	<0.3	<0.3	<0.3	<0.3					
7/28/2016					0.02 (J)				
8/30/2016						0.09 (J)			
8/31/2016							0.11 (J)	<0.3	0.14 (J)
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		<0.3		<0.3					
9/19/2016	<0.3		<0.3		0.02 (J)				
11/1/2016									
11/2/2016			<0.3						
11/3/2016	<0.3	<0.3		<0.3	<0.3				
11/4/2016									
11/14/2016						0.18 (J)	0.71		
11/15/2016								0.12 (J)	
11/16/2016									
11/28/2016									0.12 (J)
12/15/2016									
1/10/2017									
1/11/2017	<0.3	<0.3		<0.3					
1/12/2017									
1/13/2017			<0.3		<0.3				
1/16/2017									
2/21/2017									
2/22/2017									0.09 (J)
2/24/2017						0.05 (J)			
2/27/2017							0.22 (J)		
2/28/2017								0.07 (J)	
3/1/2017	<0.3	<0.3							
3/2/2017				<0.3					
3/3/2017									
3/6/2017			<0.3		<0.3				
3/7/2017									
3/8/2017									
4/26/2017	<0.3	<0.3	<0.3		0.04 (J)				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017				<0.3					
5/8/2017						0.03 (J)		0.04 (J)	0.05 (J)
5/9/2017							0.2 (J)		
5/26/2017									
6/27/2017									
6/28/2017	<0.3	<0.3							
6/29/2017			<0.3	<0.3	<0.3				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44	GWA-2 (bg)
6/30/2017									
7/11/2017						0.07 (J)			
7/13/2017							0.11 (J)	<0.3	
7/17/2017									0.14 (J)
10/3/2017					<0.3				
10/4/2017		<0.3	<0.3	<0.3					
10/5/2017	<0.3								
10/10/2017						<0.3	0.39	<0.3	
10/11/2017									
10/12/2017									
10/16/2017									0.12 (J)
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									0.17
2/20/2018									
3/27/2018									
3/28/2018	<0.3	<0.3		<0.3					
3/29/2018			<0.3		<0.3				
4/2/2018						<0.3			
4/3/2018							<0.3		
4/4/2018								<0.3	
6/5/2018					0.13 (J)				
6/6/2018			<0.3						
6/7/2018	<0.3								
6/8/2018									
6/11/2018		<0.3		<0.3					
6/28/2018									
8/6/2018									0.087 (J)
8/7/2018									
9/19/2018						<0.3	<0.3	<0.3	
9/24/2018									
9/25/2018	<0.3	<0.3	<0.3	<0.3	0 (J)				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019									0.14 (J)
2/26/2019									
2/27/2019									
3/4/2019									
3/5/2019		<0.3	<0.3	<0.3	0.32				
3/6/2019	<0.3								
3/26/2019									
3/27/2019						0.081 (J)	0.18 (J)	<0.3	
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				<0.3	0.12 (J)				
4/3/2019	<0.3	<0.3	<0.3						
6/12/2019									0.12 (J)
8/19/2019									<0.3
8/20/2019						<0.3	<0.3	<0.3	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016				
6/2/2016				
6/6/2016				
6/7/2016				
7/25/2016				
7/26/2016				
7/27/2016				
7/28/2016				
8/30/2016				
8/31/2016				
9/1/2016	0.08 (J)			
9/13/2016				
9/14/2016		0.08 (J)		
9/15/2016				
9/16/2016				
9/19/2016				
11/1/2016				
11/2/2016				
11/3/2016				
11/4/2016		<0.3		
11/14/2016				
11/15/2016				
11/16/2016	0.04 (J)			
11/28/2016				
12/15/2016		0.06 (J)		
1/10/2017				
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017		0.1 (J)		
2/21/2017				
2/22/2017				
2/24/2017				
2/27/2017	0.05 (J)			
2/28/2017				
3/1/2017				
3/2/2017				
3/3/2017		<0.3		
3/6/2017				
3/7/2017				
3/8/2017				
4/26/2017				
4/27/2017				
4/28/2017		0.06 (J)		
5/1/2017				
5/2/2017				
5/8/2017	0.004 (J)			
5/9/2017				
5/26/2017		0.09 (J)		
6/27/2017				
6/28/2017		0.11 (J)		
6/29/2017				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/30/2017				
7/11/2017				
7/13/2017	0.35			
7/17/2017				
10/3/2017		<0.3		
10/4/2017				
10/5/2017				
10/10/2017				
10/11/2017	<0.3		<0.3	
10/12/2017				<0.3
10/16/2017				
11/20/2017			<0.3	<0.3
1/10/2018				<0.3
1/11/2018			<0.3	
2/19/2018				<0.3
2/20/2018			0.23	
3/27/2018				
3/28/2018		0.31		
3/29/2018				
4/2/2018				
4/3/2018			<0.3	<0.3
4/4/2018	<0.3			
6/5/2018				
6/6/2018				
6/7/2018		0.11 (J)		
6/8/2018				
6/11/2018				
6/28/2018			<0.3	<0.3
8/6/2018				
8/7/2018			0.048 (J)	<0.3
9/19/2018	<0.3			
9/24/2018			<0.3	<0.3
9/25/2018				
9/26/2018				
10/1/2018		<0.3		
10/2/2018				
2/25/2019				
2/26/2019				
2/27/2019		0.12 (J)		
3/4/2019				
3/5/2019				
3/6/2019				
3/26/2019				<0.3
3/27/2019	0.12 (J)		<0.3	
3/28/2019				
3/29/2019		0.13 (J)		
4/1/2019				
4/2/2019				
4/3/2019				
6/12/2019				
8/19/2019				
8/20/2019				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
8/21/2019	<0.3		<0.3	<0.3
9/24/2019		0.081 (J)		
9/25/2019				
9/26/2019				
10/8/2019				
10/9/2019	0.12 (J)		<0.3	<0.3
2/10/2020				
2/11/2020		0.075 (J)		
2/12/2020				
3/17/2020	<0.3			
3/18/2020				
3/19/2020		0.093 (J)		
3/24/2020				<0.3
3/25/2020			<0.3	

Prediction Limit

Constituent: pH (S.U.) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-5I (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-4I (bg)
3/7/2017					5.66		7.43		
3/8/2017								5.41	
4/26/2017		7.4				7.45		5.02	
4/27/2017			6.09	6.99					
4/28/2017									
5/1/2017							7.22		6.21
5/2/2017					5.65				
5/8/2017	6.12								
5/9/2017									
5/26/2017									
6/27/2017			6.21	6.87	5.7		7.32		
6/28/2017		7.5				7.65			
6/29/2017									6.21
6/30/2017								5.39	
7/11/2017									
7/13/2017									
7/17/2017	6.03								
10/3/2017			5.98	6.81	5.79		7.48		
10/4/2017		7.45				7.49			
10/5/2017								5.49	6.16
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017	6.12								
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018	6.13								
2/20/2018									
3/27/2018			6.25					5.47	
3/28/2018		7.74				7.91			
3/29/2018				7.38	5.63		7.02		6.09
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018				7.16					
6/6/2018			6.17				7.43		
6/7/2018					5.63	7.69			6.12
6/8/2018		7.64						5.45	
6/11/2018									
6/28/2018									
8/6/2018	6.01								
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018					5.63		7.13		5.84
10/1/2018		7.47	5.9	6.8		7.39		5.39	
10/2/2018									
2/25/2019	6.51								
2/26/2019								5.46	
2/27/2019		7.54	5.8	6.84		7.55			

Prediction Limit

Constituent: pH (S.U.) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-44	YGWC-45
8/27/2008									
3/3/2009									
11/18/2009									
3/3/2010									
3/10/2011									
9/8/2011									
3/5/2012									
9/10/2012									
2/6/2013									
8/12/2013									
2/5/2014									
8/3/2015									
2/16/2016									
6/1/2016									
6/2/2016	5.75								
6/6/2016		5.71	6.17						
6/7/2016				5.62	6.1	5.77			
7/25/2016	5.82								
7/26/2016									
7/27/2016		5.46	6.14	5.59		5.79			
7/28/2016					6.12				
8/30/2016							5.75		
8/31/2016								6.01	7.15
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016				5.58					
9/19/2016	5.78 (D)	5.59	6.04		6.12	5.73			
11/1/2016	5.62								
11/2/2016						5.67			
11/3/2016		5.39	5.97	5.59	6.07				
11/4/2016									
11/14/2016							5.59		6.96
11/15/2016								5.91	
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017									
1/11/2017		5.48	6.05	5.59					
1/12/2017									
1/13/2017					6.41	5.79			
1/16/2017	5.72								
2/21/2017	5.67								
2/22/2017									
2/24/2017							5.49		
2/27/2017									6.79
2/28/2017								5.85	
3/1/2017		5.41	5.94						
3/2/2017				5.54					
3/3/2017									
3/6/2017					6.34	5.63			

Prediction Limit

Constituent: pH (S.U.) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
8/27/2008				
3/3/2009				
11/18/2009				
3/3/2010				
3/10/2011				
9/8/2011				
3/5/2012				
9/10/2012				
2/6/2013				
8/12/2013				
2/5/2014				
8/3/2015				
2/16/2016				
6/1/2016				
6/2/2016				
6/6/2016				
6/7/2016				
7/25/2016				
7/26/2016				
7/27/2016				
7/28/2016				
8/30/2016				
8/31/2016				
9/1/2016	6.19			
9/13/2016		7.41		
9/14/2016				
9/15/2016				
9/16/2016				
9/19/2016				
11/1/2016				
11/2/2016				
11/3/2016				
11/4/2016		7.12		
11/14/2016				
11/15/2016				
11/16/2016	6.05			
11/28/2016				
12/15/2016		7.24		
1/10/2017				
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017		7.24		
2/21/2017				
2/22/2017				
2/24/2017				
2/27/2017	6.01			
2/28/2017				
3/1/2017				
3/2/2017				
3/3/2017		7.22		
3/6/2017				

Prediction Limit

Constituent: pH (S.U.) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
3/7/2017				
3/8/2017				
4/26/2017				
4/27/2017				
4/28/2017		7.21		
5/1/2017				
5/2/2017				
5/8/2017	6.1			
5/9/2017				
5/26/2017		7.13		
6/27/2017				
6/28/2017		7.06		
6/29/2017				
6/30/2017				
7/11/2017				
7/13/2017	6.07			
7/17/2017				
10/3/2017		6.99		
10/4/2017				
10/5/2017				
10/10/2017				
10/11/2017	5.93		6.4	
10/12/2017				5.43
10/16/2017				
11/20/2017			6.33	5.1
1/10/2018				4.97
1/11/2018			6.29	
2/19/2018				5.6
2/20/2018			7.22	
3/27/2018				
3/28/2018		7.3		
3/29/2018				
4/2/2018				
4/3/2018			6.87	5.84
4/4/2018	6.01			
6/5/2018				
6/6/2018				
6/7/2018		7.29		
6/8/2018				
6/11/2018				
6/28/2018			6.18	5.24
8/6/2018				
8/7/2018			6.08	5.18
9/19/2018	6.09			
9/24/2018			5.81	5.14
9/25/2018				
9/26/2018				
10/1/2018		7.07		
10/2/2018				
2/25/2019				
2/26/2019				
2/27/2019		7.27		

Prediction Limit

Constituent: pH (S.U.) Analysis Run 7/27/2020 4:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
3/4/2019				
3/5/2019				
3/6/2019				
3/26/2019				5.3
3/27/2019	6.2		5.84	
3/28/2019				
3/29/2019		7.06		
4/1/2019				
4/2/2019				
4/3/2019				
6/12/2019				
8/19/2019				
8/20/2019				
8/21/2019	5.82		5.96	5.26
9/24/2019		7.01		
9/25/2019				
9/26/2019				
10/8/2019				
10/9/2019	5.96		5.81	5.22
2/10/2020				
2/11/2020		7.38		
2/12/2020				
3/17/2020	5.99			
3/18/2020				
3/19/2020		7.22		
3/24/2020				5.29
3/25/2020			5.78	
5/6/2020				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/1/2016	4.2	12	5						
6/2/2016				8	1.3	6.6	5.8	20	1.9
6/6/2016									
6/7/2016									
7/25/2016	3.7	8.4			1.2				
7/26/2016			5.4	7.7		6.1	6.7	20	1.8
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	5.2		2.9						
9/14/2016		8.6		7.5				19	1.8
9/15/2016						6.1	6		
9/16/2016									
9/19/2016					1.2				
11/1/2016		8.9	3.9		1.3		4.9		
11/2/2016				8.2		6.3		20	
11/3/2016									
11/4/2016	5								2
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017						5.9			
1/11/2017		8.6	3.7				4.5		
1/12/2017								19	1.9
1/13/2017				8.1					
1/16/2017	7.9				<1				
2/21/2017					1.4				
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017		9.3							
3/2/2017	7.4		4.6				4.4		
3/3/2017									
3/6/2017				8					
3/7/2017								20	2.1
3/8/2017						7			
4/26/2017		11			1.4	7	5.1		
4/27/2017	7.4		5.2						
4/28/2017									
5/1/2017				8.4				20	
5/2/2017									2
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	6.4		5.9					18	2.1
6/28/2017		12					5.4		
6/29/2017				9.2					

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/30/2017					<1	6.5			
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	5.9		6.6					16	2.3
10/4/2017		12			1.4		6.2		
10/5/2017				9.6		7.9			
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018			6.4						
6/6/2018	4.4							8.3	
6/7/2018				8.5			6.7		2
6/8/2018		9.6				6.4			
6/11/2018					1.1				
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018				10.2				7.9	2.3
10/1/2018	4	9.1	5.6			6.8	7.1		
10/2/2018					1				
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	4.3		8						
3/29/2019						7.3			
4/1/2019		8.5			0.96 (J)		7.2		
4/2/2019									
4/3/2019				8.5				7	2.1
6/12/2019									
9/24/2019	4.3		5.3					5.5	2.4
9/25/2019		13.8		8.5	0.81 (J)	6.6	7		
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020	5.3					8.1			
3/19/2020		12.9	10		1.6		9		
3/24/2020								5.9	2.1
3/25/2020				8.8					

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	YGWC-45	GWA-2 (bg)	YGWC-44
6/1/2016									
6/2/2016									
6/6/2016	1.2	1.8							
6/7/2016			<1	4.4	5.2				
7/25/2016									
7/26/2016									
7/27/2016	1.7	1.9	0.08 (J)	4.7					
7/28/2016					5.1				
8/30/2016						160			
8/31/2016							190	29	150
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		1.7		4.8					
9/19/2016	1.8		0.08 (J)		4.8				
11/1/2016									
11/2/2016			0.1 (J)						
11/3/2016	0.69 (J)	1.9		5.3	5				
11/4/2016									
11/14/2016						150	200		
11/15/2016									150
11/16/2016									
11/28/2016								36	
12/15/2016									
1/10/2017									
1/11/2017	<1	1.7		5.2					
1/12/2017									
1/13/2017			<1		4.3				
1/16/2017									
2/21/2017									
2/22/2017								43	
2/24/2017						120			
2/27/2017							190		
2/28/2017									130
3/1/2017	1.8	<1							
3/2/2017				5					
3/3/2017									
3/6/2017			<1		4.5				
3/7/2017									
3/8/2017									
4/26/2017	1.6	1.9	<1		4.9				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017				5					
5/8/2017						120		60	150
5/9/2017							190		
5/26/2017									
6/27/2017									
6/28/2017	<1	<1							
6/29/2017			<1	5.2	5.5				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016				
6/2/2016				
6/6/2016				
6/7/2016				
7/25/2016				
7/26/2016				
7/27/2016				
7/28/2016				
8/30/2016				
8/31/2016				
9/1/2016	770			
9/13/2016				
9/14/2016		9.4		
9/15/2016				
9/16/2016				
9/19/2016				
11/1/2016				
11/2/2016				
11/3/2016				
11/4/2016		13		
11/14/2016				
11/15/2016				
11/16/2016	780			
11/28/2016				
12/15/2016		1.8		
1/10/2017				
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017		11		
2/21/2017				
2/22/2017				
2/24/2017				
2/27/2017	650			
2/28/2017				
3/1/2017				
3/2/2017				
3/3/2017		8.8		
3/6/2017				
3/7/2017				
3/8/2017				
4/26/2017				
4/27/2017				
4/28/2017		10		
5/1/2017				
5/2/2017				
5/8/2017	770			
5/9/2017				
5/26/2017		12		
6/27/2017				
6/28/2017		11		
6/29/2017				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/30/2017				
7/11/2017				
7/13/2017	630			
7/17/2017				
10/3/2017		7.9		
10/4/2017				
10/5/2017				
10/10/2017				
10/11/2017	540		20	
10/12/2017				17
10/16/2017				
11/20/2017			24	71
1/10/2018				66
1/11/2018			23	
2/19/2018				57.2
2/20/2018			20.6	
4/2/2018				
4/3/2018			24.5	49.4
4/4/2018	430			
6/5/2018				
6/6/2018				
6/7/2018		8.8		
6/8/2018				
6/11/2018				
6/28/2018			22	43.8
8/6/2018				
8/7/2018			20.7	40.5
9/19/2018	395			
9/24/2018			21.2	39.7
9/25/2018				
9/26/2018				
10/1/2018		9.1		
10/2/2018				
2/25/2019				
3/26/2019				34.3
3/27/2019	437		17.7	
3/28/2019				
3/29/2019		9		
4/1/2019				
4/2/2019				
4/3/2019				
6/12/2019				
9/24/2019		9.1		
9/25/2019				
9/26/2019				
10/8/2019				
10/9/2019	<1		15	27.9
3/17/2020	439			
3/18/2020				
3/19/2020		12.4		
3/24/2020				25.2
3/25/2020			14.3	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/1/2016	54	150	120						
6/2/2016				96	36	46	130	160	66
6/6/2016									
6/7/2016									
7/25/2016	48	135			50				
7/26/2016			94	92		54	141	177	78
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	67		105						
9/14/2016		127		102				187	73
9/15/2016						54	153		
9/16/2016									
9/19/2016					35				
11/1/2016		75	44		<25		92		
11/2/2016				115		71		181	
11/3/2016									
11/4/2016	60								75
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017						45			
1/11/2017		148	107				159		
1/12/2017								202	86
1/13/2017				67					
1/16/2017	65				47				
2/21/2017					<25				
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017		182							
3/2/2017	61		98				117		
3/3/2017									
3/6/2017				159					
3/7/2017								257	108
3/8/2017						178			
4/26/2017		92			55	52	181		
4/27/2017	31		116						
4/28/2017									
5/1/2017				107				165	
5/2/2017									103
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	42		89					189	73
6/28/2017		126					169		
6/29/2017				79					

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/30/2017					42	45			
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	58		119					170	89
10/4/2017		147			31		141		
10/5/2017				95		40			
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018			127						
6/6/2018	96							151	
6/7/2018				90			95		142
6/8/2018		158				114			
6/11/2018					59				
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018				116				144	86
10/1/2018	60	138	117			50	165		
10/2/2018					57				
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	87		87						
3/29/2019						63			
4/1/2019		19 (J)			54		149		
4/2/2019									
4/3/2019				111				142	83
6/12/2019									
9/24/2019	54		124					129	79
9/25/2019		159		117	51	64	157		
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020	35					57			
3/19/2020		148	116		47		146		
3/24/2020								139	68
3/25/2020				146					

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	YGWC-45	GWA-2 (bg)	YGWC-44
6/1/2016									
6/2/2016									
6/6/2016	120	58							
6/7/2016			38	28	60				
7/25/2016									
7/26/2016									
7/27/2016	94	35	74	74					
7/28/2016					81				
8/30/2016						319			
8/31/2016							402	209	332
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		35		67					
9/19/2016	92		45		68				
11/1/2016									
11/2/2016			53						
11/3/2016	104	48		41	61				
11/4/2016									
11/14/2016						280	445		
11/15/2016									356
11/16/2016									
11/28/2016								102	
12/15/2016									
1/10/2017									
1/11/2017	133	95		104					
1/12/2017									
1/13/2017			46		76				
1/16/2017									
2/21/2017									
2/22/2017								164	
2/24/2017						162			
2/27/2017							346		
2/28/2017									483
3/1/2017	119	79							
3/2/2017				77					
3/3/2017									
3/6/2017			164		167				
3/7/2017									
3/8/2017									
4/26/2017	162	36	34		50				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017				142					
5/8/2017						194		145	296
5/9/2017							388		
5/26/2017									
6/27/2017									
6/28/2017	98	45							
6/29/2017			68	53	94				

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016				
6/2/2016				
6/6/2016				
6/7/2016				
7/25/2016				
7/26/2016				
7/27/2016				
7/28/2016				
8/30/2016				
8/31/2016				
9/1/2016	1240			
9/13/2016				
9/14/2016		152		
9/15/2016				
9/16/2016				
9/19/2016				
11/1/2016				
11/2/2016				
11/3/2016				
11/4/2016		148		
11/14/2016				
11/15/2016				
11/16/2016	1220			
11/28/2016				
12/15/2016		191		
1/10/2017				
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017		180		
2/21/2017				
2/22/2017				
2/24/2017				
2/27/2017	1060			
2/28/2017				
3/1/2017				
3/2/2017				
3/3/2017		156		
3/6/2017				
3/7/2017				
3/8/2017				
4/26/2017				
4/27/2017				
4/28/2017		130		
5/1/2017				
5/2/2017				
5/8/2017	1160			
5/9/2017				
5/26/2017		223		
6/27/2017				
6/28/2017		166		
6/29/2017				

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/27/2020 4:10 PM View: Appendix III
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/30/2017				
7/11/2017				
7/13/2017	996			
7/17/2017				
10/3/2017		153		
10/4/2017				
10/5/2017				
10/10/2017				
10/11/2017	835		68	
10/12/2017				74
10/16/2017				
11/20/2017			139	179
1/10/2018				140
1/11/2018			153	
2/19/2018				119
2/20/2018			87	
4/2/2018				
4/3/2018			85	106
4/4/2018	1470			
6/5/2018				
6/6/2018				
6/7/2018		146		
6/8/2018				
6/11/2018				
6/28/2018			88	112
8/6/2018				
8/7/2018			89	103
9/19/2018	702			
9/24/2018			82	107
9/25/2018				
9/26/2018				
10/1/2018		155		
10/2/2018				
2/25/2019				
3/26/2019				90
3/27/2019	641		75	
3/28/2019				
3/29/2019		150		
4/1/2019				
4/2/2019				
4/3/2019				
6/12/2019				
9/24/2019		146		
9/25/2019				
9/26/2019				
10/8/2019				
10/9/2019	809		119	98
3/17/2020	733			
3/18/2020				
3/19/2020		148		
3/24/2020				84
3/25/2020			158	

FIGURE E.

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:14 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	YGWA-47 (bg)	-2.542	-39	-34	Yes	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-211 (bg)	2.207	53	48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-14S (bg)	-0.05271	-60	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-46	-5.006	-49	-34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.2868	59	48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-1.02	-56	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-28.7	-50	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-46	-177.7	-38	-34	Yes	11	9.091	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.2314	52	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-17.01	-35	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-4I (bg)	0.3067	53	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-4.378	-68	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.1217	55	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	18.82	41	38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.261	51	48	Yes	14	0	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:14 PM

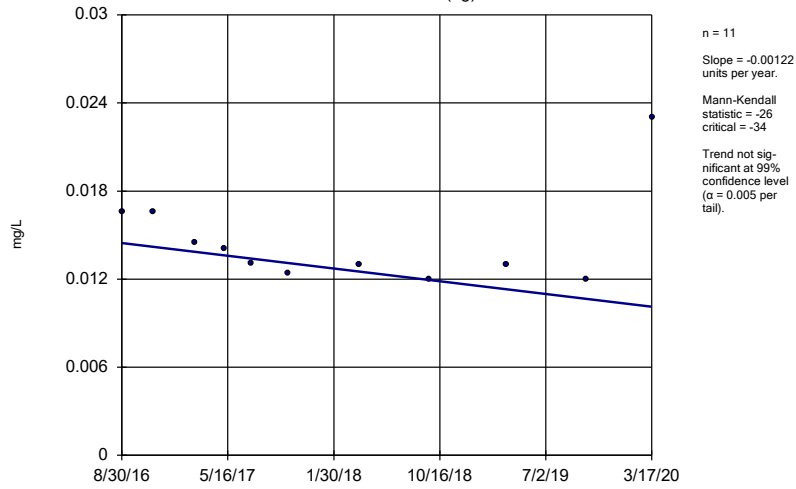
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-47 (bg)	-0.00122	-26	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-44	-0.02194	-10	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-45	0.01022	22	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-46	-0.3169	-32	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-17S (bg)	-0.0002523	-8	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-30	-48	No	14	78.57	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0003116	-11	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-5	-48	No	14	92.86	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-21I (bg)	-0.00632	-39	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-39 (bg)	0.002401	6	34	No	11	9.091	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.0315	-24	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	-15	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0006887	26	48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	0	-33	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-2 (bg)	0	9	38	No	12	58.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.002489	-37	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	-0.001025	-26	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-33	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	-26	-48	No	14	71.43	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-19	-48	No	14	85.71	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-13	-48	No	14	57.14	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-13	-48	No	14	92.86	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-2.542	-39	-34	Yes	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-45	-0.05415	-3	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-46	-15.18	-28	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.1071	40	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18I (bg)	0.01475	6	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.08778	-40	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-20S (bg)	0.1183	41	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	2.207	53	48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-39 (bg)	-0.23	-10	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-1.297	-28	-34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-4I (bg)	0.4896	40	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.47	-43	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5I (bg)	0.06941	26	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	3.705	38	38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-14S (bg)	-0.05271	-60	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	1.11	48	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1I (bg)	-0.1025	-37	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-2I (bg)	0.9579	31	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	-0.0134	-7	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3D (bg)	1.219	40	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.4381	18	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.5787	-26	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-44	0.4011	28	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-46	-5.006	-49	-34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.1415	47	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18I (bg)	0.03887	22	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18S (bg)	0.2113	30	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.2868	59	48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-21I (bg)	0	-3	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	-0.1659	-8	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.2865	17	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-4I (bg)	0.2116	33	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-1.02	-56	-48	Yes	14	0	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/27/2020, 4:14 PM

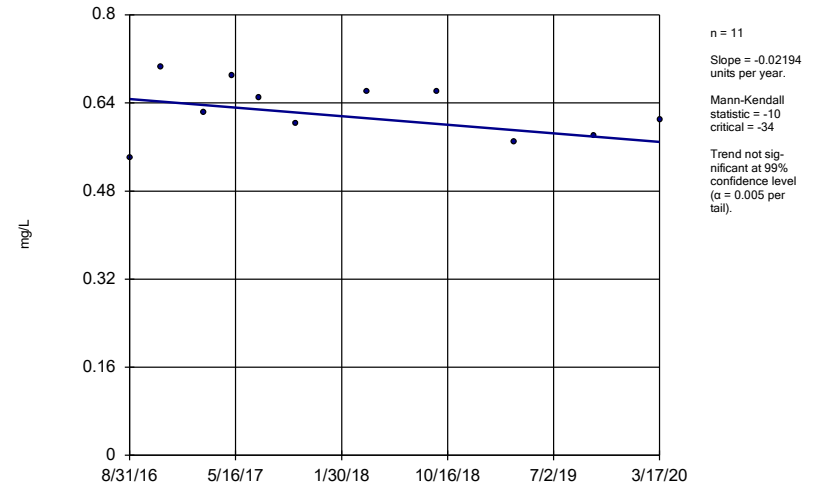
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	YGWA-5I (bg)	0.0316	9	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	0.2398	32	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0	6	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	0	-11	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	0	-5	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.03701	-16	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	0	4	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.07067	-33	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.04953	-37	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-28.7	-50	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-45	-5.075	-22	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-46	-177.7	-38	-34	Yes	11	9.091	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.2314	52	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.2926	-34	-48	No	14	21.43	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.2179	-38	-48	No	14	14.29	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	12	48	No	14	57.14	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.3724	-11	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.919	-27	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-17.01	-35	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-4I (bg)	0.3067	53	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-4.378	-68	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.1217	55	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	18.82	41	38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-14S (bg)	0.3425	40	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.261	51	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1I (bg)	-0.1237	-7	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0	0	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.05321	-7	-48	No	14	14.29	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.7245	46	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3I (bg)	0.6413	31	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-47 (bg)	-13.31	-33	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-44	-13.82	-23	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-45	-2.053	-3	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-46	-146.1	-33	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-17S (bg)	5.544	21	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18I (bg)	-2.555	-12	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18S (bg)	6.215	22	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-20S (bg)	7.597	35	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-21I (bg)	24.57	43	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-39 (bg)	4.803	7	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-40 (bg)	-19.81	-27	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-4I (bg)	7.969	29	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5D (bg)	-15	-45	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5I (bg)	1.982	11	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GWA-2 (bg)	12.21	15	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-14S (bg)	1.727	9	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1D (bg)	5.856	18	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1I (bg)	-0.6315	-3	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-2I (bg)	-3.471	-25	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-30I (bg)	4.021	23	48	No	14	14.29	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3D (bg)	4.214	14	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3I (bg)	1.372	6	48	No	14	0	n/a	n/a	0.01	NP

Sen's Slope Estimator
YGWA-47 (bg)



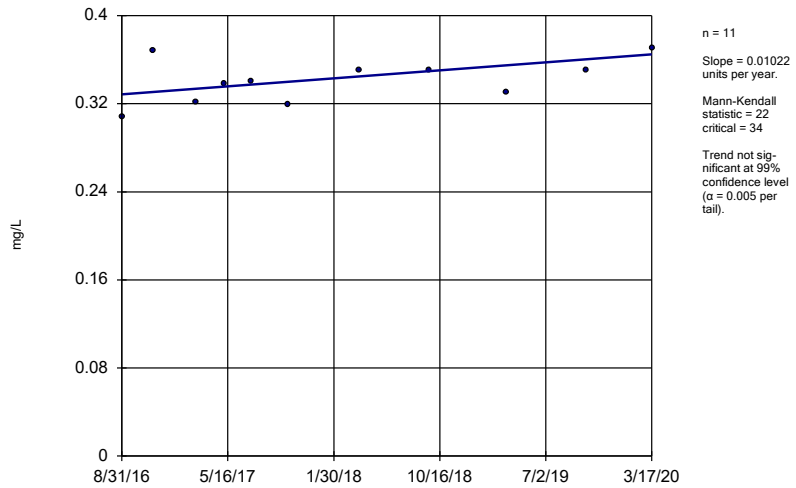
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWC-44



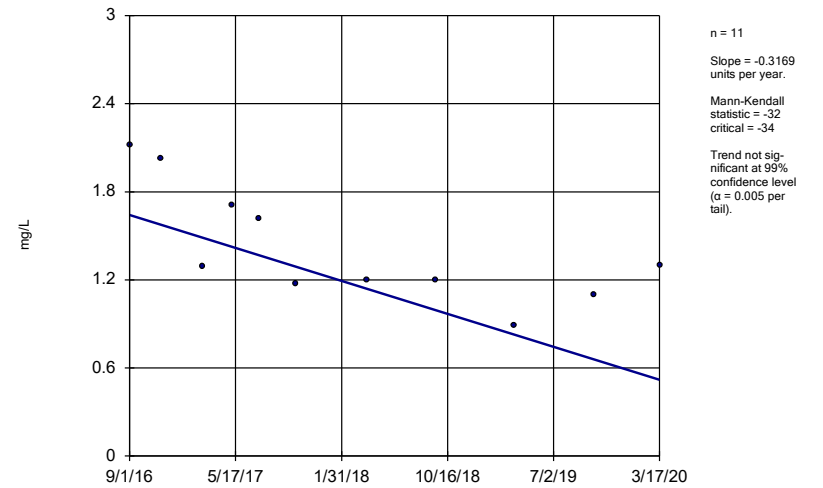
Constituent: Boron Analysis Run 7/27/2020 4:12 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWC-45



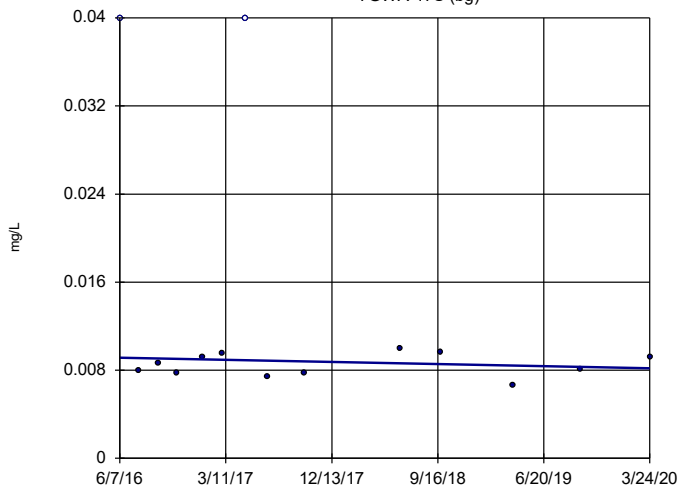
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Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWC-46



Constituent: Boron Analysis Run 7/27/2020 4:12 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

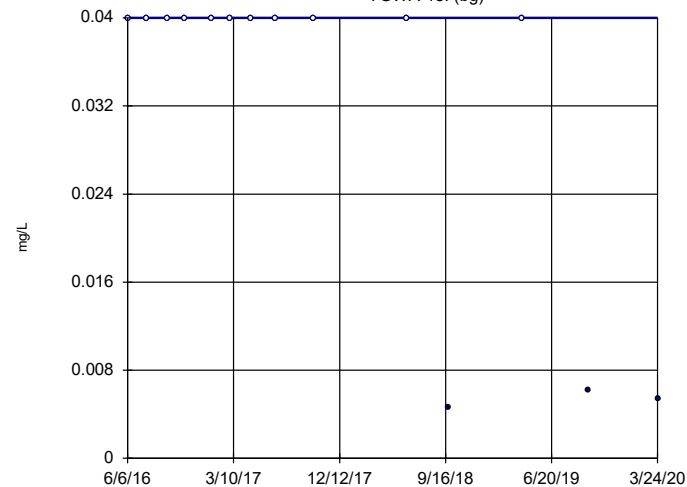
Sen's Slope Estimator YGWA-17S (bg)



n = 14
Slope = -0.0002523
units per year.
Mann-Kendall
statistic = -8
critical = -48
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

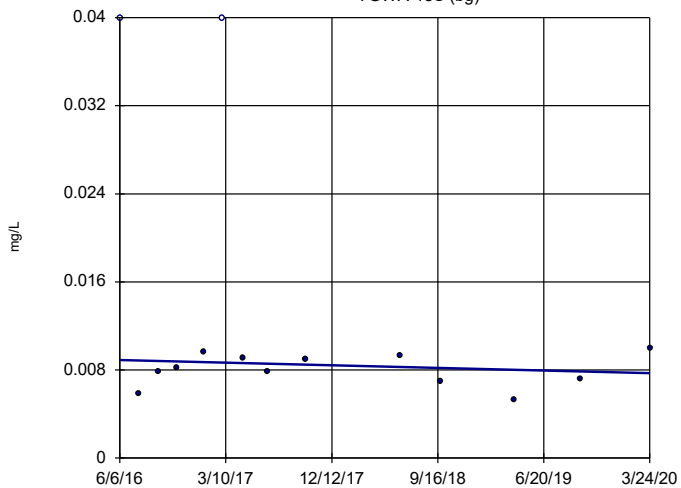
Sen's Slope Estimator YGWA-18I (bg)



n = 14
Slope = 0
units per year.
Mann-Kendall
statistic = -30
critical = -48
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

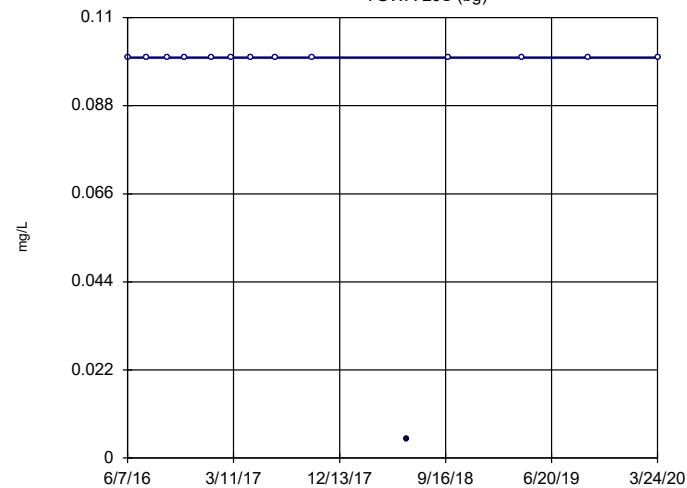
Sen's Slope Estimator YGWA-18S (bg)



n = 14
Slope = -0.0003116
units per year.
Mann-Kendall
statistic = -11
critical = -48
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

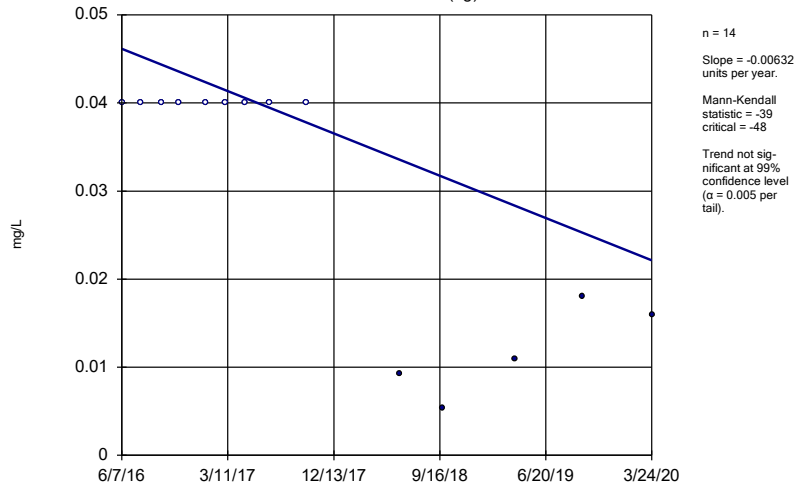
Sen's Slope Estimator YGWA-20S (bg)



n = 14
Slope = 0
units per year.
Mann-Kendall
statistic = -5
critical = -48
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

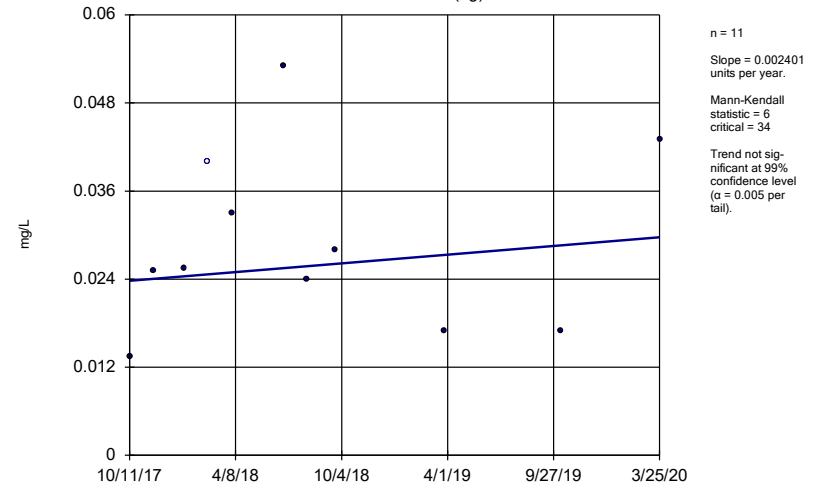
Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWA-21I (bg)



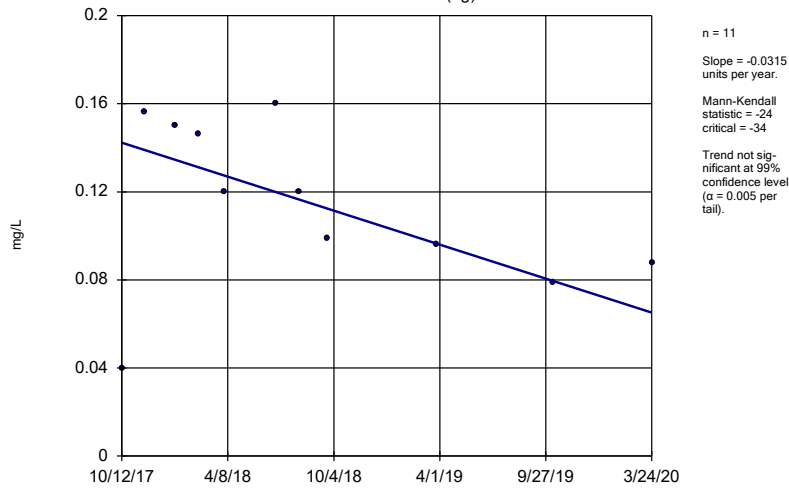
Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWA-39 (bg)



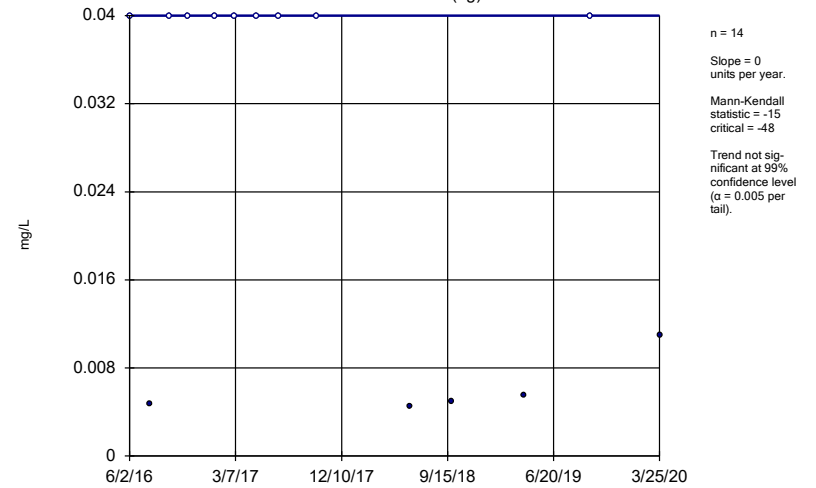
Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWA-40 (bg)



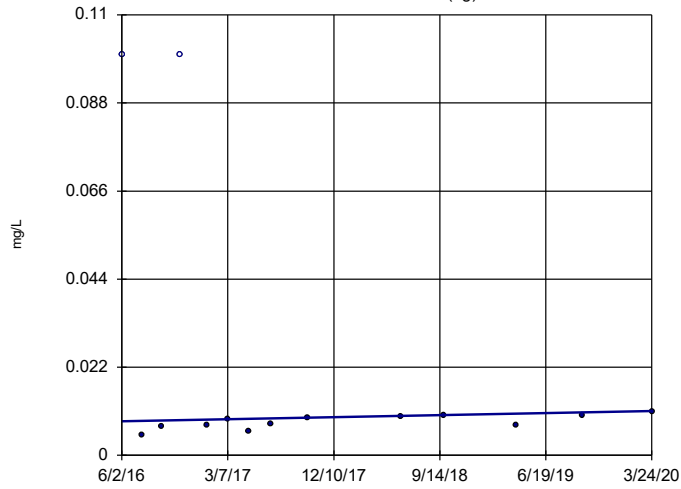
Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWA-4I (bg)



Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

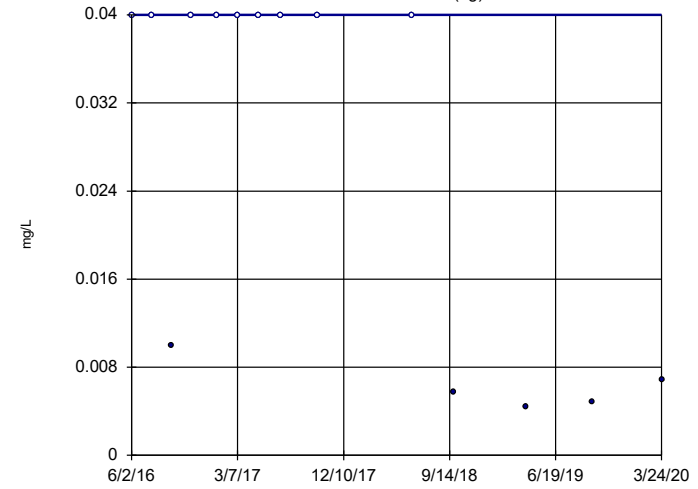
Sen's Slope Estimator
YGWA-5D (bg)



n = 14
Slope = 0.0006887 units per year.
Mann-Kendall statistic = 26 critical = 48
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

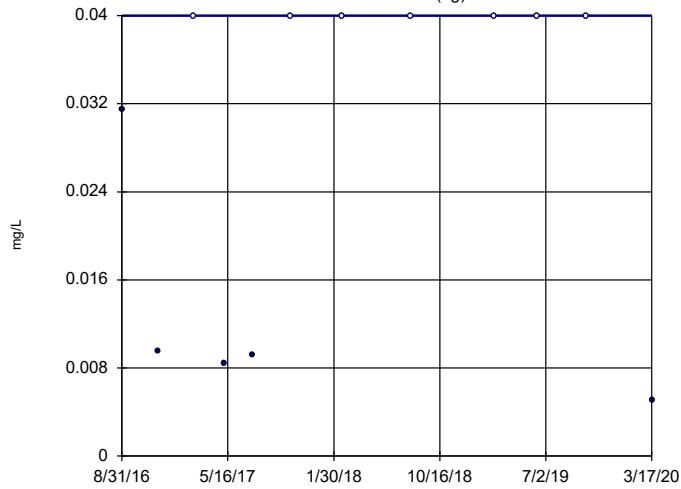
Sen's Slope Estimator
YGWA-5I (bg)



n = 14
Slope = 0 units per year.
Mann-Kendall statistic = -33 critical = -48
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

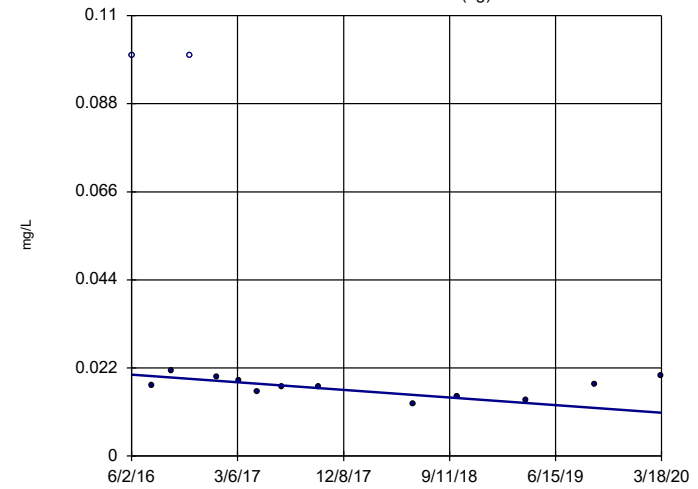
Sen's Slope Estimator
GWA-2 (bg)



n = 12
Slope = 0 units per year.
Mann-Kendall statistic = 9 critical = 38
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

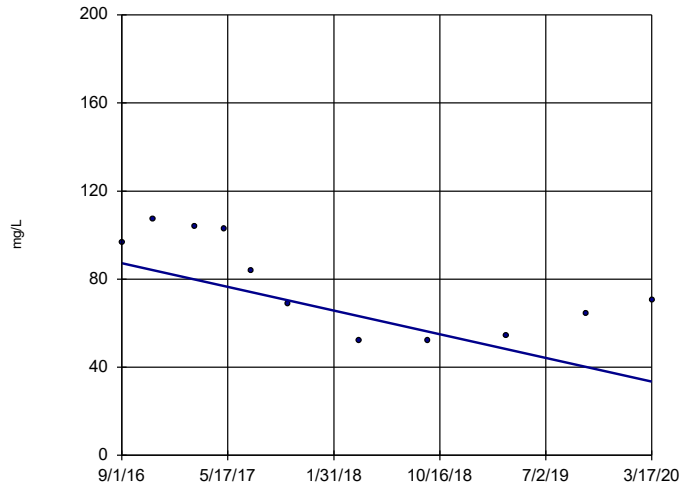
Sen's Slope Estimator
YGWA-14S (bg)



n = 14
Slope = -0.002489 units per year.
Mann-Kendall statistic = -37 critical = -48
Trend not significant at 99% confidence level (α = 0.005 per tail).

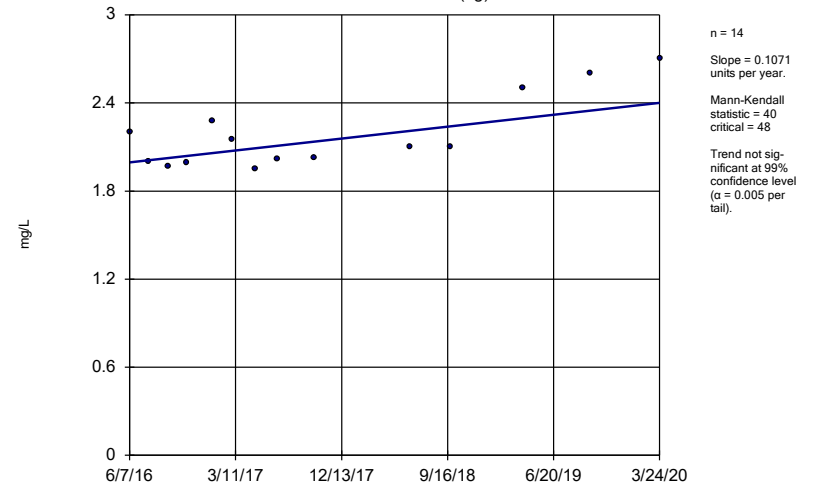
Constituent: Boron Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWC-46



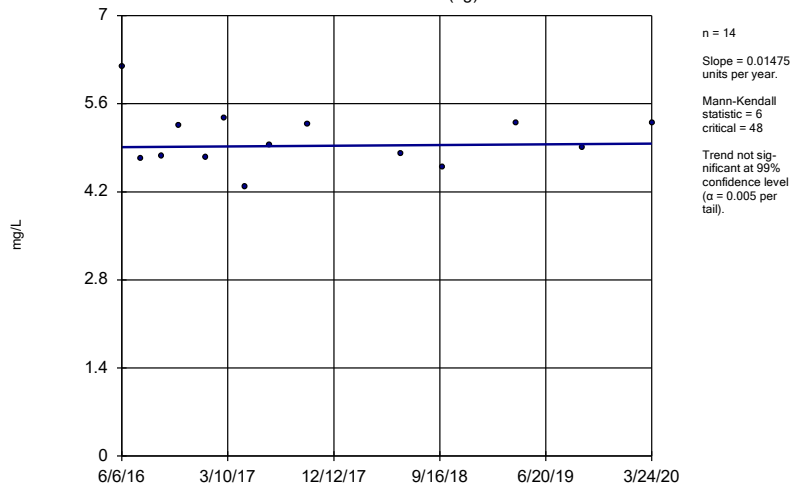
Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWA-17S (bg)



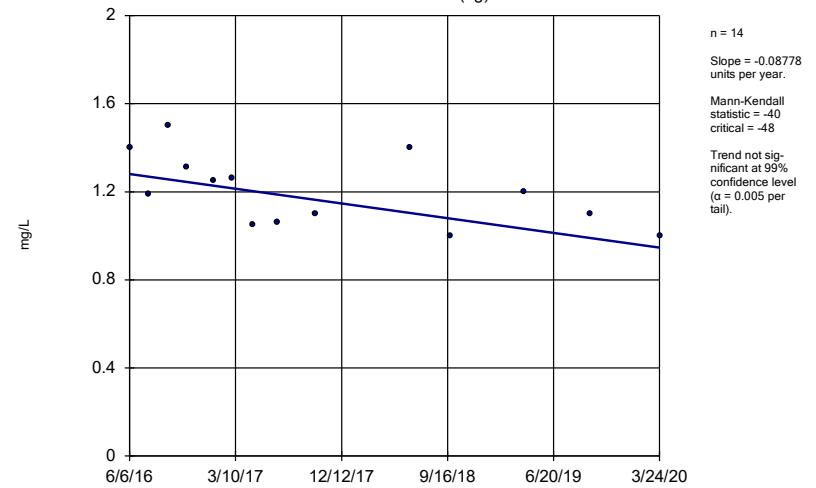
Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWA-18I (bg)



Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

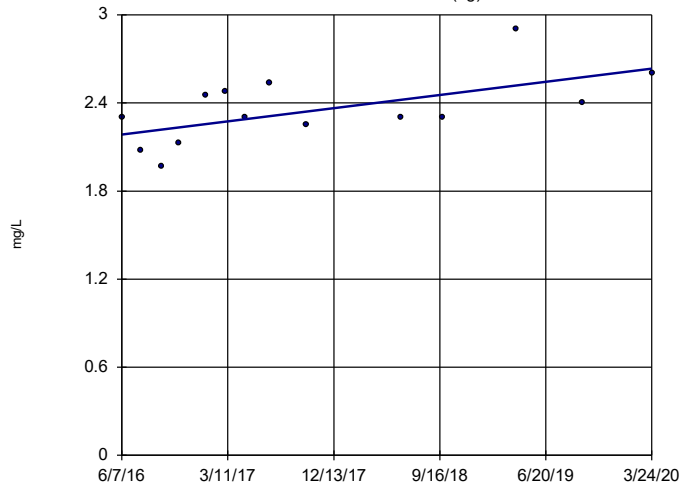
Sen's Slope Estimator
YGWA-18S (bg)



Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-20S (bg)

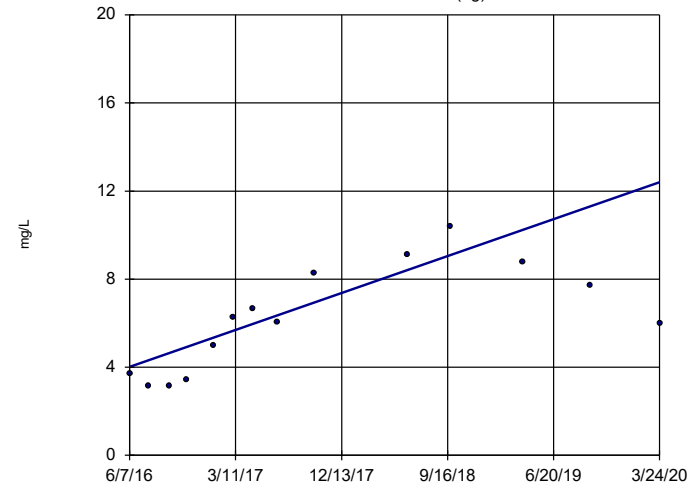


n = 14
 Slope = 0.1183 units per year.
 Mann-Kendall statistic = 41
 critical = 48
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-211 (bg)

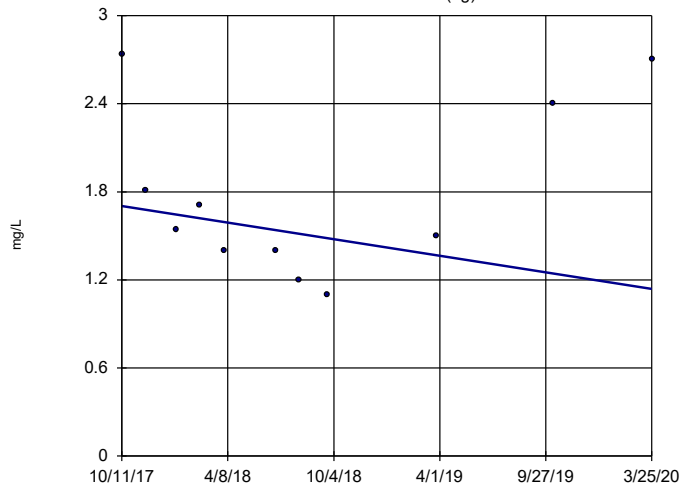


n = 14
 Slope = 2.207 units per year.
 Mann-Kendall statistic = 53
 critical = 48
 Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-39 (bg)

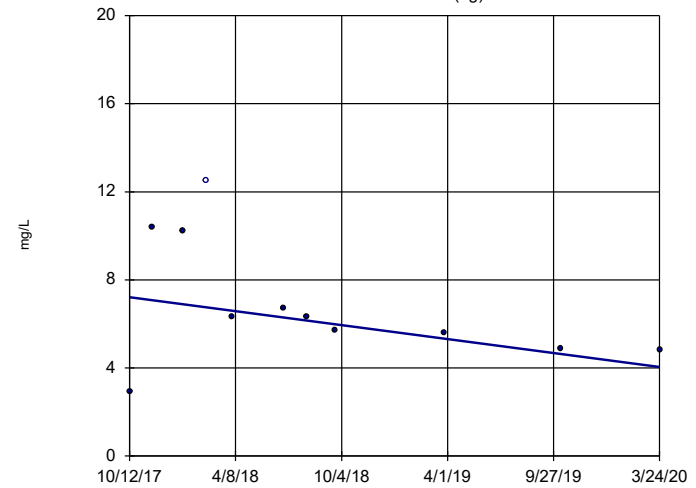


n = 11
 Slope = -0.23 units per year.
 Mann-Kendall statistic = -10
 critical = -34
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-40 (bg)

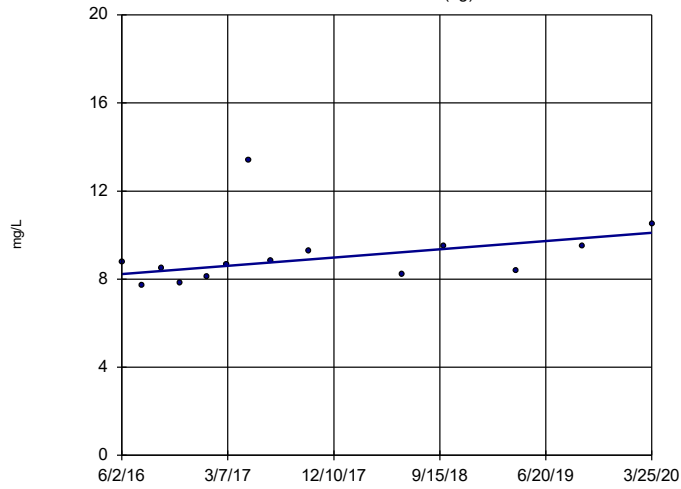


n = 11
 Slope = -1.297 units per year.
 Mann-Kendall statistic = -28
 critical = -34
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

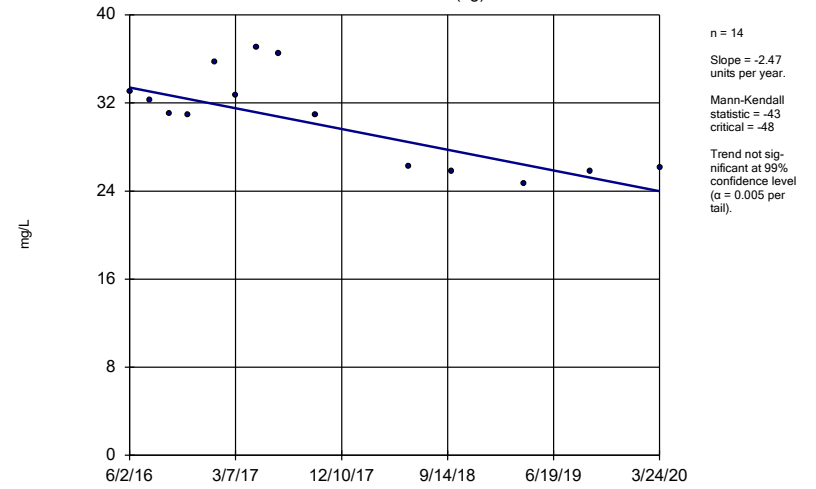
YGWA-4I (bg)



Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

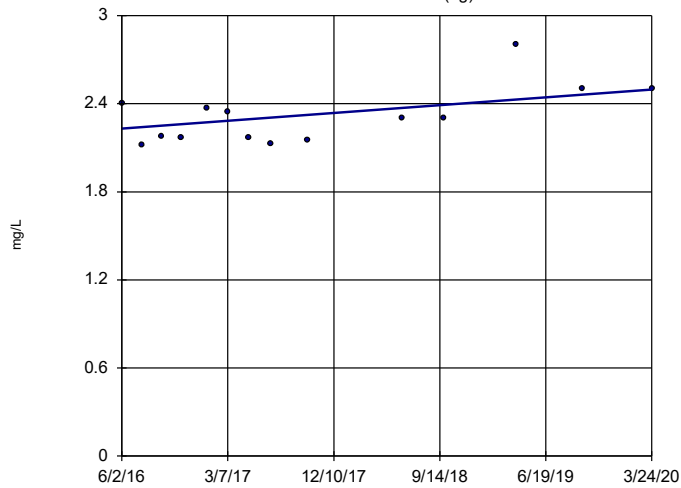
YGWA-5D (bg)



Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

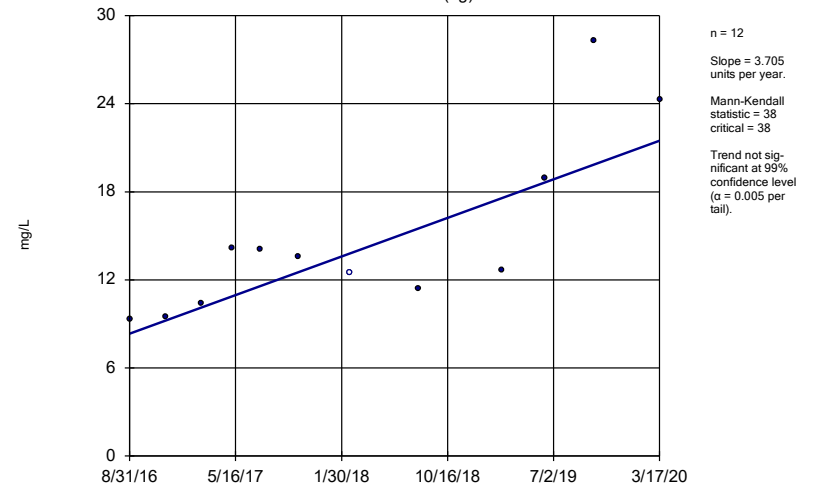
YGWA-5I (bg)



Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

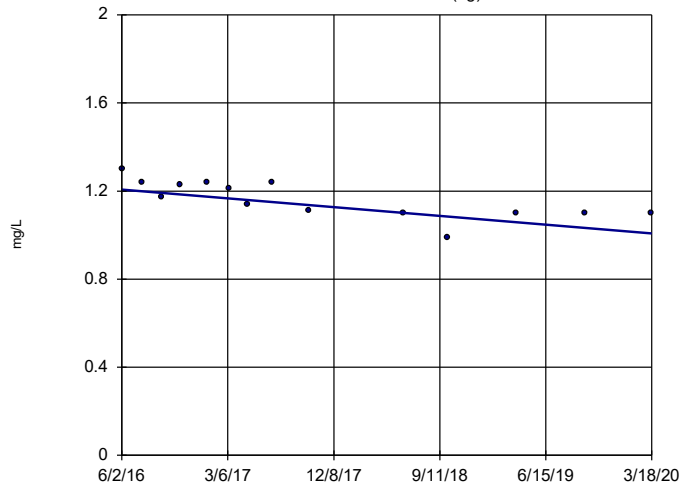
Sen's Slope Estimator

GWA-2 (bg)



Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

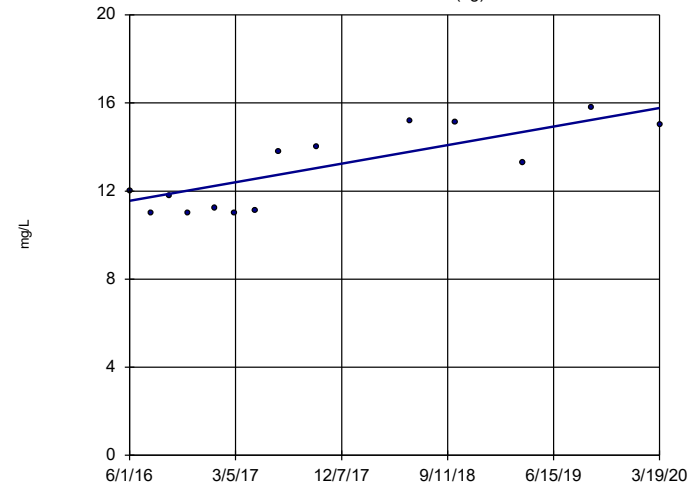
Sen's Slope Estimator YGWA-14S (bg)



n = 14
 Slope = -0.05271
 units per year.
 Mann-Kendall
 statistic = -60
 critical = -48
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

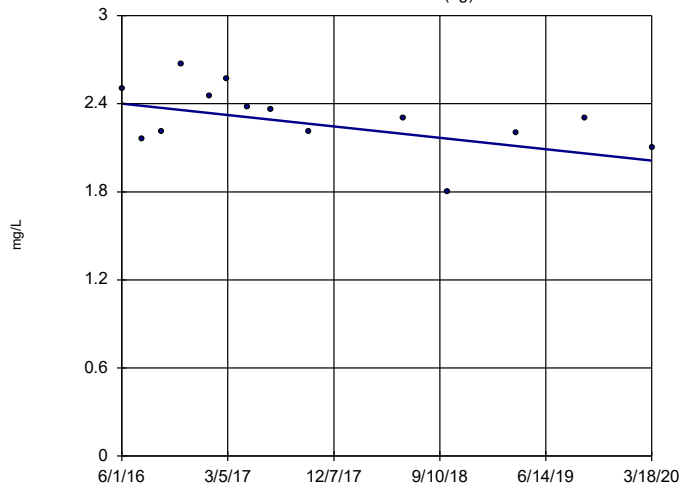
Sen's Slope Estimator YGWA-1D (bg)



n = 14
 Slope = 1.11
 units per year.
 Mann-Kendall
 statistic = 48
 critical = 48
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

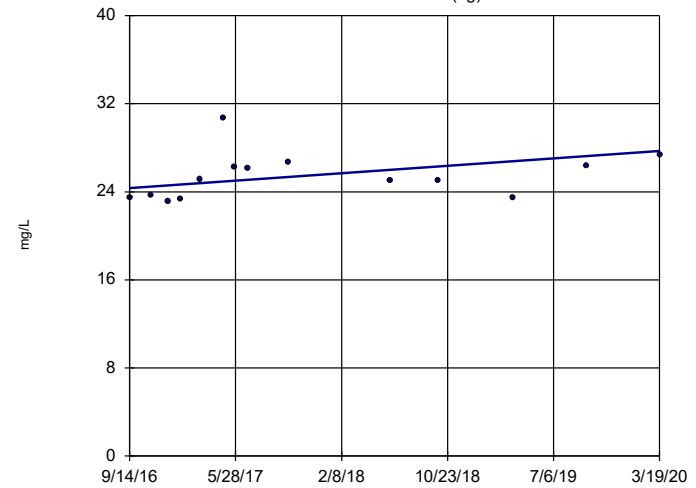
Sen's Slope Estimator YGWA-11 (bg)



n = 14
 Slope = -0.1025
 units per year.
 Mann-Kendall
 statistic = -37
 critical = -48
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator YGWA-2I (bg)

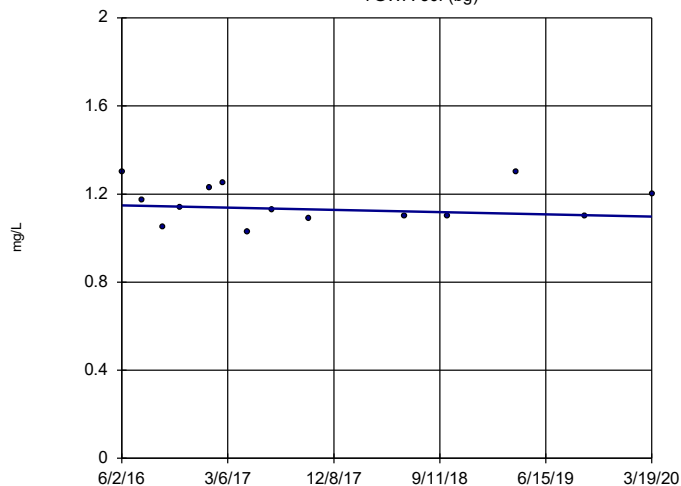


n = 14
 Slope = 0.9579
 units per year.
 Mann-Kendall
 statistic = 31
 critical = 48
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-30I (bg)

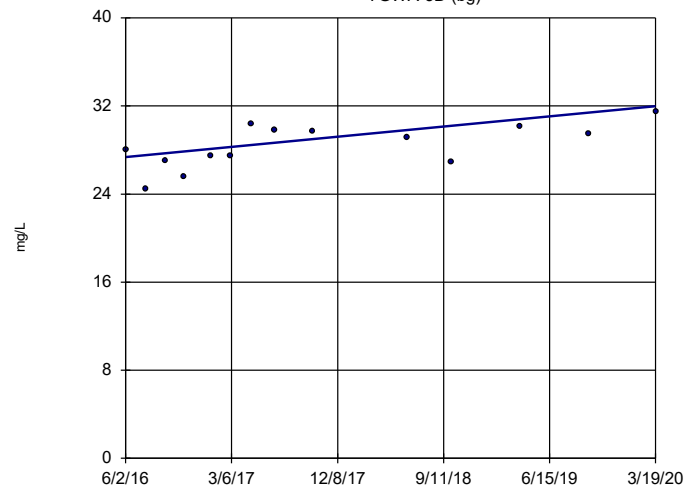


n = 14
 Slope = -0.0134 units per year.
 Mann-Kendall statistic = -7
 critical = -48
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-3D (bg)

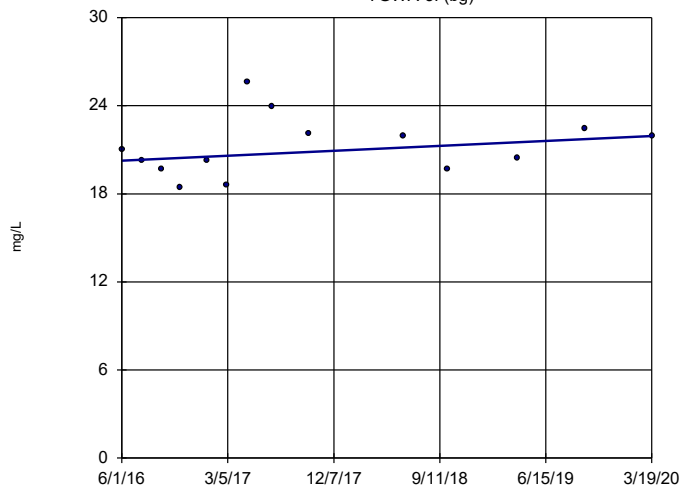


n = 14
 Slope = 1.219 units per year.
 Mann-Kendall statistic = 40
 critical = 48
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-3I (bg)

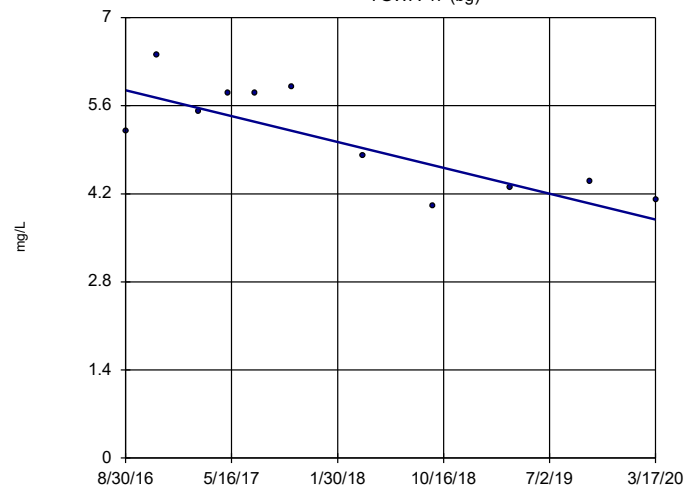


n = 14
 Slope = 0.4381 units per year.
 Mann-Kendall statistic = 18
 critical = 48
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

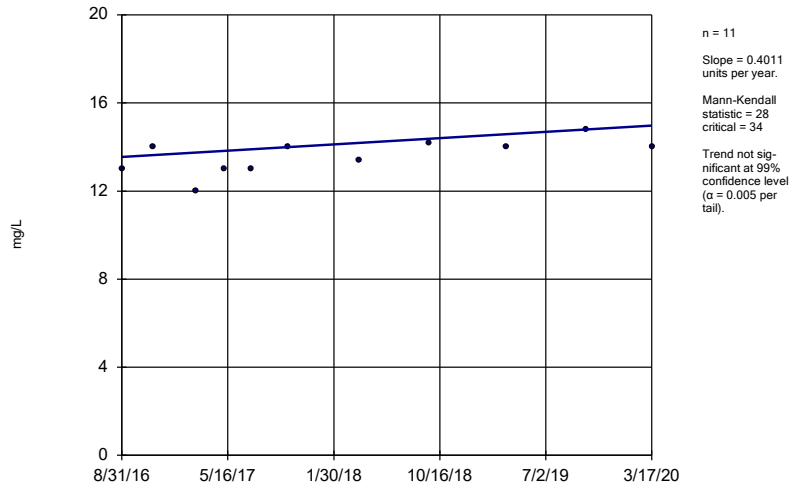
YGWA-47 (bg)



n = 11
 Slope = -0.5787 units per year.
 Mann-Kendall statistic = -26
 critical = -34
 Trend not significant at 99% confidence level (α = 0.005 per tail).

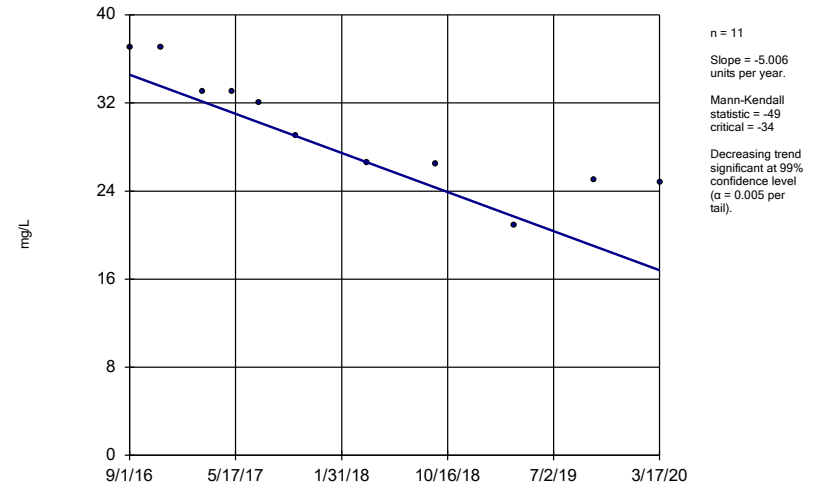
Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWC-44



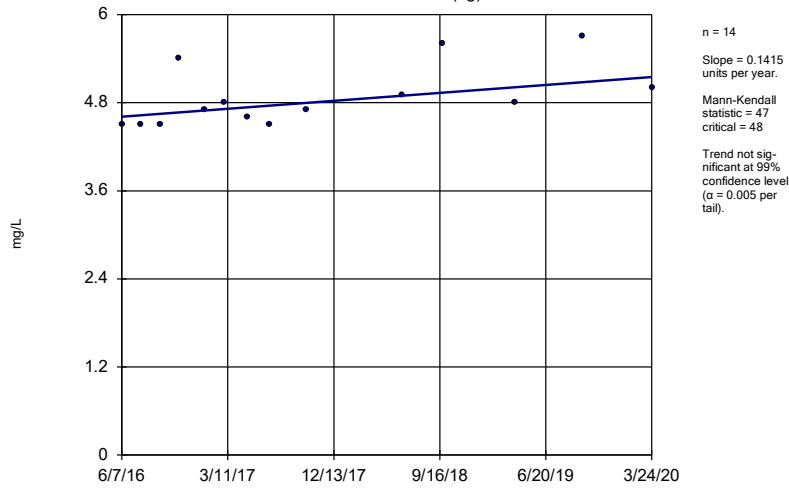
Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWC-46



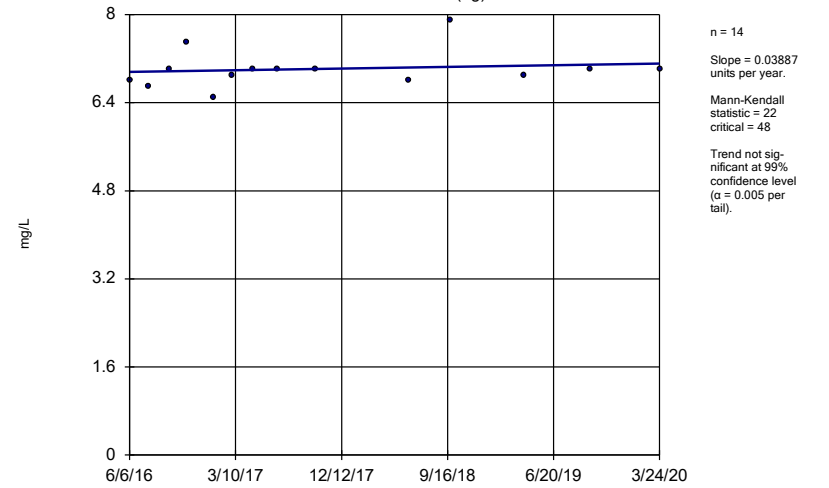
Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWA-17S (bg)



Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

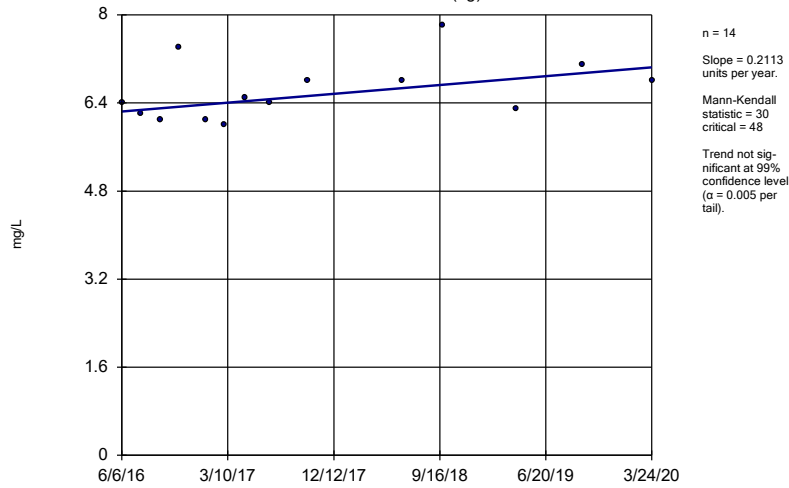
Sen's Slope Estimator
YGWA-18I (bg)



Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

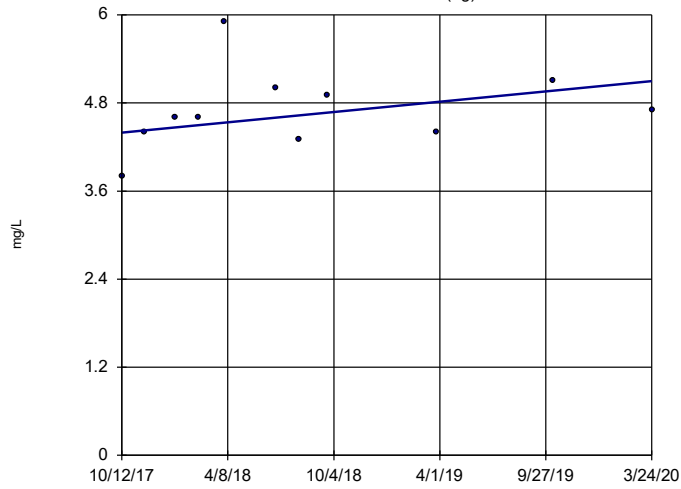
Sen's Slope Estimator

YGWA-18S (bg)



Sen's Slope Estimator

YGWA-40 (bg)

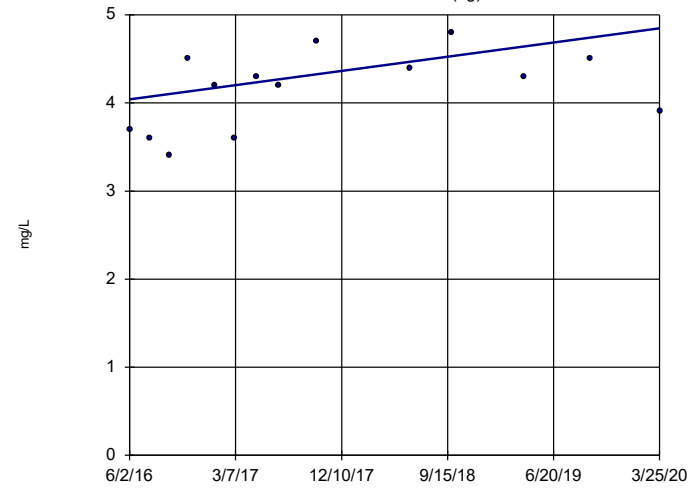


n = 11
 Slope = 0.2865 units per year.
 Mann-Kendall statistic = 17
 critical = 34
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-4I (bg)

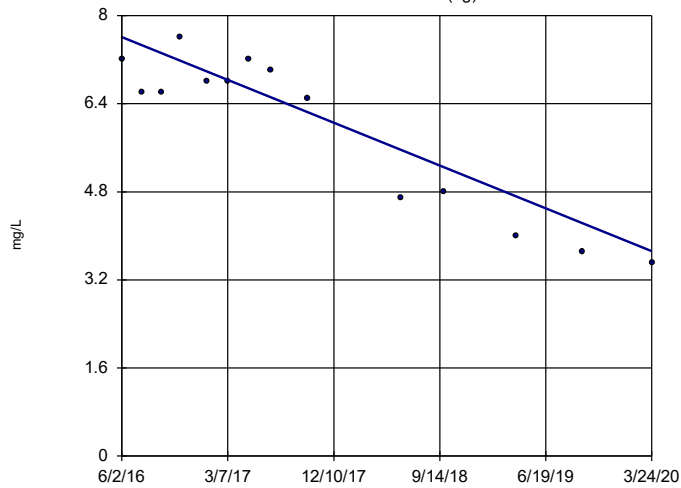


n = 14
 Slope = 0.2116 units per year.
 Mann-Kendall statistic = 33
 critical = 48
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-5D (bg)

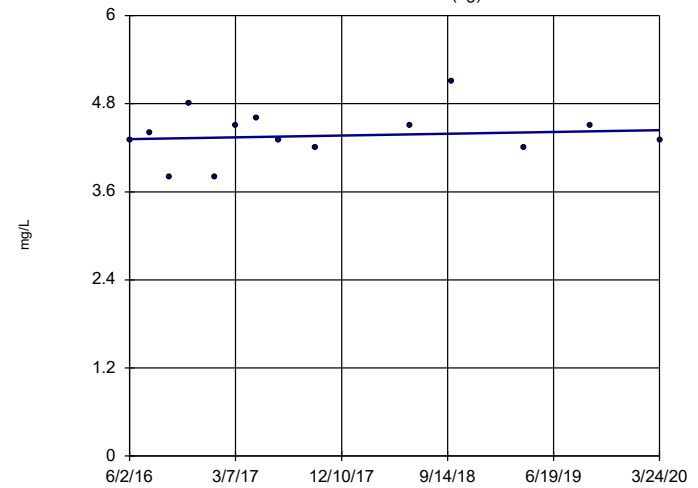


n = 14
 Slope = -1.02 units per year.
 Mann-Kendall statistic = -56
 critical = -48
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

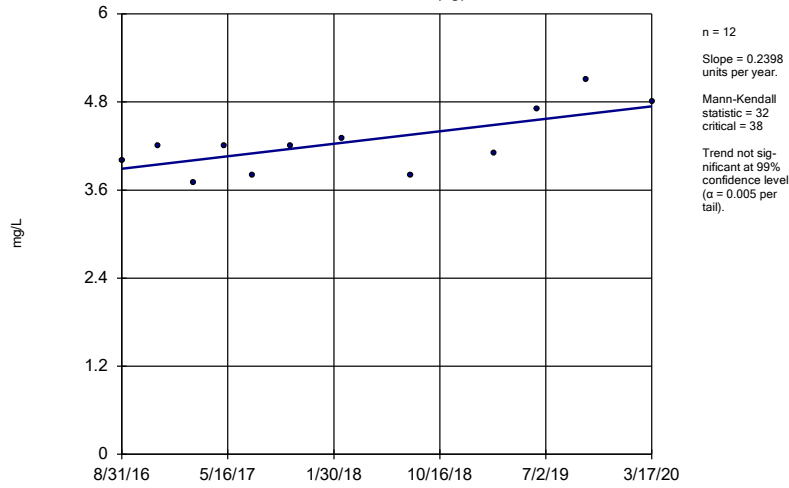
YGWA-5I (bg)



n = 14
 Slope = 0.0316 units per year.
 Mann-Kendall statistic = 9
 critical = 48
 Trend not significant at 99% confidence level (α = 0.005 per tail).

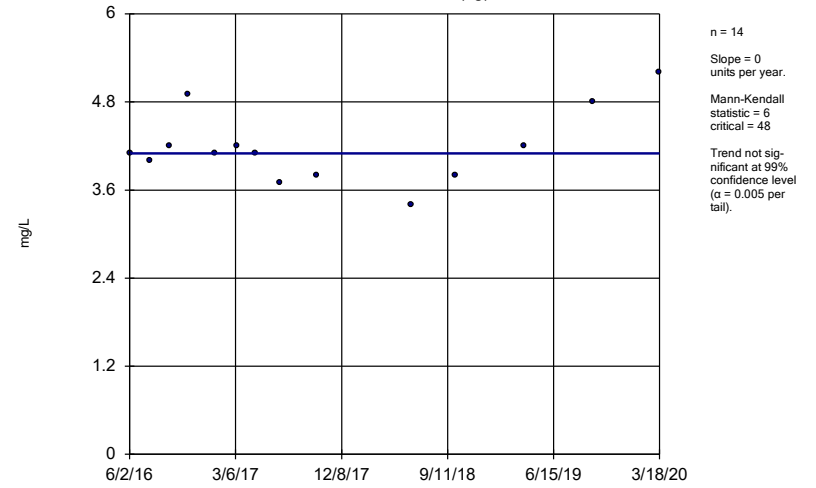
Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
GWA-2 (bg)



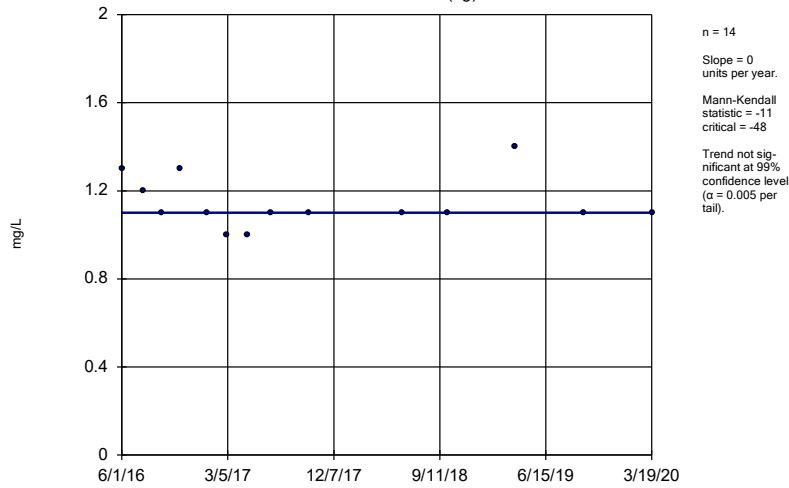
Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWA-14S (bg)



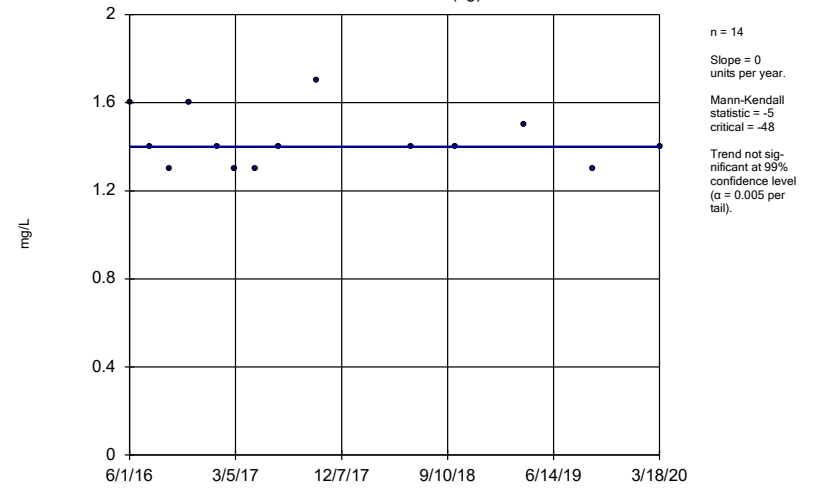
Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWA-1D (bg)



Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

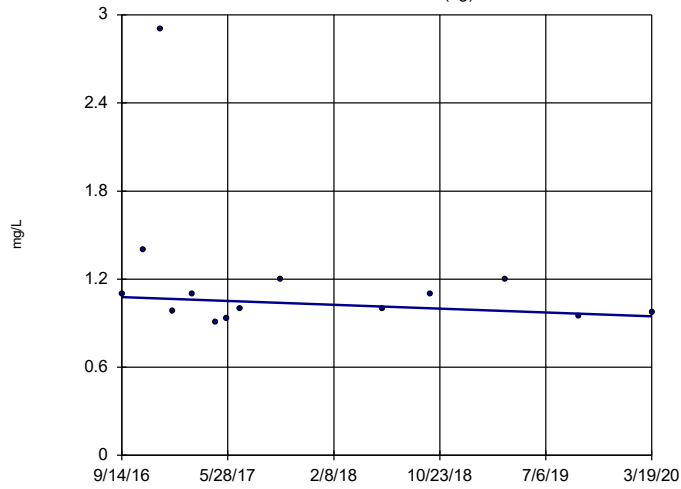
Sen's Slope Estimator
YGWA-1I (bg)



Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-2l (bg)

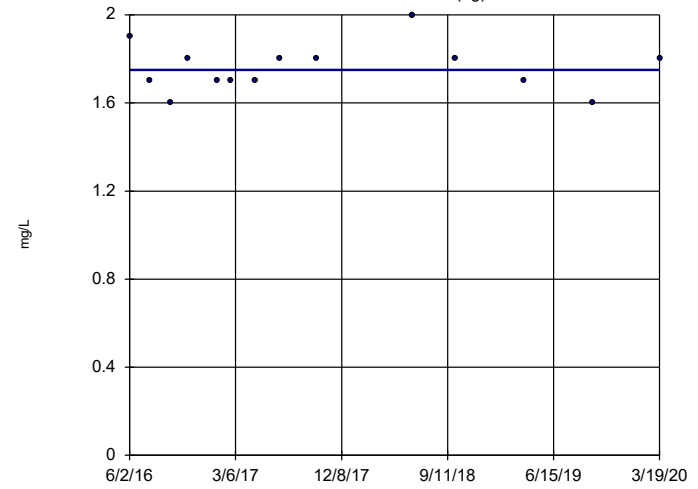


n = 14
 Slope = -0.03701
 units per year.
 Mann-Kendall
 statistic = -16
 critical = -48
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-30l (bg)

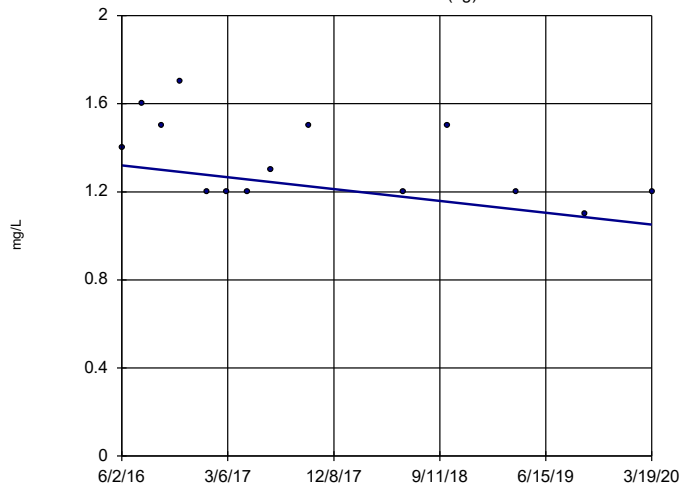


n = 14
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 4
 critical = 48
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-3D (bg)

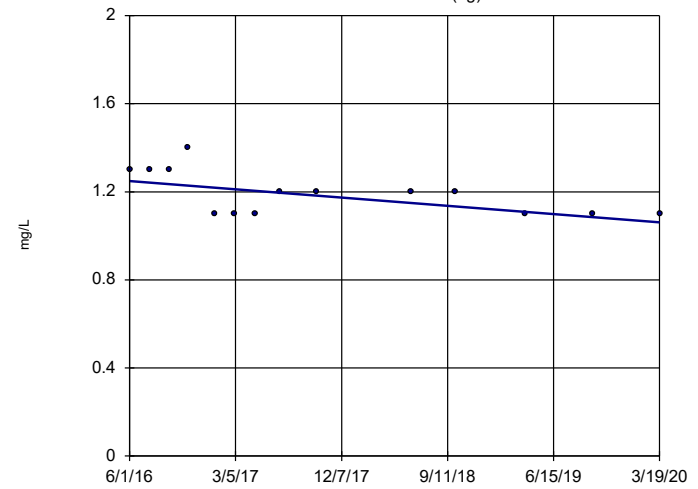


n = 14
 Slope = -0.07067
 units per year.
 Mann-Kendall
 statistic = -33
 critical = -48
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

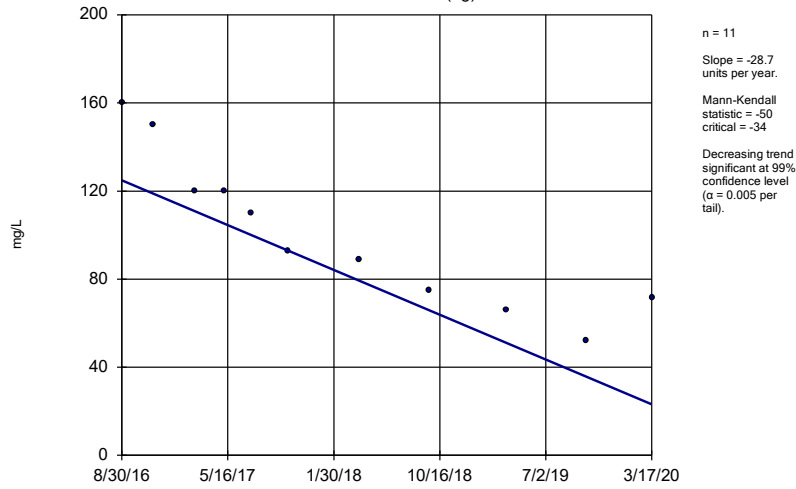
YGWA-3l (bg)



n = 14
 Slope = -0.04953
 units per year.
 Mann-Kendall
 statistic = -37
 critical = -48
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

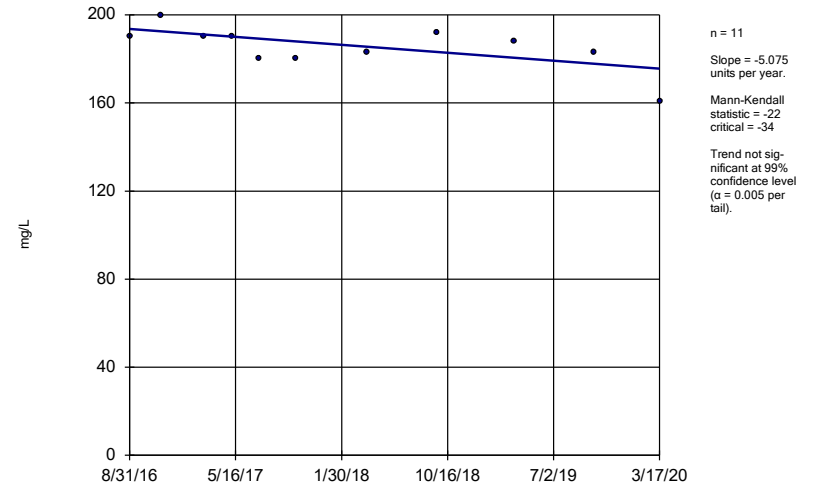
Constituent: Chloride Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWA-47 (bg)



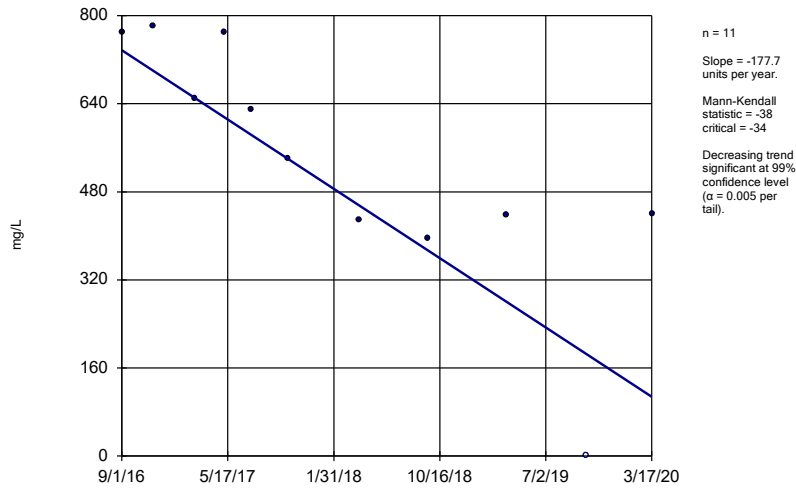
Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWC-45



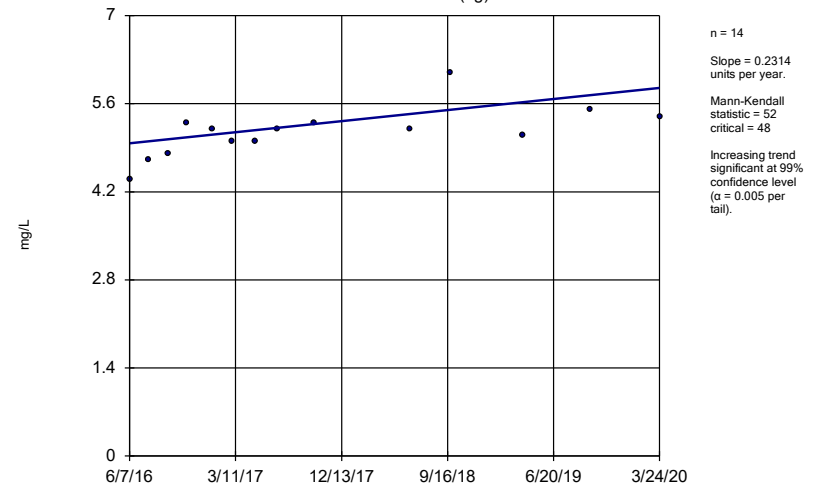
Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWC-46



Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

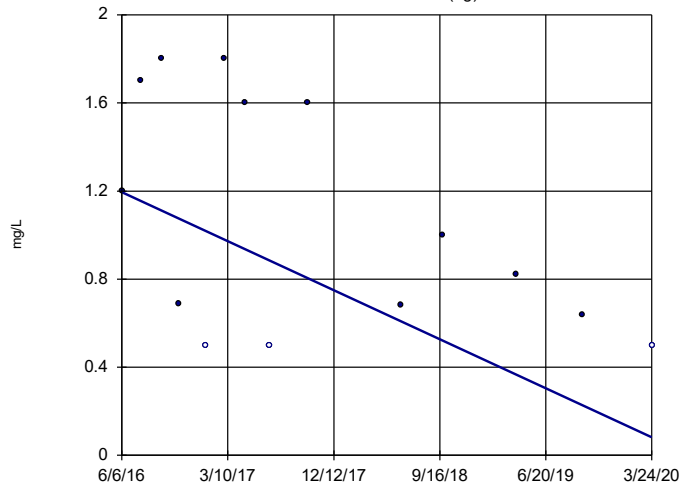
Sen's Slope Estimator
YGWA-17S (bg)



Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-18I (bg)

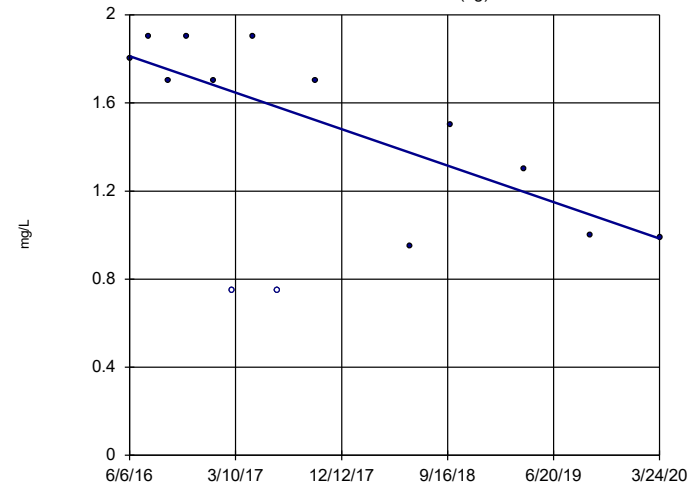


n = 14
Slope = -0.2926 units per year.
Mann-Kendall statistic = -34
critical = -48
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-18S (bg)

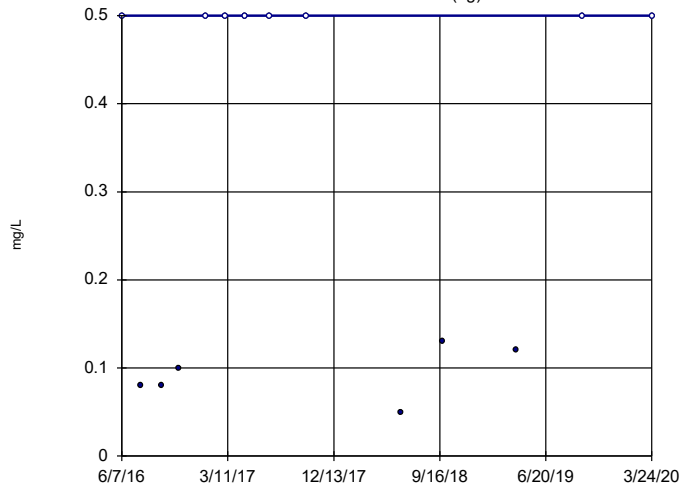


n = 14
Slope = -0.2179 units per year.
Mann-Kendall statistic = -38
critical = -48
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-20S (bg)

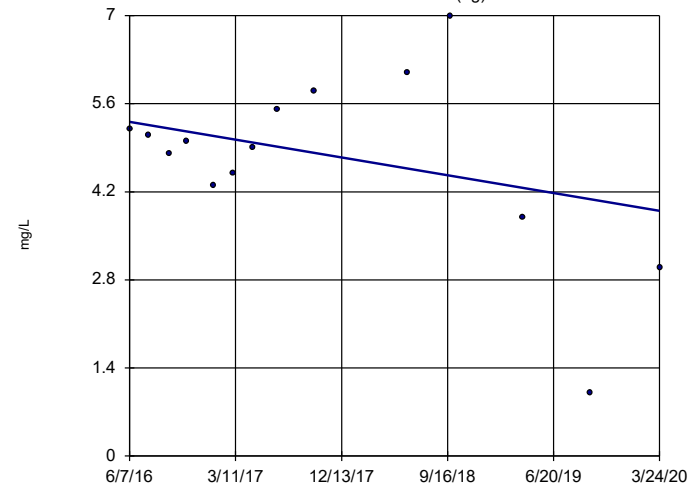


n = 14
Slope = 0 units per year.
Mann-Kendall statistic = 12
critical = 48
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-21I (bg)

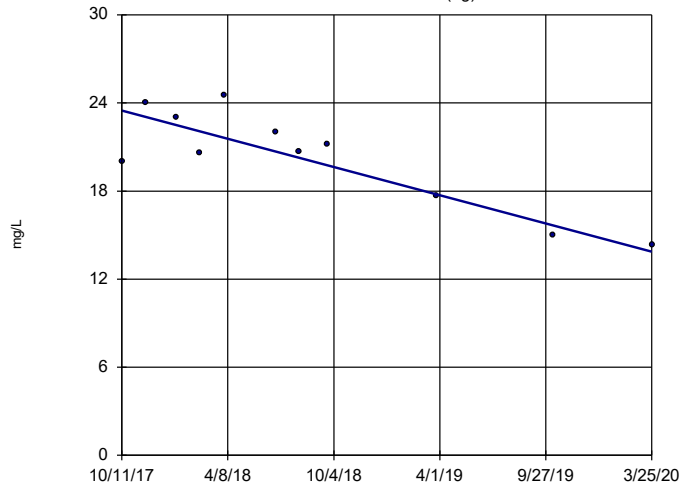


n = 14
Slope = -0.3724 units per year.
Mann-Kendall statistic = -11
critical = -48
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-39 (bg)

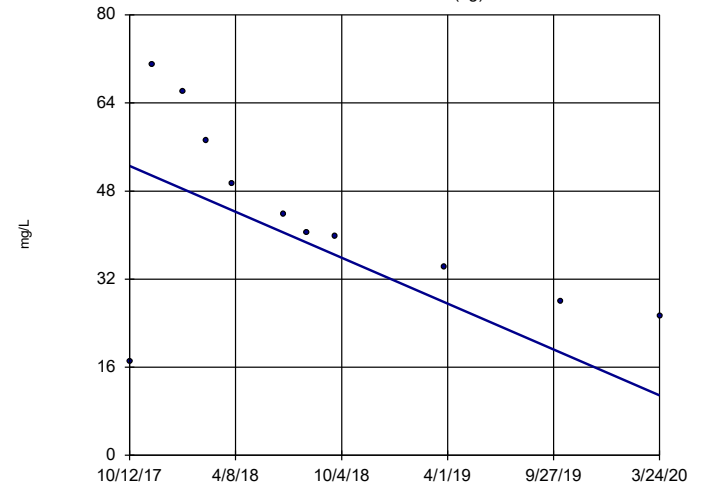


n = 11
 Slope = -3.919 units per year.
 Mann-Kendall statistic = -27
 critical = -34
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-40 (bg)

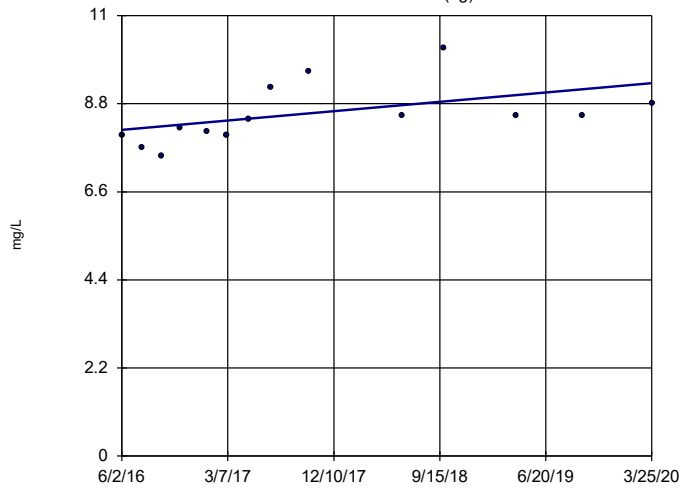


n = 11
 Slope = -17.01 units per year.
 Mann-Kendall statistic = -35
 critical = -34
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-41 (bg)

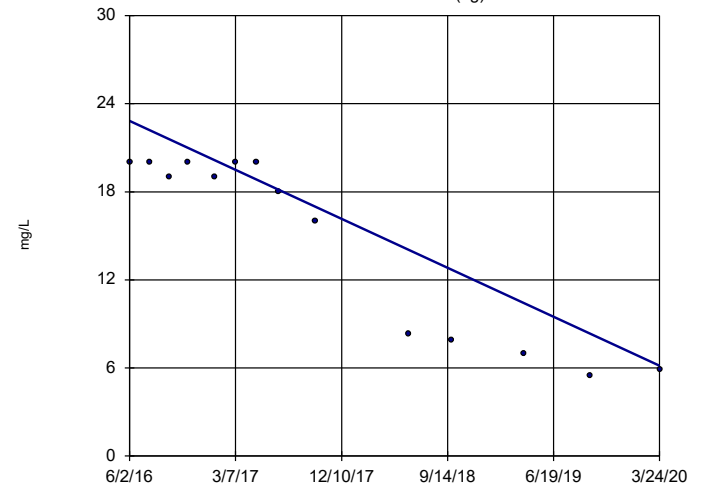


n = 14
 Slope = 0.3067 units per year.
 Mann-Kendall statistic = 53
 critical = 48
 Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-5D (bg)

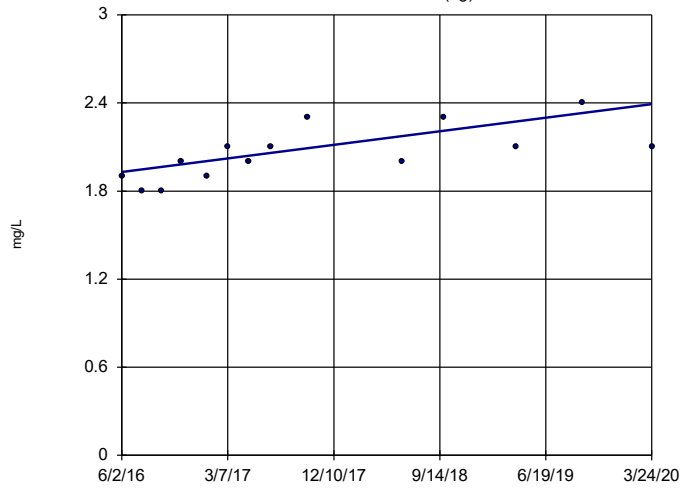


n = 14
 Slope = -4.378 units per year.
 Mann-Kendall statistic = -68
 critical = -48
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-5I (bg)

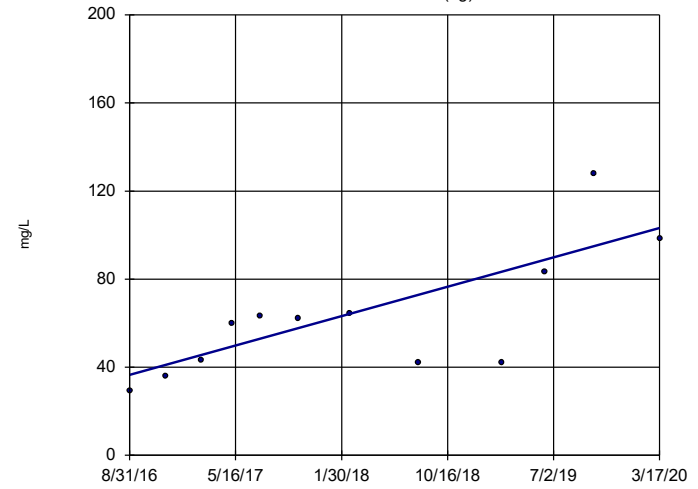


n = 14
 Slope = 0.1217
 units per year.
 Mann-Kendall
 statistic = 55
 critical = 48
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

GWA-2 (bg)

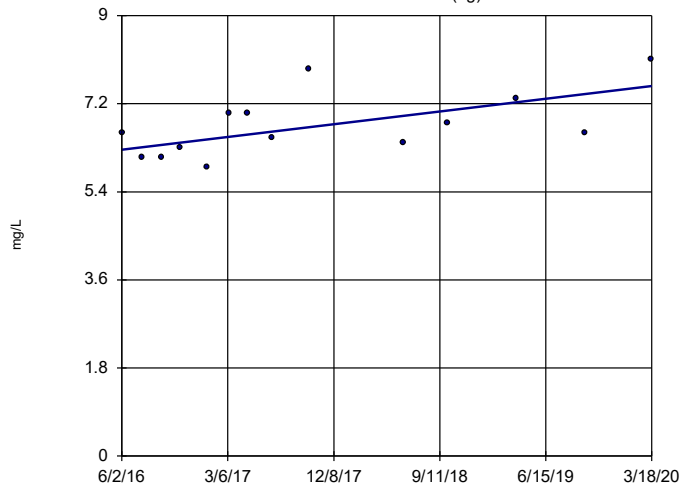


n = 12
 Slope = 18.82
 units per year.
 Mann-Kendall
 statistic = 41
 critical = 38
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-14S (bg)

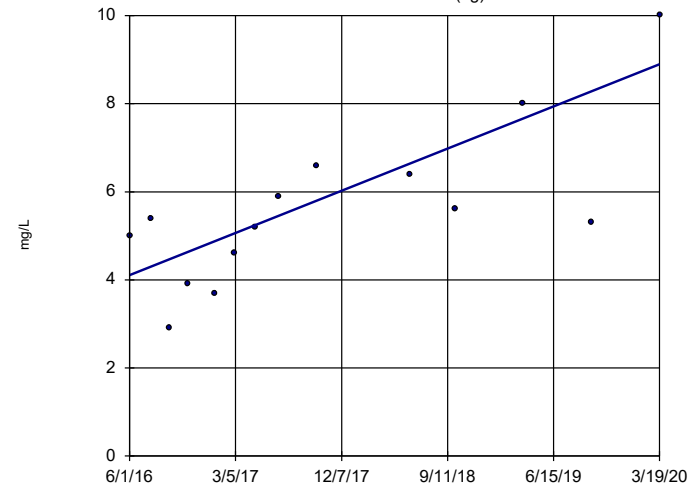


n = 14
 Slope = 0.3425
 units per year.
 Mann-Kendall
 statistic = 40
 critical = 48
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-1D (bg)

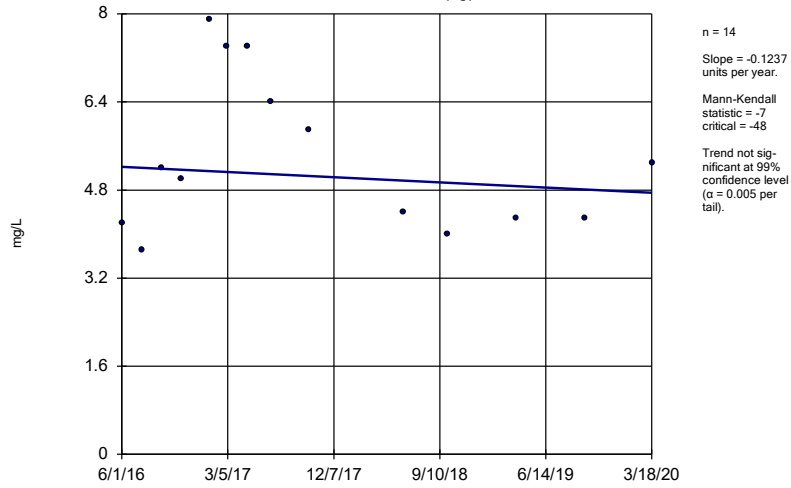


n = 14
 Slope = 1.261
 units per year.
 Mann-Kendall
 statistic = 51
 critical = 48
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

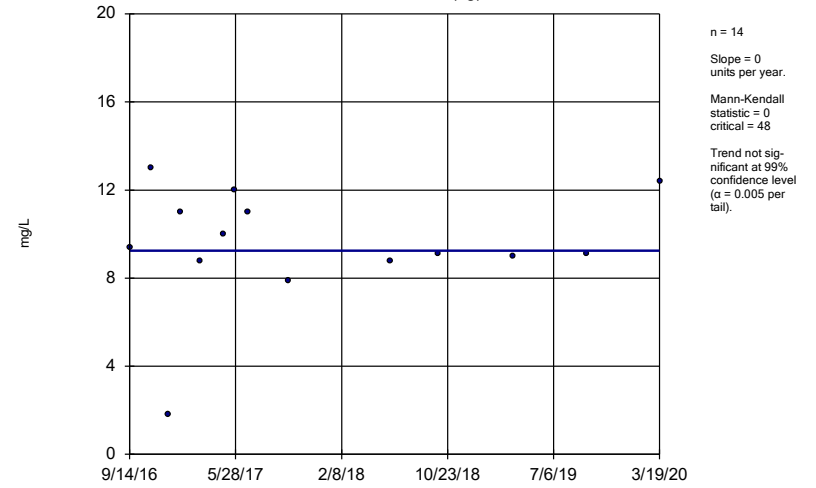
YGWA-11 (bg)



Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

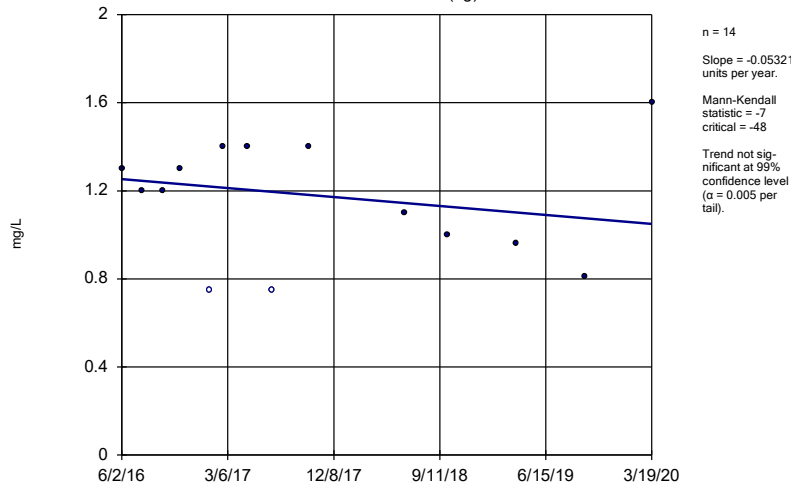
YGWA-2I (bg)



Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

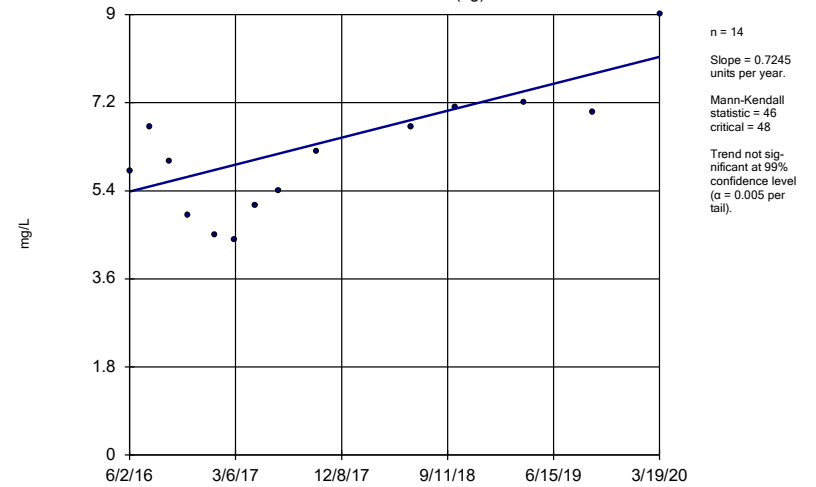
YGWA-30I (bg)



Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

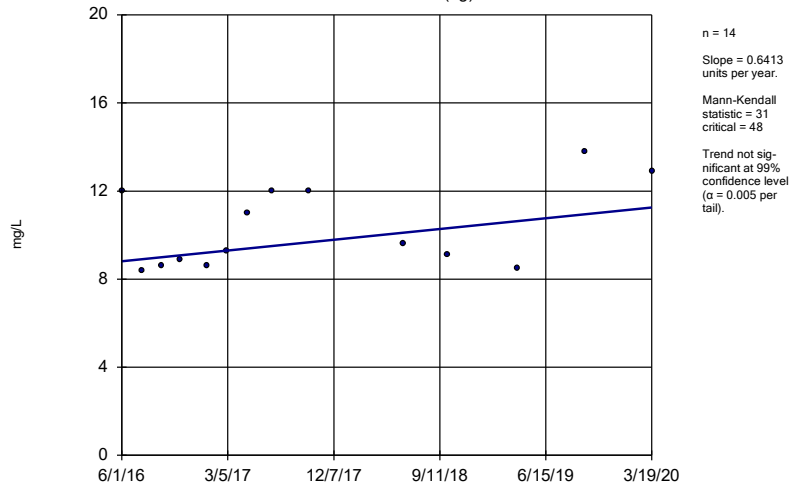
YGWA-3D (bg)



Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

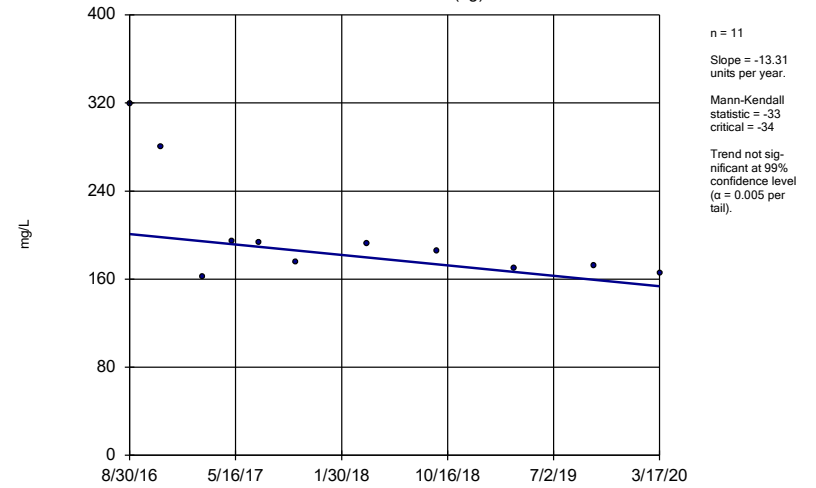
YGWA-3l (bg)



Constituent: Sulfate Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

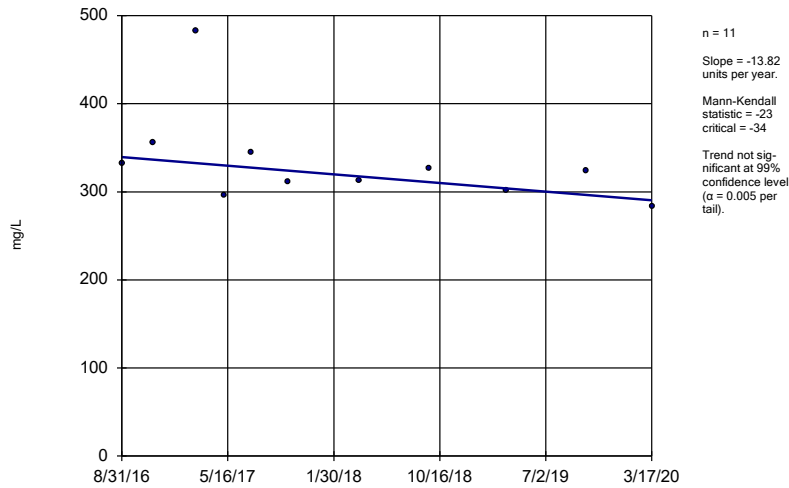
YGWA-47 (bg)



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

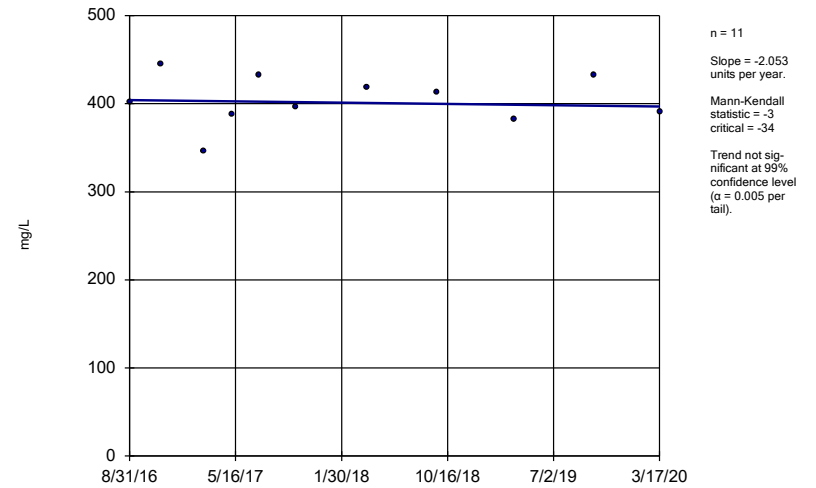
YGWC-44



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

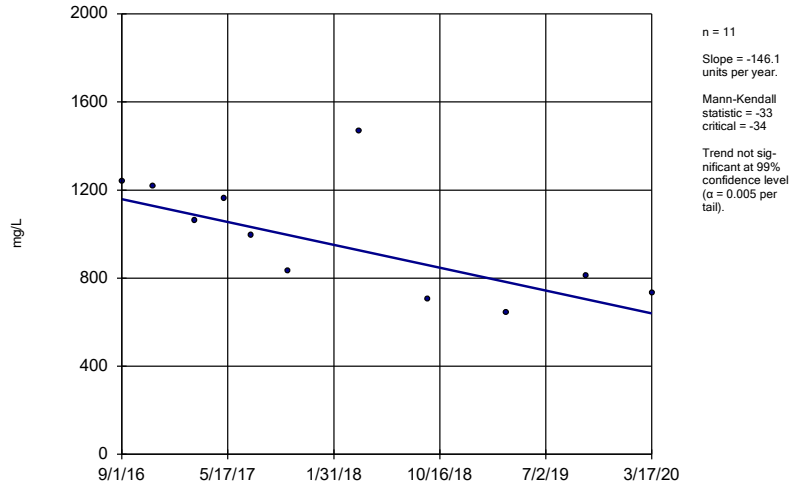
Sen's Slope Estimator

YGWC-45



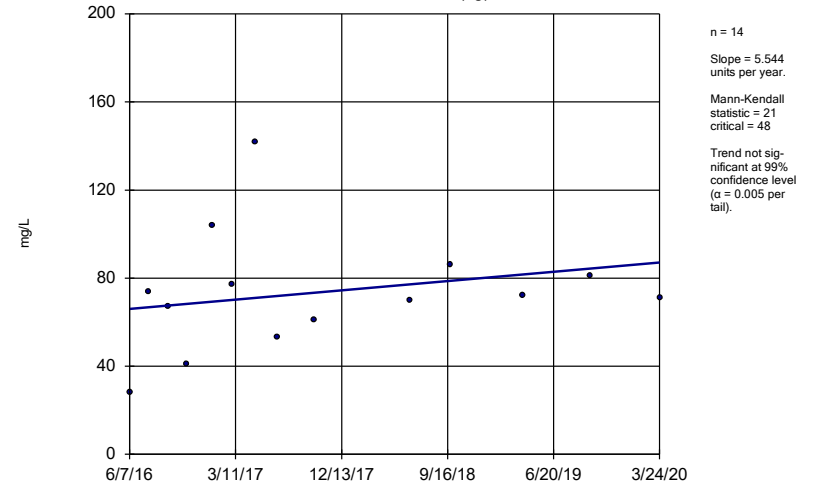
Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator YGWC-46



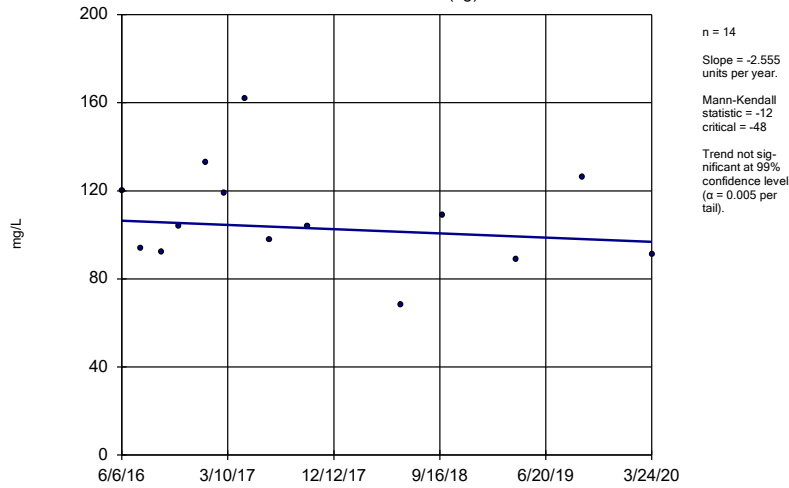
Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator YGWA-17S (bg)



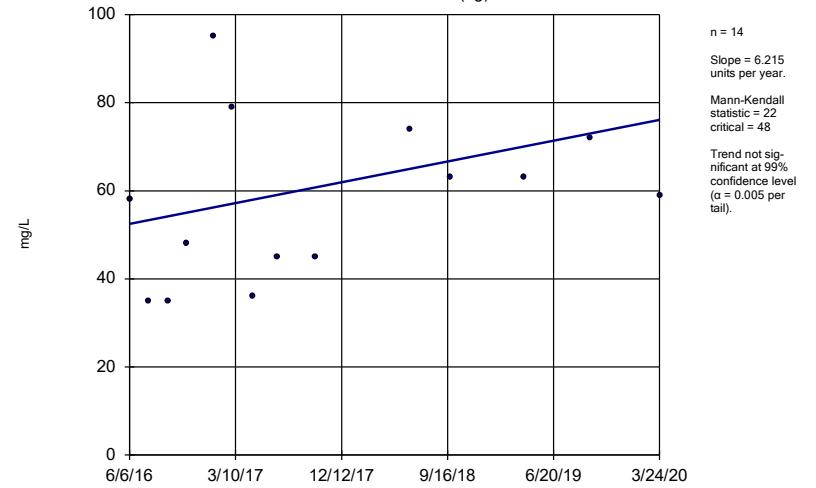
Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator YGWA-18I (bg)



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

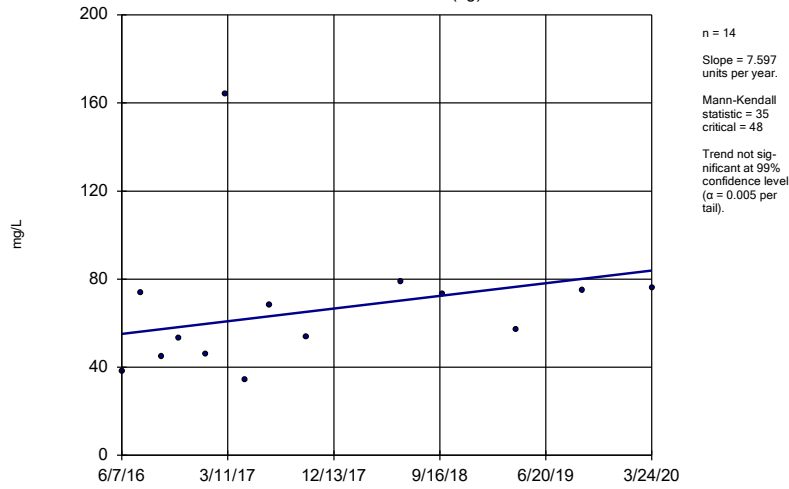
Sen's Slope Estimator YGWA-18S (bg)



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

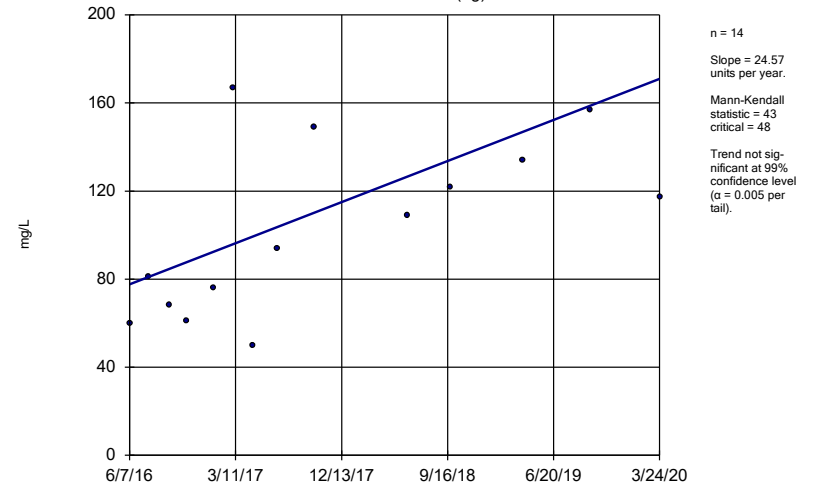
YGWA-20S (bg)



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

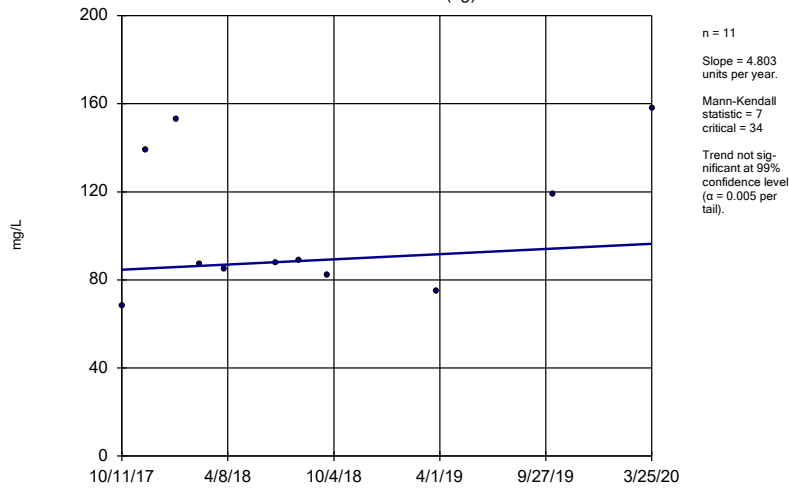
YGWA-21I (bg)



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

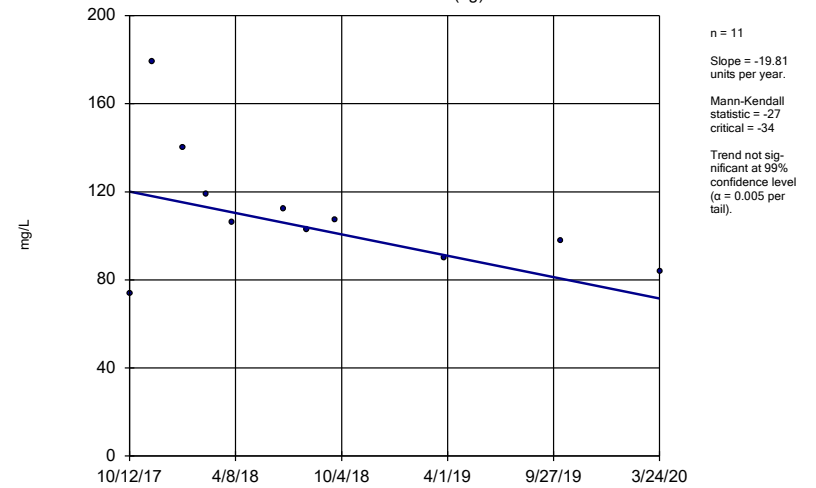
YGWA-39 (bg)



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

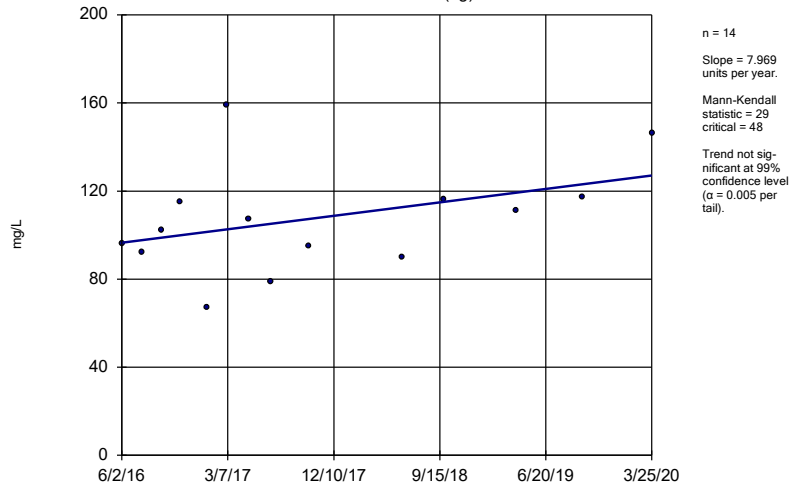
YGWA-40 (bg)



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

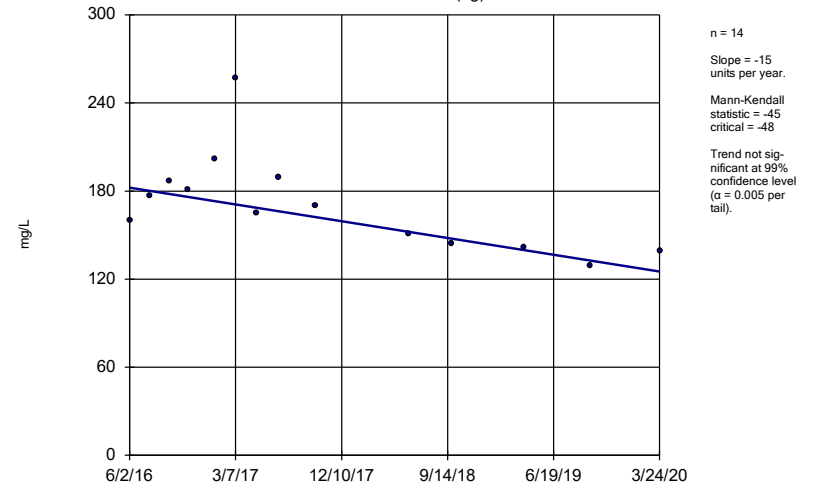
YGWA-4I (bg)



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

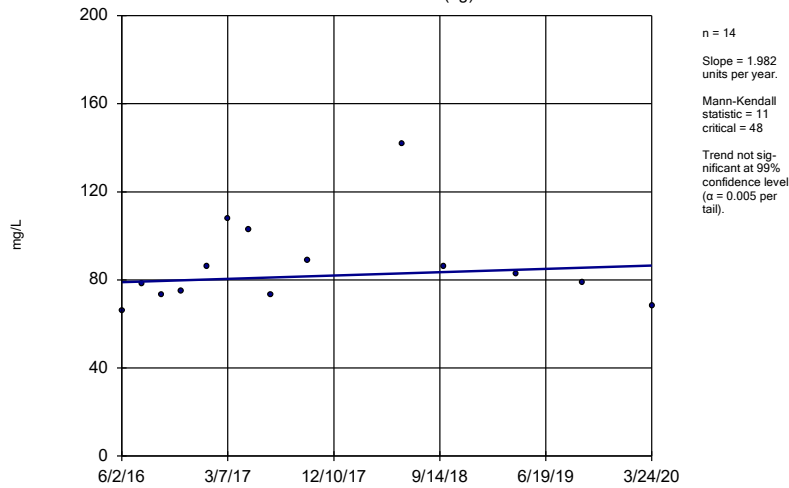
YGWA-5D (bg)



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

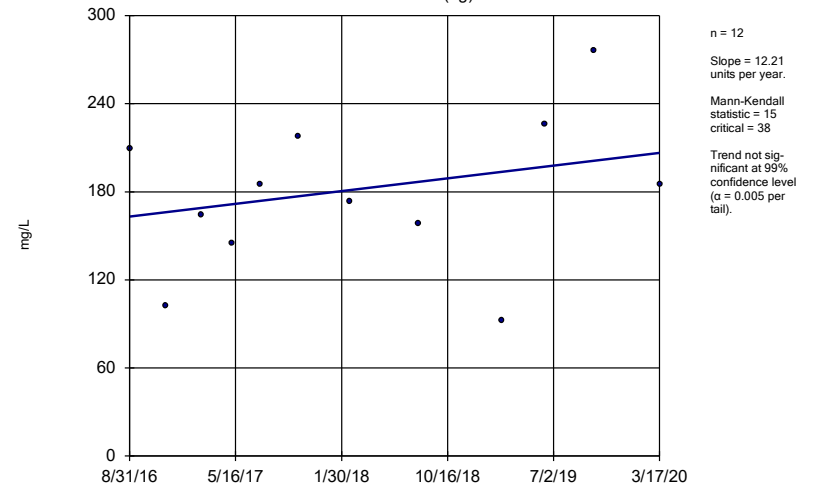
YGWA-5I (bg)



Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:13 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

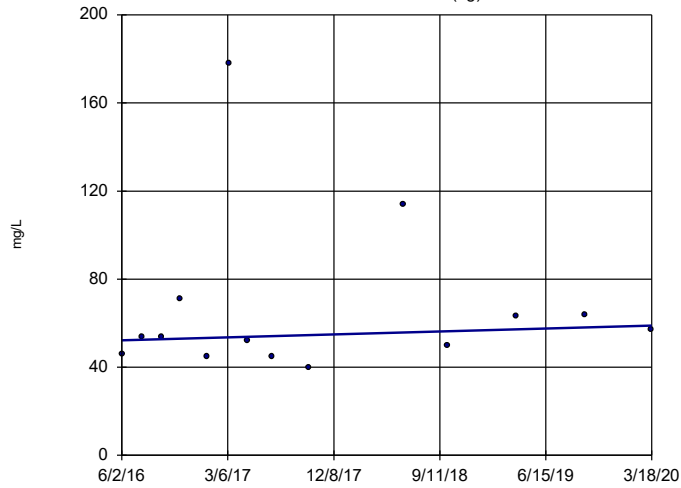
Sen's Slope Estimator

GWA-2 (bg)



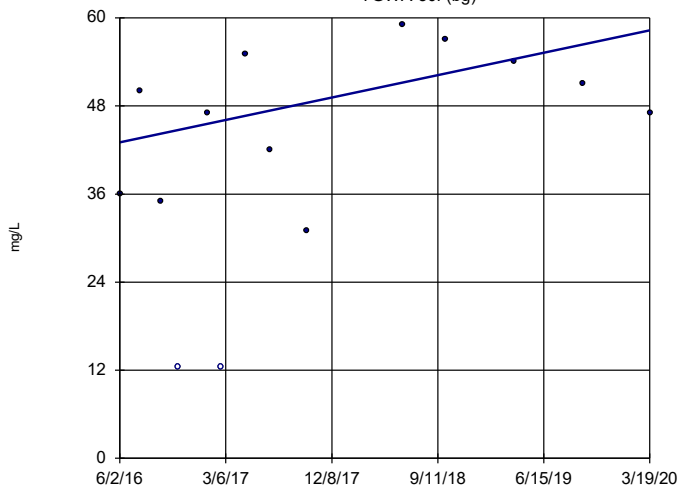
Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:14 PM View: Trend Tests
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator
YGWA-14S (bg)



Sen's Slope Estimator

YGWA-30I (bg)

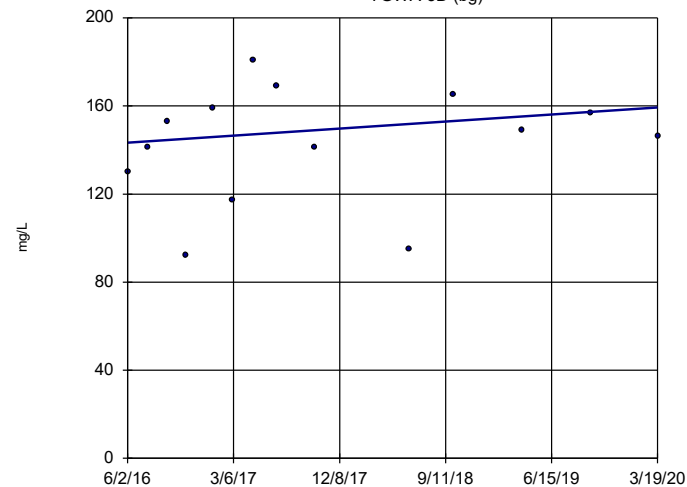


n = 14
Slope = 4.021
units per year.
Mann-Kendall
statistic = 23
critical = 48
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-3D (bg)

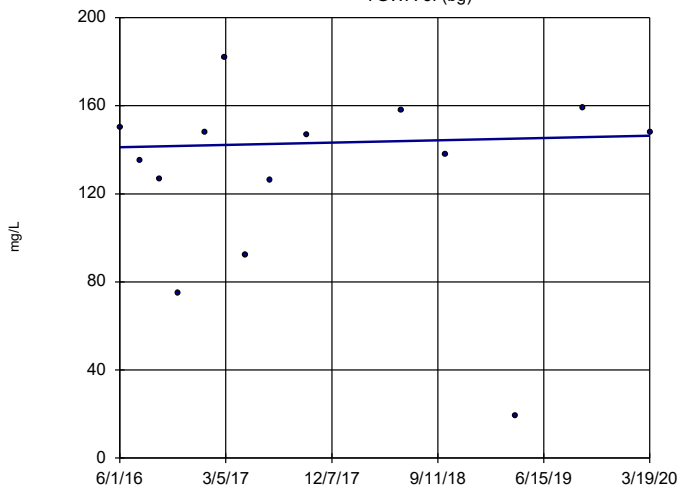


n = 14
Slope = 4.214
units per year.
Mann-Kendall
statistic = 14
critical = 48
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-3I (bg)



n = 14
Slope = 1.372
units per year.
Mann-Kendall
statistic = 6
critical = 48
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Total Dissolved Solids Analysis Run 7/27/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

FIGURE F.

Tolerance Limit Summary Table

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/15/2020, 10:38 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Lim.Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg.N</u>	<u>Bg.Mean</u>	<u>Std.Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.0035	n/a	n/a	n/a	n/a	249	n/a	n/a	86.75	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0050	n/a	n/a	n/a	n/a	297	n/a	n/a	78.79	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.071	n/a	n/a	n/a	n/a	297	n/a	n/a	3.704	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0030	n/a	n/a	n/a	n/a	281	n/a	n/a	85.05	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	n/a	283	n/a	n/a	95.76	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.010	n/a	n/a	n/a	n/a	249	n/a	n/a	79.52	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.035	n/a	n/a	n/a	n/a	297	n/a	n/a	69.7	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.9	n/a	n/a	n/a	n/a	275	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	n/a	0.68	n/a	n/a	n/a	n/a	296	n/a	n/a	68.24	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	n/a	0.0050	n/a	n/a	n/a	n/a	251	n/a	n/a	88.84	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.030	n/a	n/a	n/a	n/a	276	n/a	n/a	28.99	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	n/a	0.00050	n/a	n/a	n/a	n/a	238	n/a	n/a	92.02	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.014	n/a	n/a	n/a	n/a	242	n/a	n/a	58.26	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	n/a	0.010	n/a	n/a	n/a	n/a	281	n/a	n/a	90.75	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.0010	n/a	n/a	n/a	n/a	251	n/a	n/a	96.41	n/a	n/a	NaN	NP Inter(NDs)

FIGURE G.

YATES ASH POND 1 GWPS					
Constituent Name	MCL	CCR-Rule Specified	Background Limit	Federal GWPS	State GWPS
Antimony, Total (mg/L)	0.006		0.0035	0.006	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01	0.01
Barium, Total (mg/L)	2		0.071	2	2
Beryllium, Total (mg/L)	0.004		0.003	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005	0.005
Chromium, Total (mg/L)	0.1		0.01	0.1	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.9	6.9	6.9
Fluoride, Total (mg/L)	4		0.68	4	4
Lead, Total (mg/L)		0.015	0.005	0.015	0.005
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03
Mercury, Total (mg/L)	0.002		0.0005	0.002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014
Selenium, Total (mg/L)	0.05		0.01	0.05	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002

**Grey cell indicates Background Limit is higher than MCL. or CCR Rule Specified Level*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

FIGURE H.

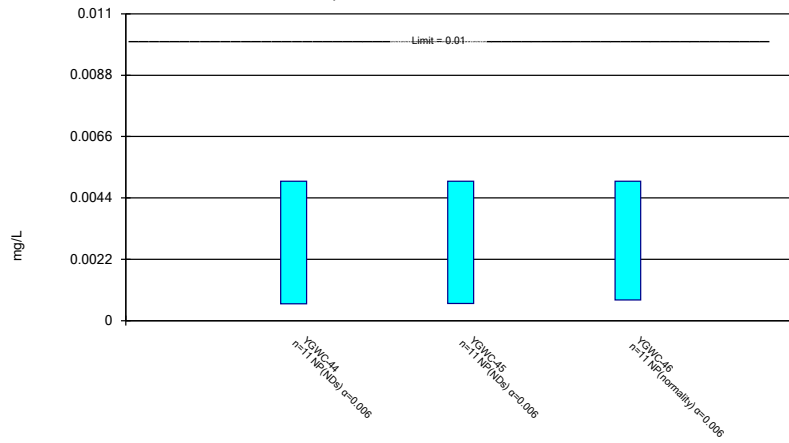
Federal Confidence Intervals - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/15/2020, 10:42 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	YGWC-44	0.005	0.0006	0.01	No	11	0.003057	0.002235	54.55	None	No	0.006	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00061	0.01	No	11	0.003428	0.002181	63.64	None	No	0.006	NP (NDs)
Arsenic (mg/L)	YGWC-46	0.005	0.00074	0.01	No	11	0.002792	0.002119	45.45	None	No	0.006	NP (normality)
Barium (mg/L)	YGWC-44	0.1206	0.1034	2	No	11	0.112	0.01033	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.07581	0.06192	2	No	11	0.06886	0.008338	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46	0.03558	0.02496	2	No	11	0.03027	0.006372	0	None	No	0.01	Param.
Cadmium (mg/L)	YGWC-46	0.0025	0.00012	0.005	No	11	0.001849	0.001115	72.73	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-45	0.01	0.0006	0.1	No	9	0.008522	0.003239	77.78	None	No	0.002	NP (NDs)
Cobalt (mg/L)	YGWC-44	0.005	0.0017	0.035	No	11	0.003436	0.00301	9.091	None	No	0.006	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0009157	0.0007503	0.035	No	10	0.000833	0.00009274	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46	0.03821	0.01752	0.035	No	11	0.02786	0.01241	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.465	0.4145	6.9	No	11	0.9395	0.6301	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.722	0.8757	6.9	No	11	1.299	0.5079	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46	1.526	0.7762	6.9	No	12	1.151	0.4778	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-44	0.3	0.07	4	No	12	0.2442	0.1025	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-45	0.3097	0.09342	4	No	12	0.2663	0.1694	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-46	0.35	0.04	4	No	12	0.1887	0.1296	41.67	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-45	0.005	0.0001	0.015	No	9	0.004456	0.001633	88.89	None	No	0.002	NP (NDs)
Lithium (mg/L)	YGWC-44	0.01364	0.0121	0.04	No	11	0.01287	0.0009253	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.01511	0.01239	0.04	No	11	0.01375	0.001632	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-46	0.01029	0.007546	0.04	No	11	0.008918	0.001646	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0005	0.00006	0.002	No	9	0.0004511	0.0001467	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0005	0.000071	0.002	No	9	0.0004523	0.000143	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-46	0.0005	0.00007	0.002	No	9	0.0004522	0.0001433	88.89	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.01	0.1	No	11	0.009136	0.002864	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.01	0.0012	0.1	No	11	0.003873	0.003949	27.27	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-46	0.002279	0.001052	0.1	No	11	0.004027	0.003918	27.27	Kaplan-Meier	ln(x)	0.01	Param.
Thallium (mg/L)	YGWC-44	0.001	0.001	0.002	No	11	0.0009164	0.0002774	90.91	None	No	0.006	NP (NDs)

Non-Parametric Confidence Interval

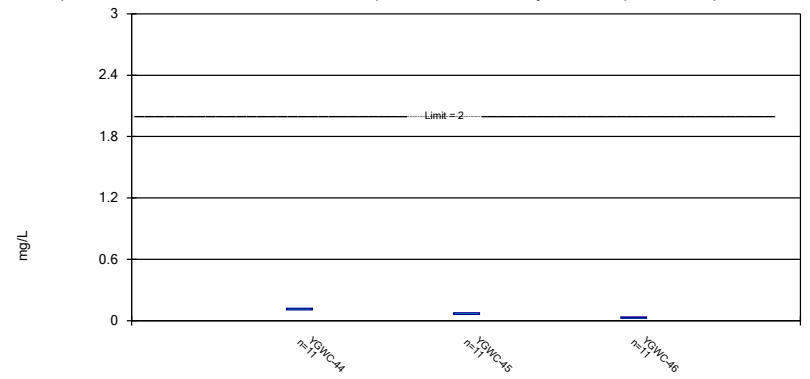
Compliance Limit is not exceeded.



Constituent: Arsenic Analysis Run 7/15/2020 10:41 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric Confidence Interval

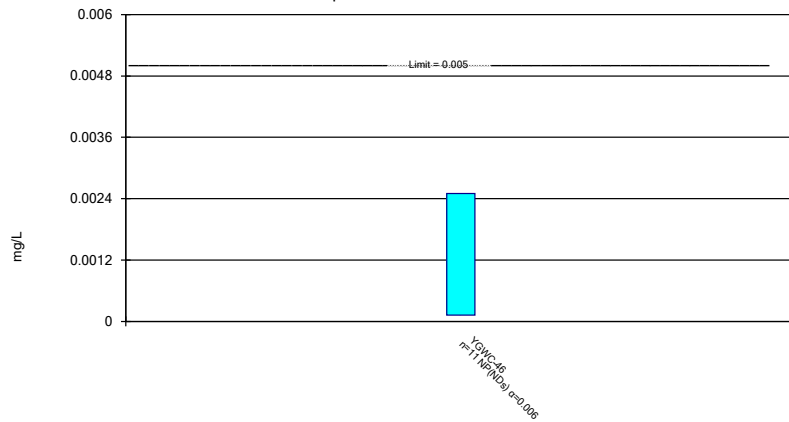
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 7/15/2020 10:41 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

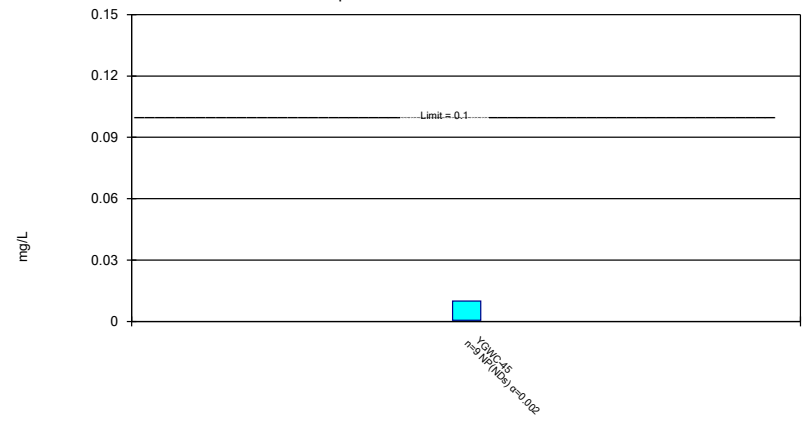
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 7/15/2020 10:41 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

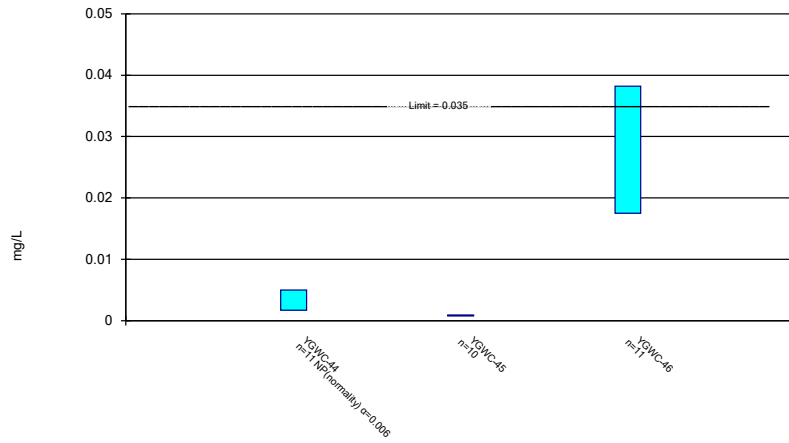
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 7/15/2020 10:41 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric and Non-Parametric (NP) Confidence Interval

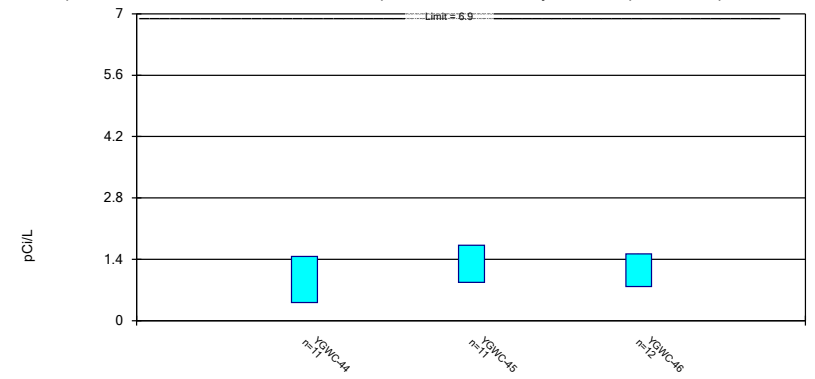
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 7/15/2020 10:41 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric Confidence Interval

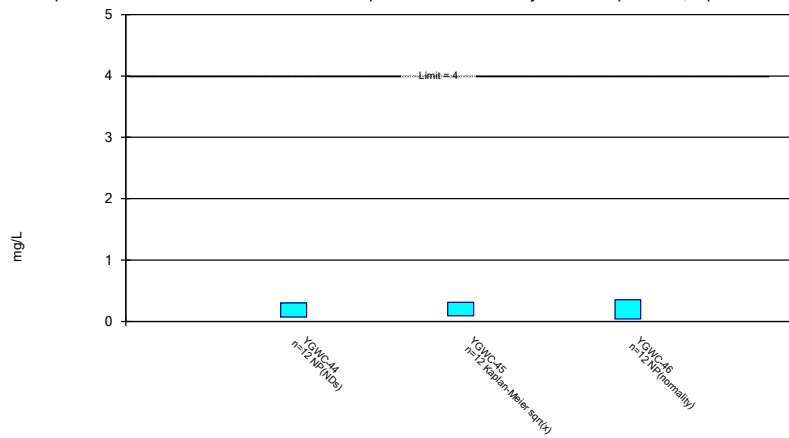
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 7/15/2020 10:41 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric and Non-Parametric (NP) Confidence Interval

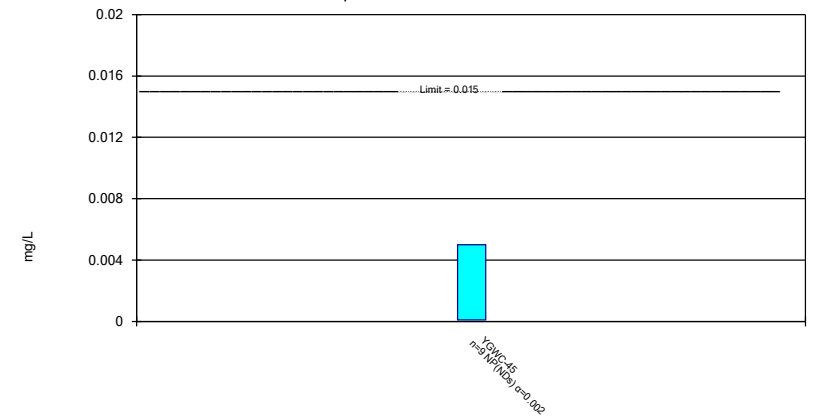
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 7/15/2020 10:41 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

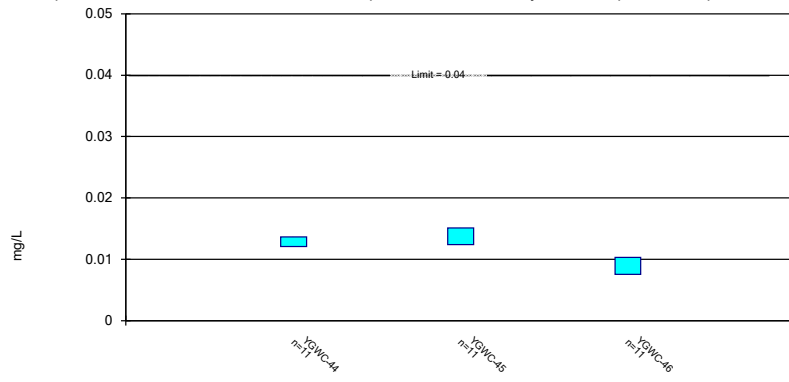
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 7/15/2020 10:41 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric Confidence Interval

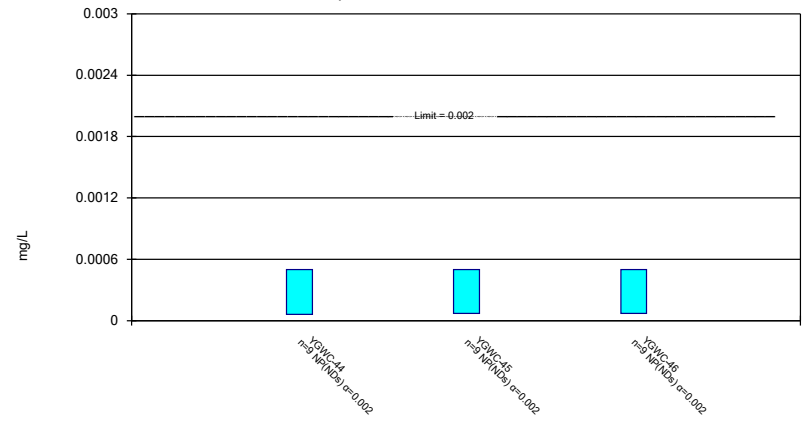
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 7/15/2020 10:41 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

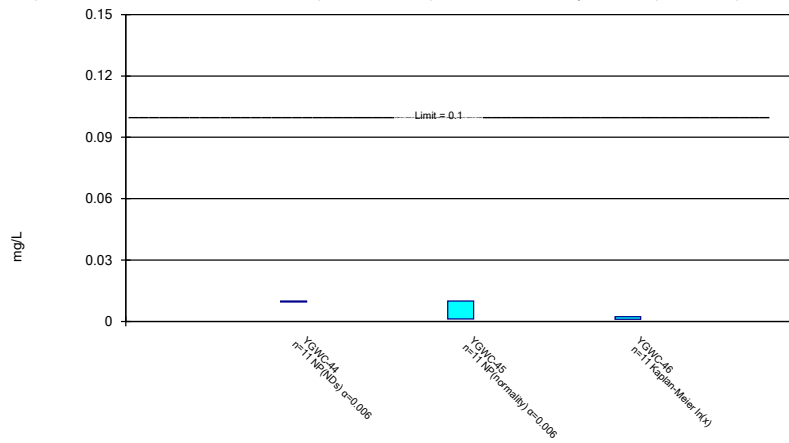
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 7/15/2020 10:41 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric and Non-Parametric (NP) Confidence Interval

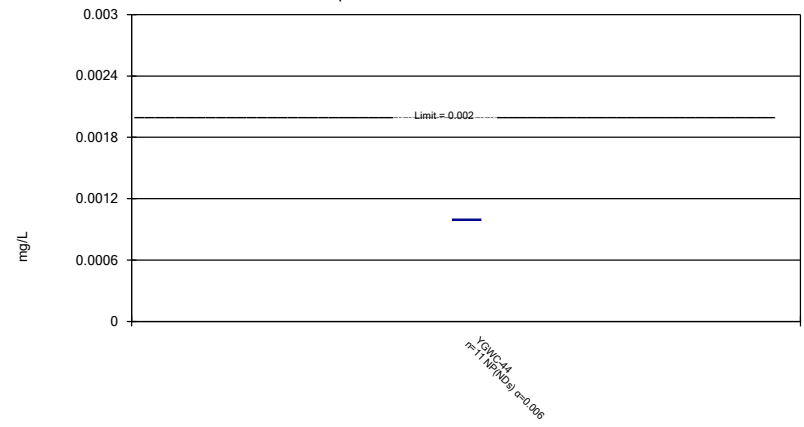
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 7/15/2020 10:41 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 7/15/2020 10:41 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

FIGURE I.

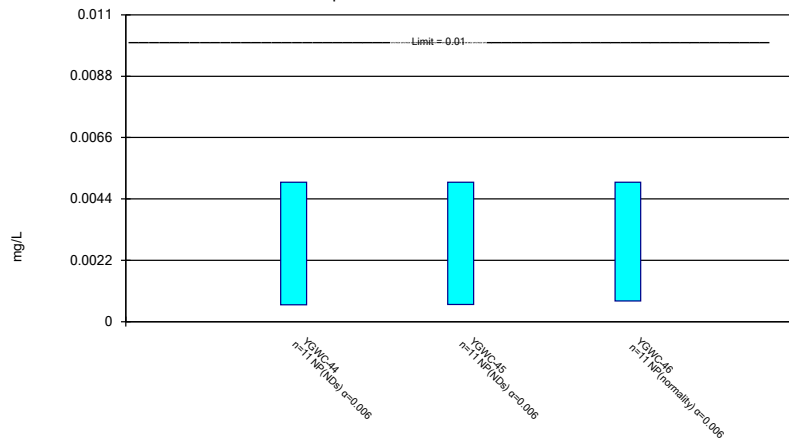
State Confidence Intervals - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 7/15/2020, 10:40 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	YGWC-44	0.005	0.0006	0.01	No	11	0.003057	0.002235	54.55	None	No	0.006	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00061	0.01	No	11	0.003428	0.002181	63.64	None	No	0.006	NP (NDs)
Arsenic (mg/L)	YGWC-46	0.005	0.00074	0.01	No	11	0.002792	0.002119	45.45	None	No	0.006	NP (normality)
Barium (mg/L)	YGWC-44	0.1206	0.1034	2	No	11	0.112	0.01033	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.07581	0.06192	2	No	11	0.06886	0.008338	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46	0.03558	0.02496	2	No	11	0.03027	0.006372	0	None	No	0.01	Param.
Cadmium (mg/L)	YGWC-46	0.0025	0.00012	0.005	No	11	0.001849	0.001115	72.73	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-45	0.01	0.0006	0.1	No	9	0.008522	0.003239	77.78	None	No	0.002	NP (NDs)
Cobalt (mg/L)	YGWC-44	0.005	0.0017	0.035	No	11	0.003436	0.00301	9.091	None	No	0.006	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0009157	0.0007503	0.035	No	10	0.000833	0.00009274	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46	0.03821	0.01752	0.035	No	11	0.02786	0.01241	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.465	0.4145	6.9	No	11	0.9395	0.6301	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.722	0.8757	6.9	No	11	1.299	0.5079	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46	1.526	0.7762	6.9	No	12	1.151	0.4778	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-44	0.3	0.07	4	No	12	0.2442	0.1025	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-45	0.3097	0.09342	4	No	12	0.2663	0.1694	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-46	0.35	0.04	4	No	12	0.1887	0.1296	41.67	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-45	0.005	0.0001	0.005	No	9	0.004456	0.001633	88.89	None	No	0.002	NP (NDs)
Lithium (mg/L)	YGWC-44	0.01364	0.0121	0.03	No	11	0.01287	0.0009253	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.01511	0.01239	0.03	No	11	0.01375	0.001632	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-46	0.01029	0.007546	0.03	No	11	0.008918	0.001646	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0005	0.00006	0.002	No	9	0.0004511	0.0001467	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0005	0.000071	0.002	No	9	0.0004523	0.000143	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-46	0.0005	0.00007	0.002	No	9	0.0004522	0.0001433	88.89	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.01	0.014	No	11	0.009136	0.002864	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.01	0.0012	0.014	No	11	0.003873	0.003949	27.27	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-46	0.002279	0.001052	0.014	No	11	0.004027	0.003918	27.27	Kaplan-Meier	ln(x)	0.01	Param.
Thallium (mg/L)	YGWC-44	0.001	0.001	0.002	No	11	0.0009164	0.0002774	90.91	None	No	0.006	NP (NDs)

Non-Parametric Confidence Interval

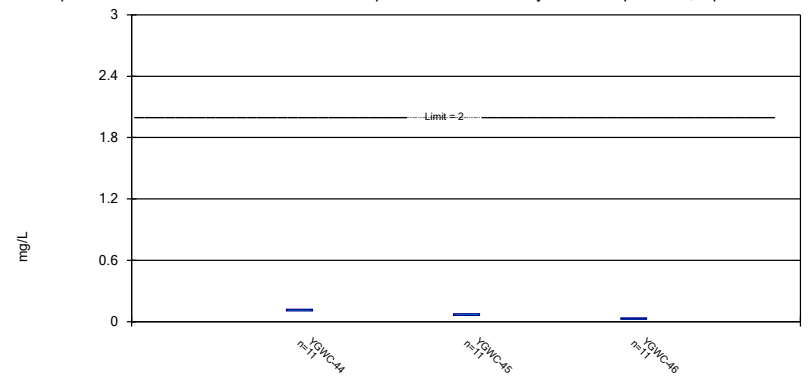
Compliance Limit is not exceeded.



Constituent: Arsenic Analysis Run 7/15/2020 10:40 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric Confidence Interval

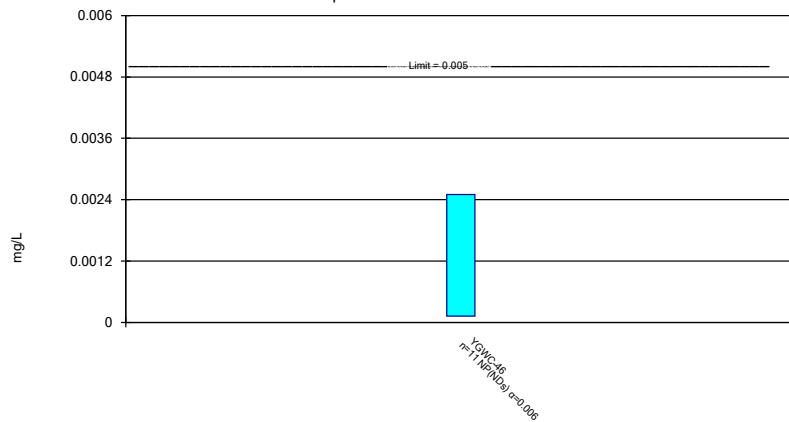
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 7/15/2020 10:40 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

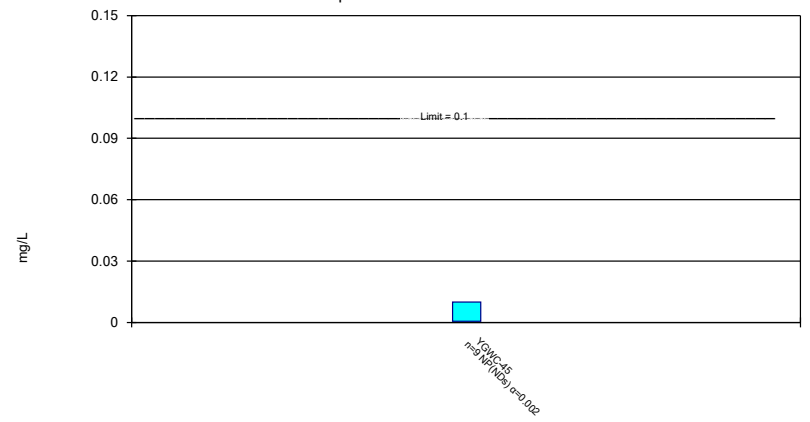
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 7/15/2020 10:40 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

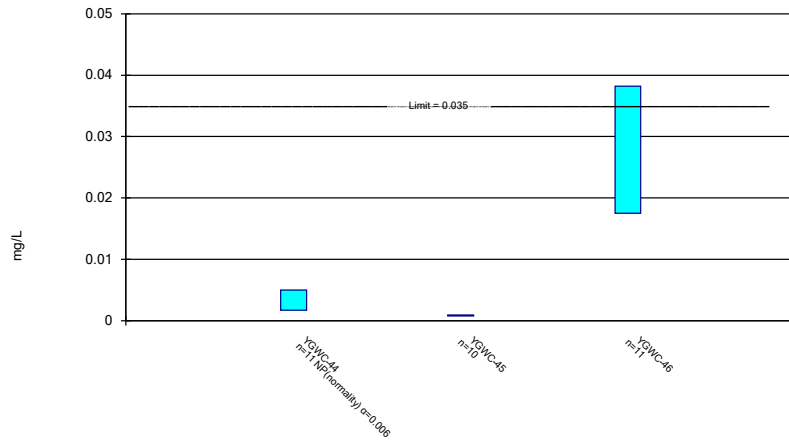
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 7/15/2020 10:40 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric and Non-Parametric (NP) Confidence Interval

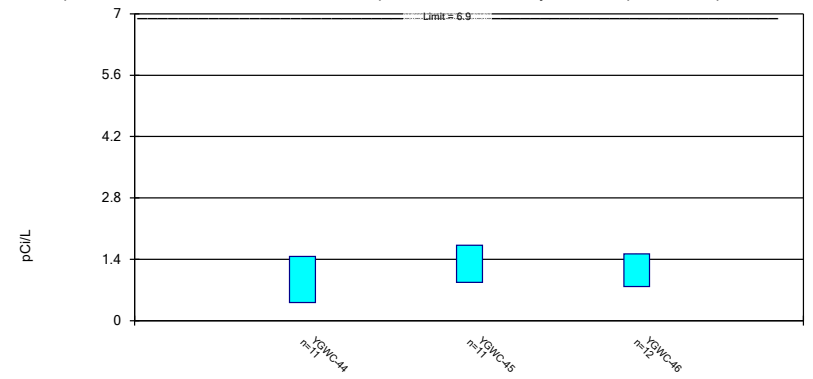
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 7/15/2020 10:40 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric Confidence Interval

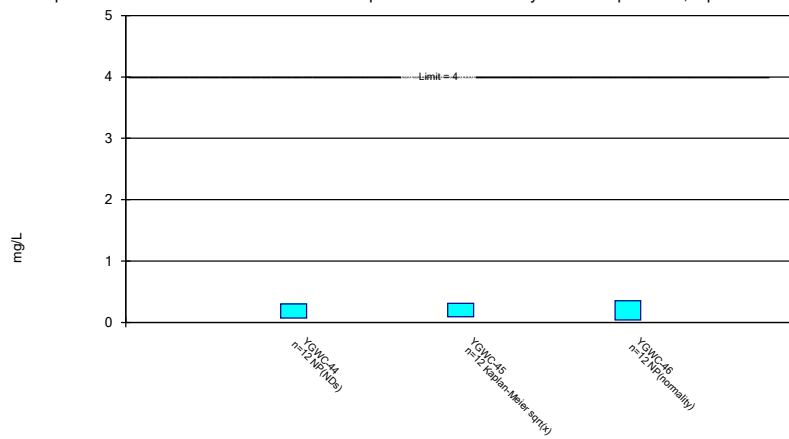
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 7/15/2020 10:40 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric and Non-Parametric (NP) Confidence Interval

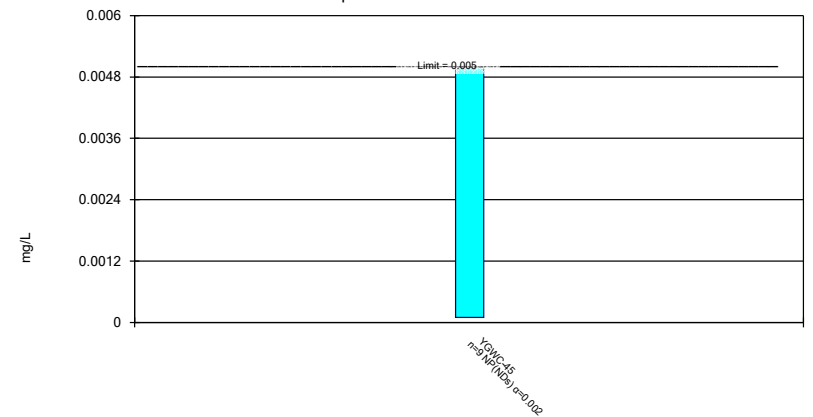
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 7/15/2020 10:40 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

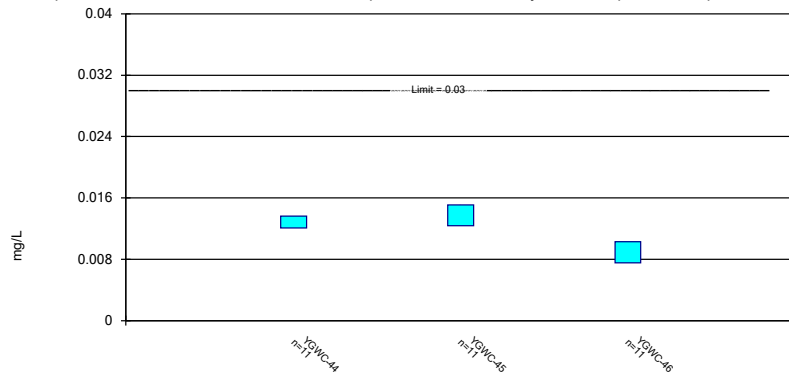
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 7/15/2020 10:40 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric Confidence Interval

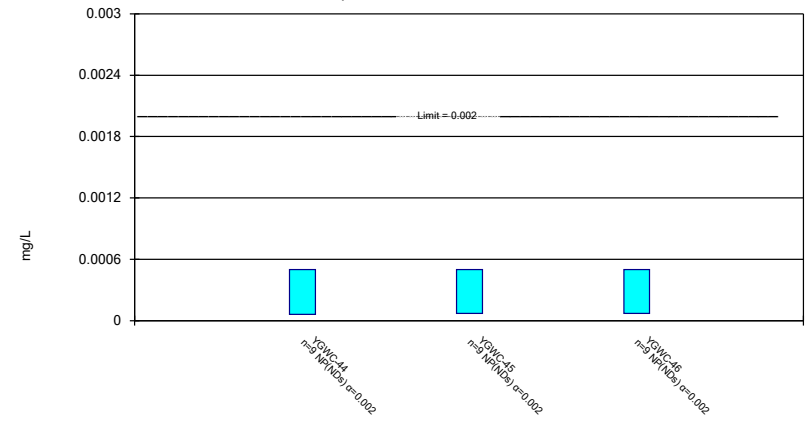
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 7/15/2020 10:40 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

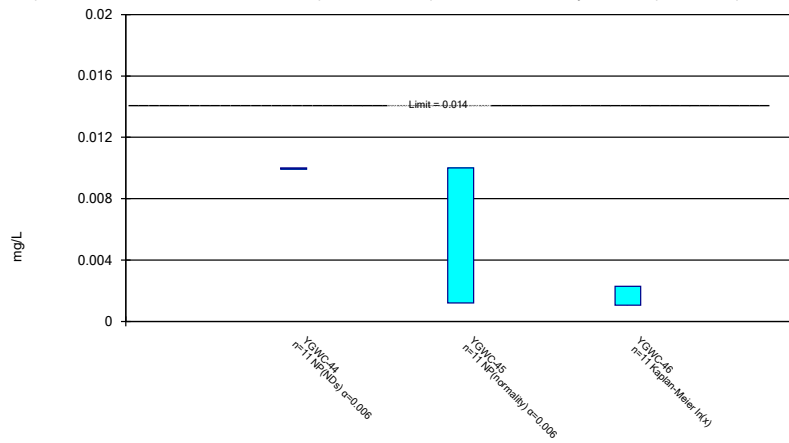
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 7/15/2020 10:40 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric and Non-Parametric (NP) Confidence Interval

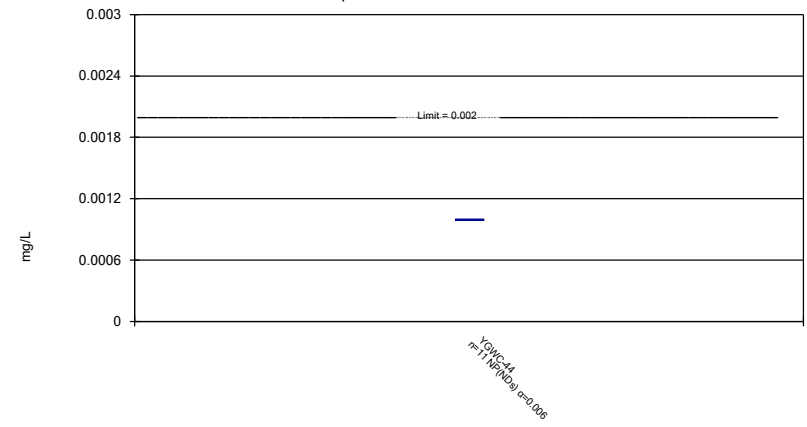
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 7/15/2020 10:40 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 7/15/2020 10:40 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

October 2019

Semiannual Event



**Appendix III Statistics (from 2019 Semiannual Groundwater Monitoring and
Corrective Action Report)**

Interwell Prediction Limit Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond 1 Printed 12/3/2019, 2:31 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	YGWC-44	0.01752	n/a	10/8/2019	0.58	Yes	10	0	No	0.002505	Param Inter 1 of 2
Boron (mg/L)	YGWC-45	0.01752	n/a	10/9/2019	0.35	Yes	10	0	No	0.002505	Param Inter 1 of 2
Boron (mg/L)	YGWC-46	0.01752	n/a	10/9/2019	1.1	Yes	10	0	No	0.002505	Param Inter 1 of 2
Calcium (mg/L)	YGWC-44	22.04	n/a	10/8/2019	28.1	Yes	10	10	No	0.002505	Param Inter 1 of 2
Calcium (mg/L)	YGWC-45	22.04	n/a	10/9/2019	47.9	Yes	10	10	No	0.002505	Param Inter 1 of 2
Calcium (mg/L)	YGWC-46	22.04	n/a	10/9/2019	64.2	Yes	10	10	No	0.002505	Param Inter 1 of 2
Chloride (mg/L)	YGWC-44	6.986	n/a	10/8/2019	14.8	Yes	10	0	No	0.002505	Param Inter 1 of 2
Chloride (mg/L)	YGWC-46	6.986	n/a	10/9/2019	25	Yes	10	0	No	0.002505	Param Inter 1 of 2
pH (S.U.)	YGWC-45	5.847	5.345	10/9/2019	6.55	Yes	10	0	No	0.001253	Param Inter 1 of 2
pH (S.U.)	YGWC-46	5.847	5.345	10/9/2019	5.96	Yes	10	0	No	0.001253	Param Inter 1 of 2
Sulfate (mg/L)	YGWC-45	181.3	n/a	10/9/2019	183	Yes	10	0	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-44	319	n/a	10/8/2019	324	Yes	10	0	n/a	0.01337	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-45	319	n/a	10/9/2019	432	Yes	10	0	n/a	0.01337	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-46	319	n/a	10/9/2019	809	Yes	10	0	n/a	0.01337	NP Inter (normality) 1 of 2

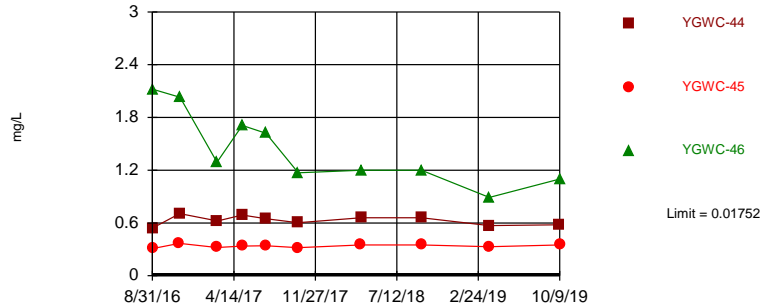
Interwell Prediction Limit All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond 1 Printed 12/3/2019, 2:31 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	YGWC-44	0.01752	n/a	10/8/2019	0.58	Yes	10	0	No	0.002505	Param Inter 1 of 2
Boron (mg/L)	YGWC-45	0.01752	n/a	10/9/2019	0.35	Yes	10	0	No	0.002505	Param Inter 1 of 2
Boron (mg/L)	YGWC-46	0.01752	n/a	10/9/2019	1.1	Yes	10	0	No	0.002505	Param Inter 1 of 2
Calcium (mg/L)	YGWC-44	22.04	n/a	10/8/2019	28.1	Yes	10	10	No	0.002505	Param Inter 1 of 2
Calcium (mg/L)	YGWC-45	22.04	n/a	10/9/2019	47.9	Yes	10	10	No	0.002505	Param Inter 1 of 2
Calcium (mg/L)	YGWC-46	22.04	n/a	10/9/2019	64.2	Yes	10	10	No	0.002505	Param Inter 1 of 2
Chloride (mg/L)	YGWC-44	6.986	n/a	10/8/2019	14.8	Yes	10	0	No	0.002505	Param Inter 1 of 2
Chloride (mg/L)	YGWC-45	6.986	n/a	10/9/2019	5.1	No	10	0	No	0.002505	Param Inter 1 of 2
Chloride (mg/L)	YGWC-46	6.986	n/a	10/9/2019	25	Yes	10	0	No	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	YGWC-44	0.1893	n/a	10/8/2019	0.3ND	No	11	36.36	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	YGWC-45	0.1893	n/a	10/9/2019	0.3ND	No	11	36.36	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	YGWC-46	0.1893	n/a	10/9/2019	0.12	No	11	36.36	sqrt(x)	0.002505	Param Inter 1 of 2
pH (S.U.)	YGWC-44	5.847	5.345	10/8/2019	5.84	No	10	0	No	0.001253	Param Inter 1 of 2
pH (S.U.)	YGWC-45	5.847	5.345	10/9/2019	6.55	Yes	10	0	No	0.001253	Param Inter 1 of 2
pH (S.U.)	YGWC-46	5.847	5.345	10/9/2019	5.96	Yes	10	0	No	0.001253	Param Inter 1 of 2
Sulfate (mg/L)	YGWC-44	181.3	n/a	10/8/2019	142	No	10	0	No	0.002505	Param Inter 1 of 2
Sulfate (mg/L)	YGWC-45	181.3	n/a	10/9/2019	183	Yes	10	0	No	0.002505	Param Inter 1 of 2
Sulfate (mg/L)	YGWC-46	181.3	n/a	10/9/2019	0.5ND	No	10	0	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-44	319	n/a	10/8/2019	324	Yes	10	0	n/a	0.01337	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-45	319	n/a	10/9/2019	432	Yes	10	0	n/a	0.01337	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-46	319	n/a	10/9/2019	809	Yes	10	0	n/a	0.01337	NP Inter (normality) 1 of 2

Exceeds Limit: YGWC-44, YGWC-45, YGWC-46

Prediction Limit
Interwell Parametric

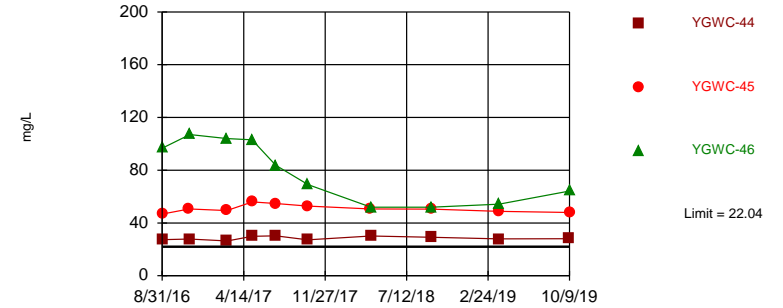


Background Data Summary: Mean=0.01373, Std. Dev.=0.001713, n=10. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8511, critical = 0.781. Kappa = 2.214 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Boron Analysis Run 12/3/2019 2:28 PM View: AP-1 Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Exceeds Limit: YGWC-44, YGWC-45, YGWC-46

Prediction Limit
Interwell Parametric

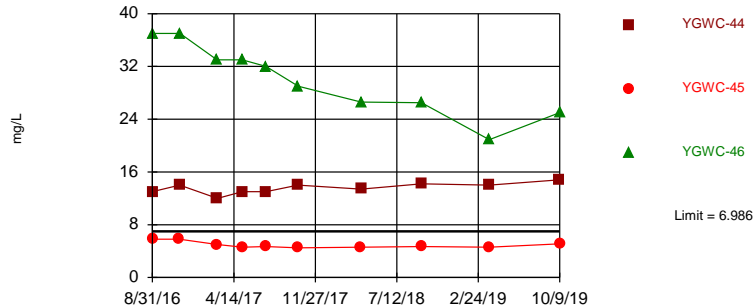


Background Data Summary: Mean=14.07, Std. Dev.=3.599, n=10, 10% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9355, critical = 0.781. Kappa = 2.214 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Calcium Analysis Run 12/3/2019 2:28 PM View: AP-1 Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Exceeds Limit: YGWC-44, YGWC-46

Prediction Limit
Interwell Parametric



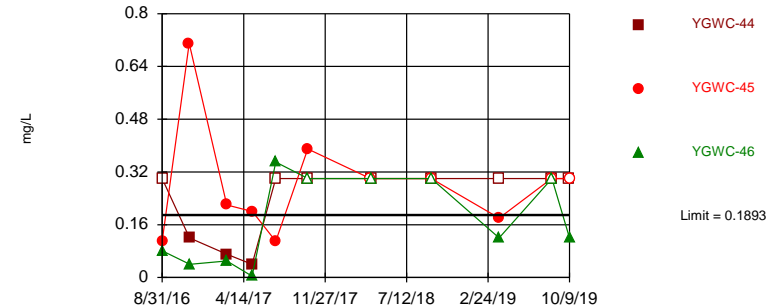
Background Data Summary: Mean=5.21, Std. Dev.=0.802, n=10. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9443, critical = 0.781. Kappa = 2.214 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Chloride Analysis Run 12/3/2019 2:28 PM View: AP-1 Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interwell Parametric

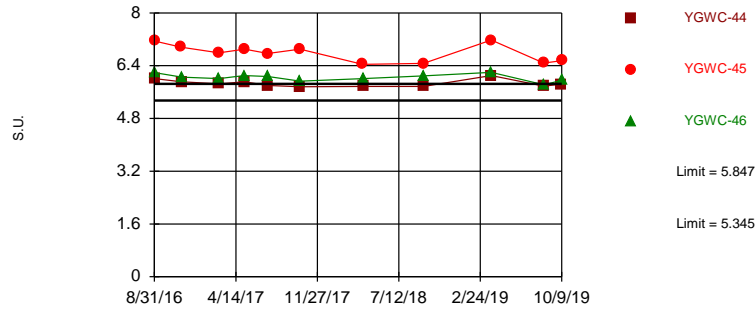


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.2649, Std. Dev.=0.07893, n=11, 36.36% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8326, critical = 0.792. Kappa = 2.155 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Fluoride Analysis Run 12/3/2019 2:28 PM View: AP-1 Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Exceeds Limits: YGWC-45, YGWC-46

Prediction Limit
Interwell Parametric



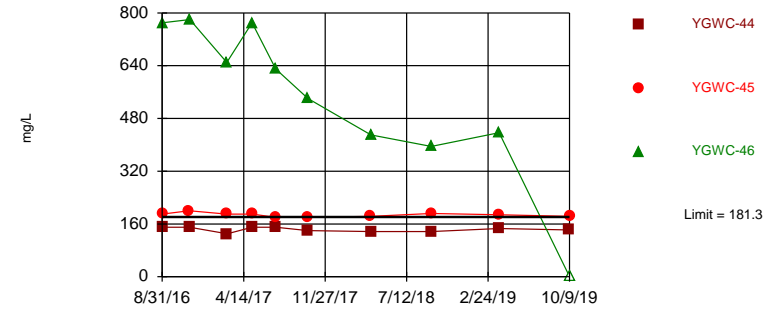
Background Data Summary: Mean=5.596, Std. Dev.=0.1132, n=10. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8289, critical = 0.781. Kappa = 2.214 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001253. Comparing 3 points to limit.

Constituent: pH Analysis Run 12/3/2019 2:28 PM View: AP-1 Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Hollow symbols indicate censored values.

Exceeds Limit: YGWC-45

Prediction Limit
Interwell Parametric

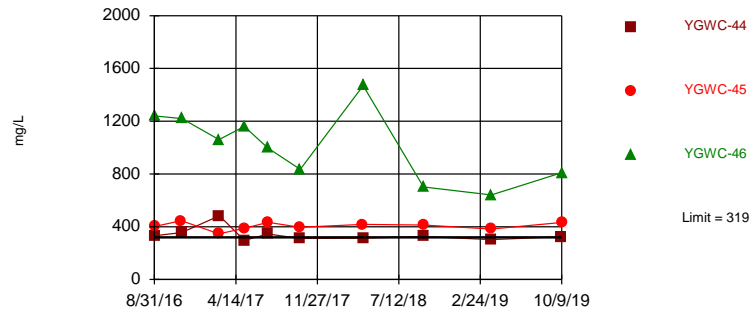


Background Data Summary: Mean=103.5, Std. Dev.=35.14, n=10. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.966, critical = 0.781. Kappa = 2.214 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Sulfate Analysis Run 12/3/2019 2:28 PM View: AP-1 Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Exceeds Limit: YGWC-44, YGWC-45, YGWC-46

Prediction Limit
Interwell 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 10 background values. Annual per-constituent alpha = 0.07757. Individual comparison alpha = 0.01337 (1 of 2). Comparing 3 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Total Dissolved Solids Analysis Run 12/3/2019 2:28 PM View: AP-1 Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/3/2019 2:31 PM View: AP-1 Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46
8/30/2016	0.0166 (J)			
8/31/2016		0.541	0.308	
9/1/2016				2.12
11/14/2016	0.0166 (J)		0.368	
11/15/2016		0.706		
11/16/2016				2.03
2/24/2017	0.0145 (J)			
2/27/2017			0.321	1.29
2/28/2017		0.623		
5/8/2017	0.0141 (J)	0.69		1.71
5/9/2017			0.338	
7/11/2017	0.0131 (J)			
7/13/2017		0.649	0.34	1.62
10/10/2017	0.0124 (J)	0.603	0.319	
10/11/2017				1.17
4/2/2018	0.013 (J)			
4/3/2018			0.35	
4/4/2018		0.66		1.2
9/19/2018	0.012 (J)	0.66	0.35	1.2
3/27/2019	0.013 (J)	0.57	0.33	0.89
10/8/2019	0.012 (J)	0.58		
10/9/2019			0.35	1.1

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/3/2019 2:31 PM View: AP-1 Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46
8/30/2016	20.9			
8/31/2016		27.3	46.7	
9/1/2016				96.8
11/14/2016	18.6		50.6	
11/15/2016		27.8		
11/16/2016				107
2/24/2017	16.1			
2/27/2017			49.4	104
2/28/2017		26.4		
5/8/2017	14.6	29.9		103
5/9/2017			56	
7/11/2017	14.3			
7/13/2017		30.2	54.8	83.7
10/10/2017	12.1	27.2	52.8	
10/11/2017				69
4/2/2018	<25			
4/3/2018			50.6	
4/4/2018		30.1		51.9
9/19/2018	11.1 (J)	29.2	50.5	51.9
3/27/2019	10.8 (J)	27.9	48.8	54.2
10/8/2019	9.7	28.1		
10/9/2019			47.9	64.2

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/3/2019 2:31 PM View: AP-1 Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46
8/30/2016	5.2			
8/31/2016		13	5.8	
9/1/2016				37
11/14/2016	6.4		5.8	
11/15/2016		14		
11/16/2016				37
2/24/2017	5.5			
2/27/2017			5	33
2/28/2017		12		
5/8/2017	5.8	13		33
5/9/2017			4.6	
7/11/2017	5.8			
7/13/2017		13	4.7	32
10/10/2017	5.9	14	4.5	
10/11/2017				29
4/2/2018	4.8			
4/3/2018			4.6	
4/4/2018		13.4		26.6
9/19/2018	4	14.2	4.7	26.5
3/27/2019	4.3	14	4.6	20.9
10/8/2019	4.4	14.8		
10/9/2019			5.1	25

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/3/2019 2:31 PM View: AP-1 Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46
8/30/2016	0.09 (J)			
8/31/2016		<0.3	0.11 (J)	
9/1/2016				0.08 (J)
11/14/2016	0.18 (J)		0.71	
11/15/2016		0.12 (J)		
11/16/2016				0.04 (J)
2/24/2017	0.05 (J)			
2/27/2017			0.22 (J)	0.05 (J)
2/28/2017		0.07 (J)		
5/8/2017	0.03 (J)	0.04 (J)		0.004 (J)
5/9/2017			0.2 (J)	
7/11/2017	0.07 (J)			
7/13/2017		<0.3	0.11 (J)	0.35
10/10/2017	<0.3	<0.3	0.39	
10/11/2017				<0.3
4/2/2018	<0.3			
4/3/2018			<0.3	
4/4/2018		<0.3		<0.3
9/19/2018	<0.3	<0.3	<0.3	<0.3
3/27/2019	0.081 (J)	<0.3	0.18 (J)	0.12 (J)
8/20/2019	<0.3	<0.3	<0.3	
8/21/2019				<0.3
10/8/2019	0.034 (J)	<0.3		
10/9/2019			<0.3	0.12 (J)

Prediction Limit

Constituent: pH (S.U.) Analysis Run 12/3/2019 2:31 PM View: AP-1 Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46
8/30/2016	5.75			
8/31/2016		6.01	7.15	
9/1/2016				6.19
11/14/2016	5.59		6.96	
11/15/2016		5.91		
11/16/2016				6.05
2/24/2017	5.49			
2/27/2017			6.79	6.01
2/28/2017		5.85		
5/8/2017	5.58	5.91		6.1
5/9/2017			6.9	
7/11/2017	5.58			
7/13/2017		5.8	6.77	6.07
10/10/2017	5.49	5.76	6.9	
10/11/2017				5.93
4/2/2018	6.3 (o)			
4/3/2018			6.44	
4/4/2018		5.77		6.01
9/19/2018	5.48	5.77	6.47	6.09
3/27/2019	5.83	6.1	7.18	6.2
8/20/2019	5.58	5.78	6.48	
8/21/2019				5.82
10/8/2019	5.59	5.84		
10/9/2019			6.55	5.96

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/3/2019 2:31 PM View: AP-1 Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWC-46
8/30/2016	160			
8/31/2016		150	190	
9/1/2016				770
11/14/2016	150		200	
11/15/2016		150		
11/16/2016				780
2/24/2017	120			
2/27/2017			190	650
2/28/2017		130		
5/8/2017	120	150		770
5/9/2017			190	
7/11/2017	110			
7/13/2017		150	180	630
10/10/2017	93	140	180	
10/11/2017				540
4/2/2018	88.8			
4/3/2018			183	
4/4/2018		137		430
9/19/2018	75	137	192	395
3/27/2019	65.9	146	188	437
10/8/2019	52.3	142		
10/9/2019			183	<1

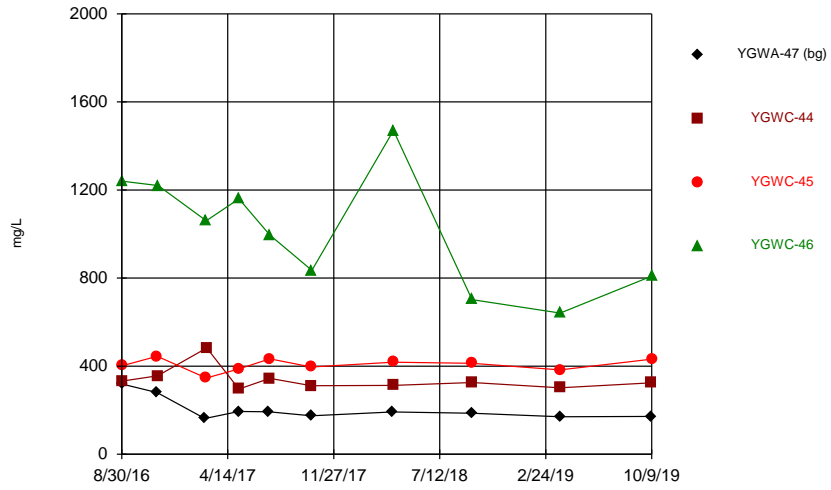
Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/3/2019 2:31 PM View: AP-1 Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWA-47 (bg)	YGWC-45	YGWC-44	YGWC-46
8/30/2016	319			
8/31/2016		402	332	
9/1/2016				1240
11/14/2016	280	445		
11/15/2016			356	
11/16/2016				1220
2/24/2017	162			
2/27/2017		346		1060
2/28/2017			483	
5/8/2017	194		296	1160
5/9/2017		388		
7/11/2017	193			
7/13/2017		433	345	996
10/10/2017	175	396	311	
10/11/2017				835
4/2/2018	192			
4/3/2018		418		
4/4/2018			313	1470
9/19/2018	186	413	326	702
3/27/2019	170	383	302	641
10/8/2019	172		324	
10/9/2019		432		809

Time Series



Constituent: Total Dissolved Solids Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Trend Test

Plant Yates Client: Southern Company Data: Yates Ash Pond 1 Printed 2/11/2020, 5:44 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	YGWA-47 (bg)	-0.00...	-36	-30	Yes	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-46	-0.4284	-34	-30	Yes	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-3.191	-43	-30	Yes	10	10	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-46	-5.794	-41	-30	Yes	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-32.92	-44	-30	Yes	10	0	n/a	n/a	0.01	NP

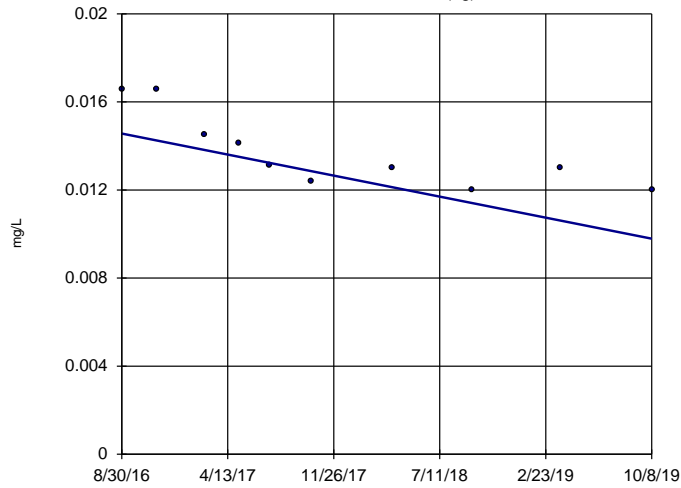
Trend Test

Plant Yates Client: Southern Company Data: Yates Ash Pond 1 Printed 2/11/2020, 5:44 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	YGWA-47 (bg)	-0.00...	-36	-30	Yes	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-44	-0.0226	-8	-30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-45	0.00843	12	30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-46	-0.4284	-34	-30	Yes	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-3.191	-43	-30	Yes	10	10	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-44	0.2577	9	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-45	-0.7613	-10	-30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-46	-18.2	-28	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.5787	-18	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-44	0.5703	25	30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-46	-5.794	-41	-30	Yes	10	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-47 (bg)	0	-4	-30	No	10	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWC-45	-0.1736	-20	-34	No	11	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWC-46	-0.04908	-14	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-32.92	-44	-30	Yes	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-45	-2.253	-12	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-47 (bg)	-13.31	-25	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-44	-11.25	-13	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-45	5.36	1	30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-46	-201.8	-27	-30	No	10	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

YGWA-47 (bg)

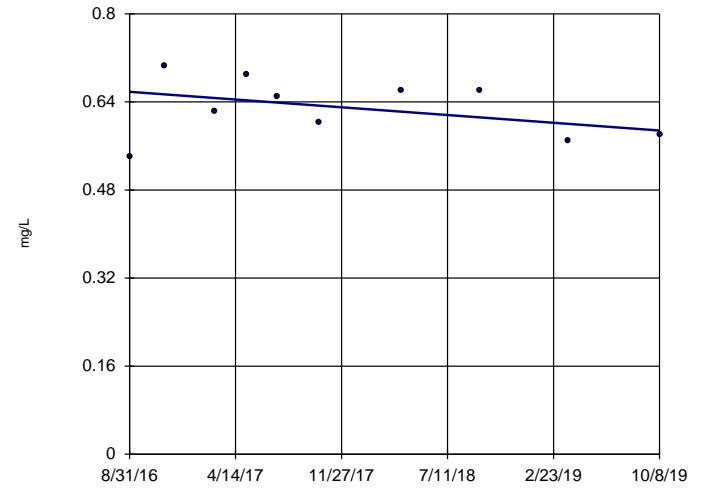


n = 10
Slope = -0.001536
units per year.
Mann-Kendall
statistic = -36
critical = -30
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator

YGWC-44

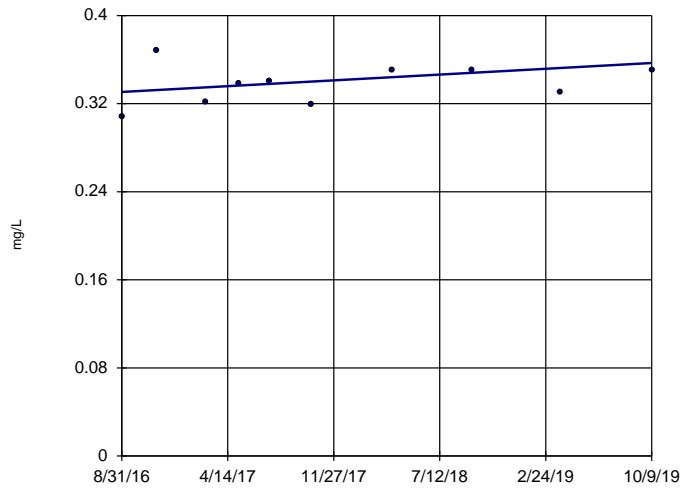


n = 10
Slope = -0.0226
units per year.
Mann-Kendall
statistic = -8
critical = -30
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator

YGWC-45

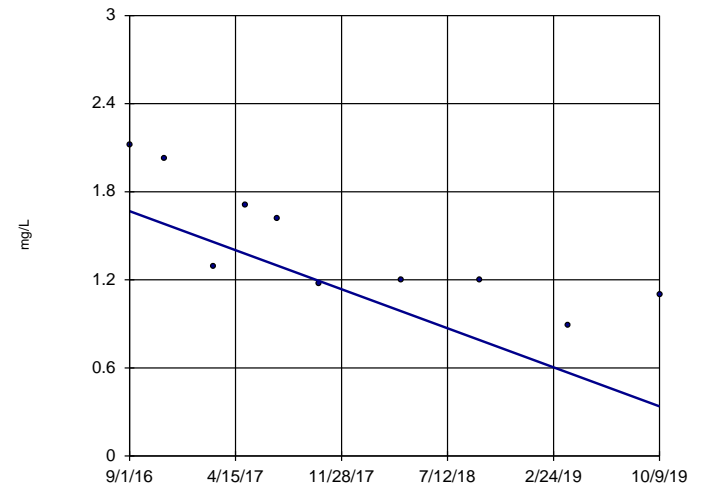


n = 10
Slope = 0.00843
units per year.
Mann-Kendall
statistic = 12
critical = 30
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator

YGWC-46

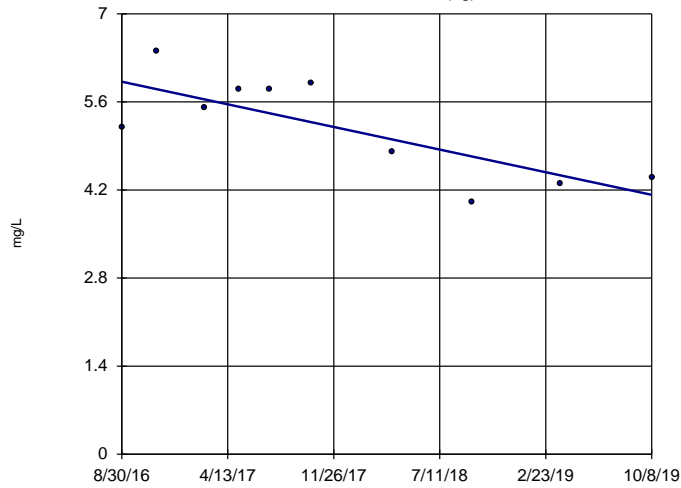


n = 10
Slope = -0.4284
units per year.
Mann-Kendall
statistic = -34
critical = -30
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator

YGWA-47 (bg)

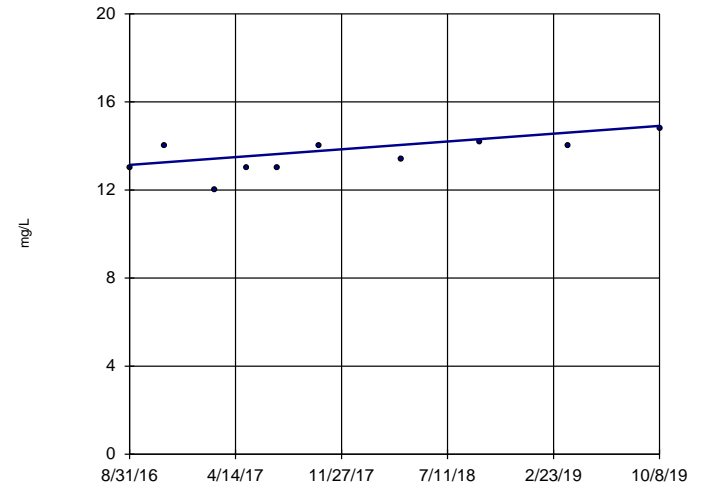


n = 10
 Slope = -0.5787
 units per year.
 Mann-Kendall
 statistic = -18
 critical = -30
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator

YGWC-44

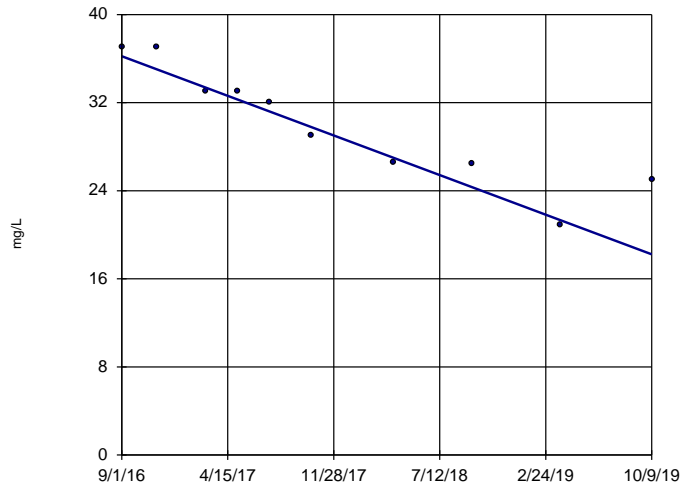


n = 10
 Slope = 0.5703
 units per year.
 Mann-Kendall
 statistic = 25
 critical = 30
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator

YGWC-46

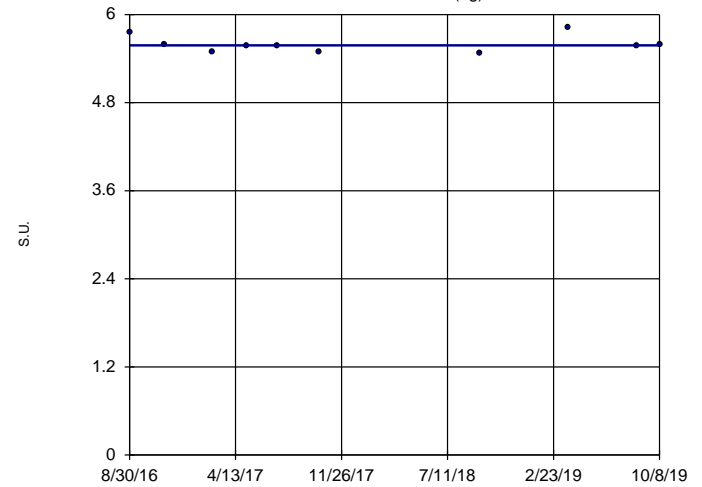


n = 10
 Slope = -5.794
 units per year.
 Mann-Kendall
 statistic = -41
 critical = -30
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator

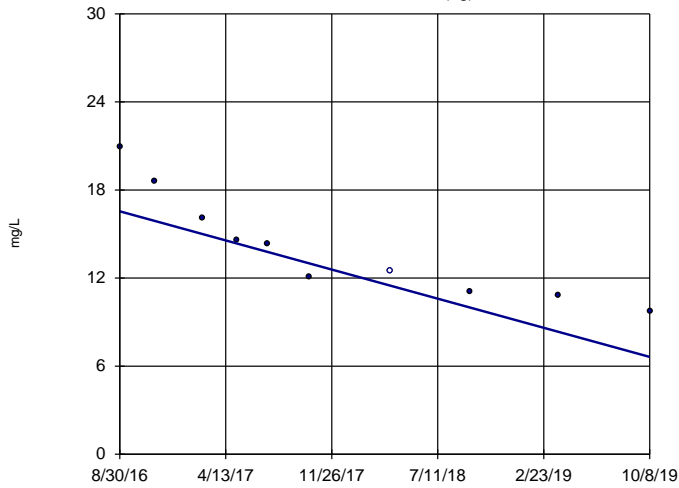
YGWA-47 (bg)



n = 10
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = -4
 critical = -30
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

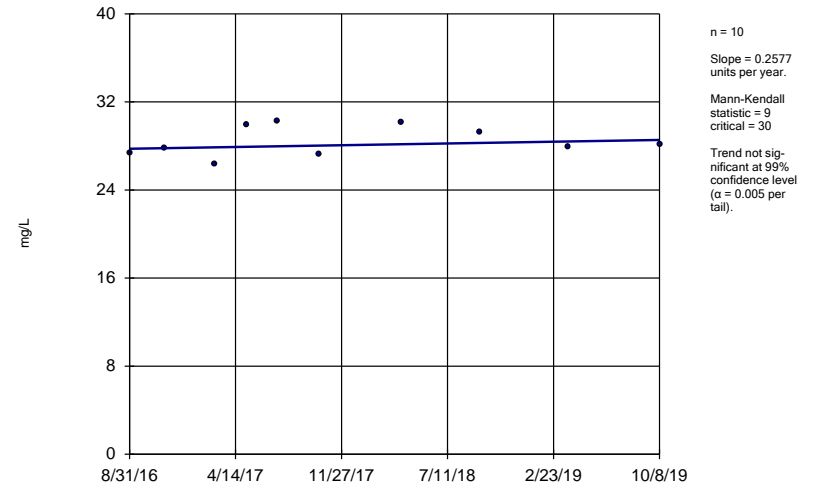
Constituent: pH Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator
YGWA-47 (bg)



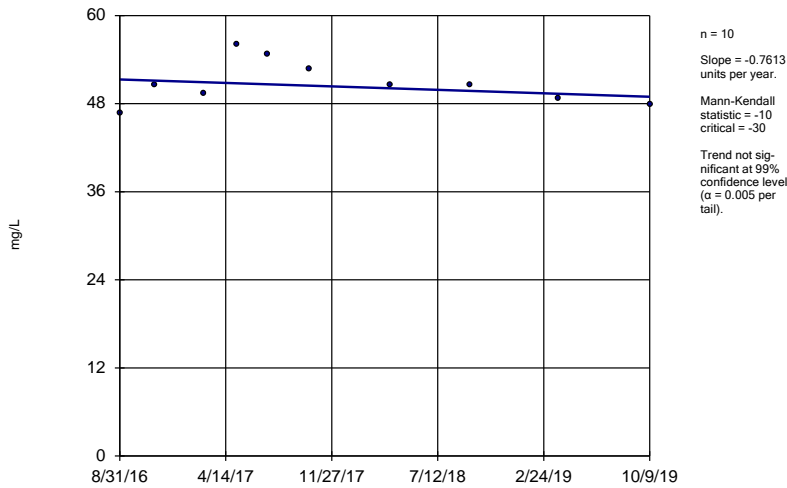
Constituent: Calcium Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator
YGWC-44



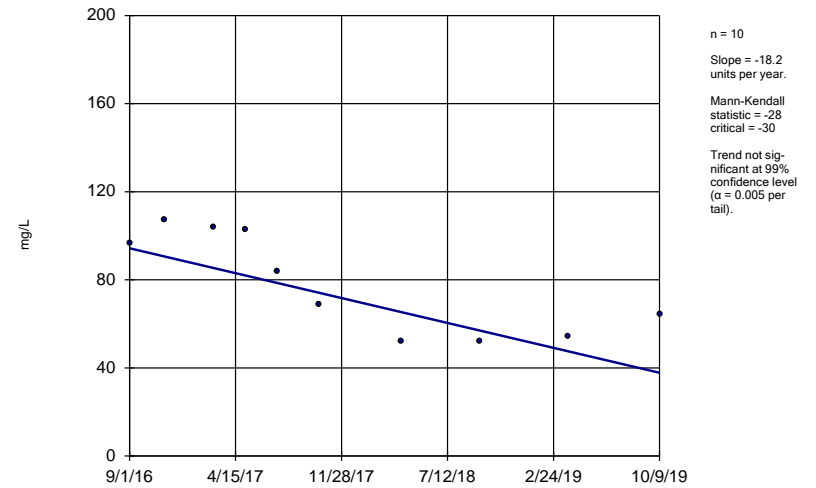
Constituent: Calcium Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator
YGWC-45



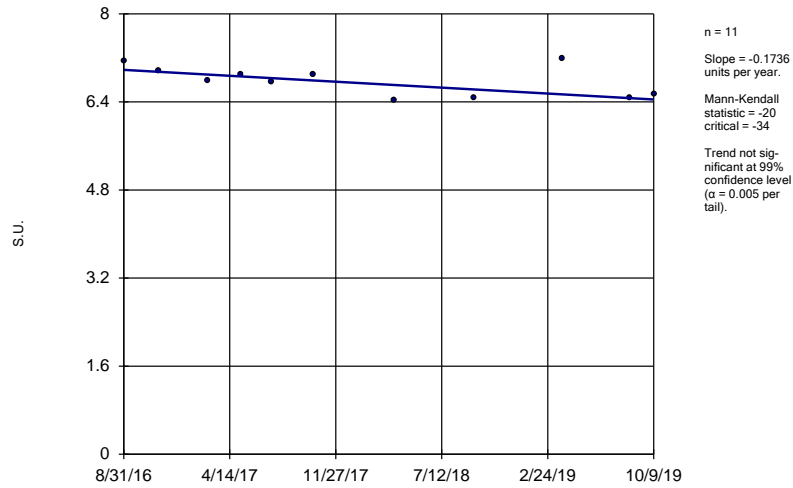
Constituent: Calcium Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator
YGWC-46



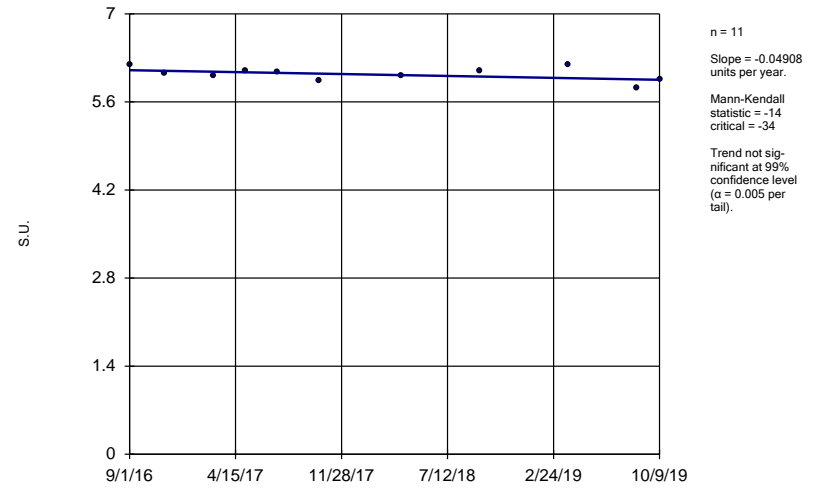
Constituent: Calcium Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator YGWC-45



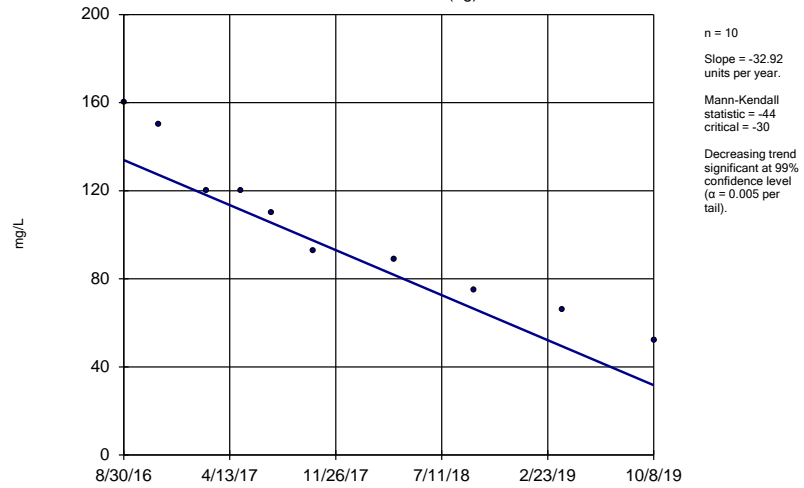
Constituent: pH Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator YGWC-46



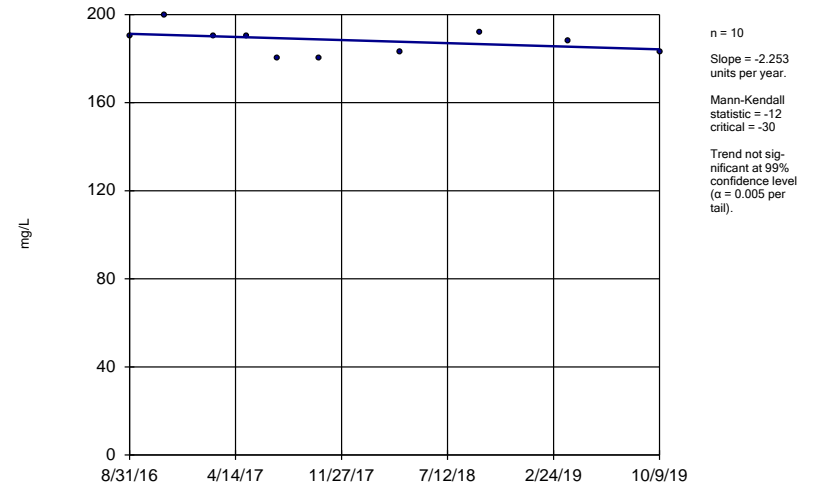
Constituent: pH Analysis Run 2/11/2020 5:40 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator YGWA-47 (bg)



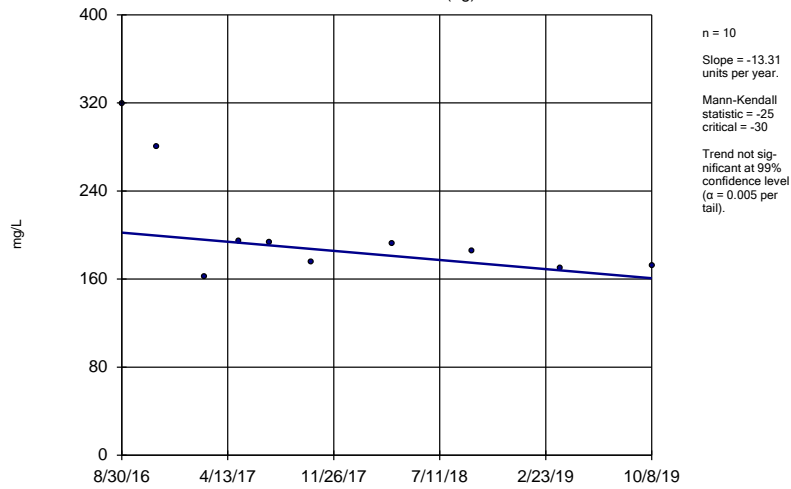
Constituent: Sulfate Analysis Run 2/11/2020 5:41 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator YGWC-45



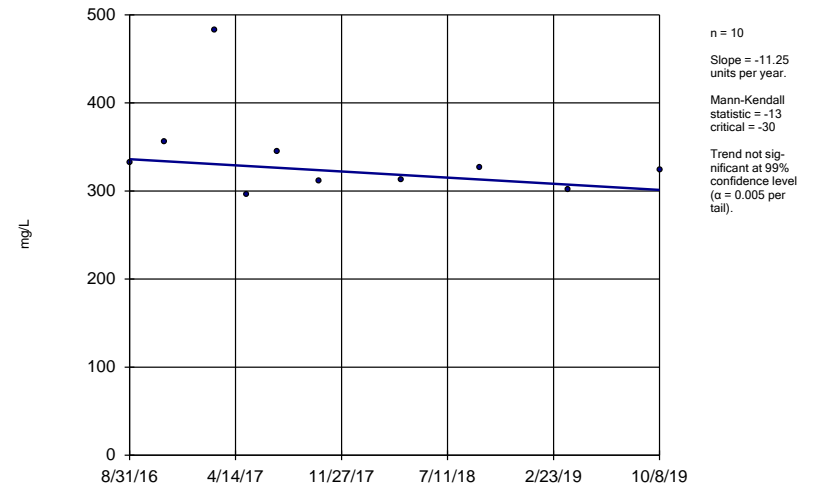
Constituent: Sulfate Analysis Run 2/11/2020 5:41 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator YGWA-47 (bg)



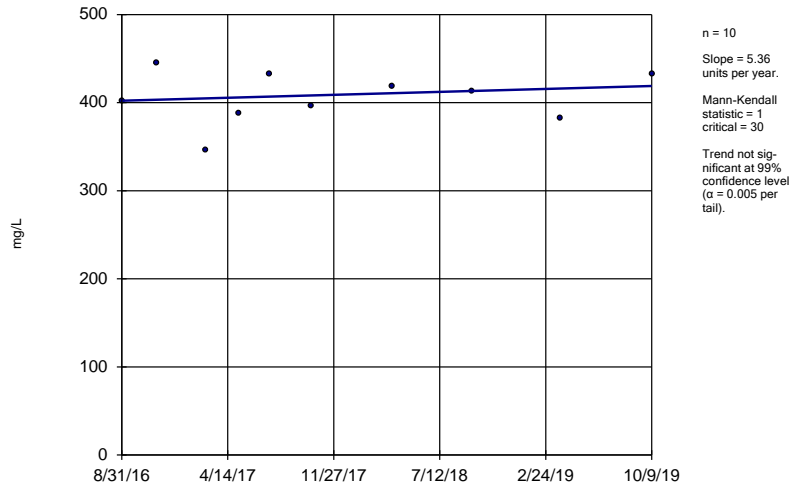
Constituent: Total Dissolved Solids Analysis Run 2/11/2020 5:41 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator YGWC-44



Constituent: Total Dissolved Solids Analysis Run 2/11/2020 5:41 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Sen's Slope Estimator YGWC-45



Sen's Slope Estimator

Constituent: Boron (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWA-47 (bg)

8/30/2016	0.0166 (J)
11/14/2016	0.0166 (J)
2/24/2017	0.0145 (J)
5/8/2017	0.0141 (J)
7/11/2017	0.0131 (J)
10/10/2017	0.0124 (J)
4/2/2018	0.013 (J)
9/19/2018	0.012 (J)
3/27/2019	0.013 (J)
10/8/2019	0.012 (J)

Sen's Slope Estimator

Constituent: Boron (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-44

8/31/2016	0.541
11/15/2016	0.706
2/28/2017	0.623
5/8/2017	0.69
7/13/2017	0.649
10/10/2017	0.603
4/4/2018	0.66
9/19/2018	0.66
3/27/2019	0.57
10/8/2019	0.58

Sen's Slope Estimator

Constituent: Boron (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-45

8/31/2016	0.308
11/14/2016	0.368
2/27/2017	0.321
5/9/2017	0.338
7/13/2017	0.34
10/10/2017	0.319
4/3/2018	0.35
9/19/2018	0.35
3/27/2019	0.33
10/9/2019	0.35

Sen's Slope Estimator

Constituent: Boron (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-46

9/1/2016	2.12
11/16/2016	2.03
2/27/2017	1.29
5/8/2017	1.71
7/13/2017	1.62
10/11/2017	1.17
4/4/2018	1.2
9/19/2018	1.2
3/27/2019	0.89
10/9/2019	1.1

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWA-47 (bg)

8/30/2016	20.9
11/14/2016	18.6
2/24/2017	16.1
5/8/2017	14.6
7/11/2017	14.3
10/10/2017	12.1
4/2/2018	<25
9/19/2018	11.1 (J)
3/27/2019	10.8 (J)
10/8/2019	9.7

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-44

8/31/2016	27.3
11/15/2016	27.8
2/28/2017	26.4
5/8/2017	29.9
7/13/2017	30.2
10/10/2017	27.2
4/4/2018	30.1
9/19/2018	29.2
3/27/2019	27.9
10/8/2019	28.1

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-45

8/31/2016	46.7
11/14/2016	50.6
2/27/2017	49.4
5/9/2017	56
7/13/2017	54.8
10/10/2017	52.8
4/3/2018	50.6
9/19/2018	50.5
3/27/2019	48.8
10/9/2019	47.9

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-46

9/1/2016	96.8
11/16/2016	107
2/27/2017	104
5/8/2017	103
7/13/2017	83.7
10/11/2017	69
4/4/2018	51.9
9/19/2018	51.9
3/27/2019	54.2
10/9/2019	64.2

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWA-47 (bg)

8/30/2016	5.2
11/14/2016	6.4
2/24/2017	5.5
5/8/2017	5.8
7/11/2017	5.8
10/10/2017	5.9
4/2/2018	4.8
9/19/2018	4
3/27/2019	4.3
10/8/2019	4.4

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-44

8/31/2016	13
11/15/2016	14
2/28/2017	12
5/8/2017	13
7/13/2017	13
10/10/2017	14
4/4/2018	13.4
9/19/2018	14.2
3/27/2019	14
10/8/2019	14.8

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-46

9/1/2016	37
11/16/2016	37
2/27/2017	33
5/8/2017	33
7/13/2017	32
10/11/2017	29
4/4/2018	26.6
9/19/2018	26.5
3/27/2019	20.9
10/9/2019	25

Sen's Slope Estimator

Constituent: pH (S.U.) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWA-47 (bg)

8/30/2016	5.75
11/14/2016	5.59
2/24/2017	5.49
5/8/2017	5.58
7/11/2017	5.58
10/10/2017	5.49
4/2/2018	6.3 (o)
9/19/2018	5.48
3/27/2019	5.83
8/20/2019	5.58
10/8/2019	5.59

Sen's Slope Estimator

Constituent: pH (S.U.) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-45

8/31/2016	7.15
11/14/2016	6.96
2/27/2017	6.79
5/9/2017	6.9
7/13/2017	6.77
10/10/2017	6.9
4/3/2018	6.44
9/19/2018	6.47
3/27/2019	7.18
8/20/2019	6.48
10/9/2019	6.55

Sen's Slope Estimator

Constituent: pH (S.U.) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-46

9/1/2016	6.19
11/16/2016	6.05
2/27/2017	6.01
5/8/2017	6.1
7/13/2017	6.07
10/11/2017	5.93
4/4/2018	6.01
9/19/2018	6.09
3/27/2019	6.2
8/21/2019	5.82
10/9/2019	5.96

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWA-47 (bg)

8/30/2016	160
11/14/2016	150
2/24/2017	120
5/8/2017	120
7/11/2017	110
10/10/2017	93
4/2/2018	88.8
9/19/2018	75
3/27/2019	65.9
10/8/2019	52.3

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-45

8/31/2016	190
11/14/2016	200
2/27/2017	190
5/9/2017	190
7/13/2017	180
10/10/2017	180
4/3/2018	183
9/19/2018	192
3/27/2019	188
10/9/2019	183

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWA-47 (bg)

8/30/2016	319
11/14/2016	280
2/24/2017	162
5/8/2017	194
7/11/2017	193
10/10/2017	175
4/2/2018	192
9/19/2018	186
3/27/2019	170
10/8/2019	172

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

YGWC-44

8/31/2016	332
11/15/2016	356
2/28/2017	483
5/8/2017	296
7/13/2017	345
10/10/2017	311
4/4/2018	313
9/19/2018	326
3/27/2019	302
10/8/2019	324

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-45
8/31/2016	402
11/14/2016	445
2/27/2017	346
5/9/2017	388
7/13/2017	433
10/10/2017	396
4/3/2018	418
9/19/2018	413
3/27/2019	383
10/9/2019	432

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/L) Analysis Run 2/11/2020 5:44 PM View: AP-1 Time Series

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-46
9/1/2016	1240
11/16/2016	1220
2/27/2017	1060
5/8/2017	1160
7/13/2017	996
10/11/2017	835
4/4/2018	1470
9/19/2018	702
3/27/2019	641
10/9/2019	809

Appendix IV Upper Tolerance Limit Summary (October 2019)

Upper Tolerance Limit

Plant Yates Client: Southern Company Data: Yates Ash Pond 1 Printed 3/11/2020, 4:02 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	8	62.5	n/a	0.6634	NP Inter(normal...
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	8	75	n/a	0.6634	NP Inter(normal...
Barium (mg/L)	n/a	0.05487	n/a	n/a	n/a	8	0	No	0.05	Inter
Beryllium (mg/L)	n/a	0.003	n/a	n/a	n/a	8	75	n/a	0.6634	NP Inter(normal...
Cadmium (mg/L)	n/a	0.001	n/a	n/a	n/a	8	50	n/a	0.6634	NP Inter(normal...
Chromium (mg/L)	n/a	0.01	n/a	n/a	n/a	8	87.5	n/a	0.6634	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.01789	n/a	n/a	n/a	8	12.5	No	0.05	Inter
Combined Radium 226 + 228 (pCi/L)	n/a	1.48	n/a	n/a	n/a	8	0	No	0.05	Inter
Fluoride (mg/L)	n/a	0.7552	n/a	n/a	n/a	8	37.5	No	0.05	Inter
Lead (mg/L)	n/a	0.005	n/a	n/a	n/a	8	100	n/a	0.6634	NP Inter(NDs)
Lithium (mg/L)	n/a	0.007643	n/a	n/a	n/a	8	0	No	0.05	Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	8	87.5	n/a	0.6634	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	8	100	n/a	0.6634	NP Inter(NDs)
Selenium (mg/L)	n/a	0.01	n/a	n/a	n/a	8	75	n/a	0.6634	NP Inter(normal...
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	8	100	n/a	0.6634	NP Inter(NDs)

Appendix IV Confidence Intervals (October 2019)

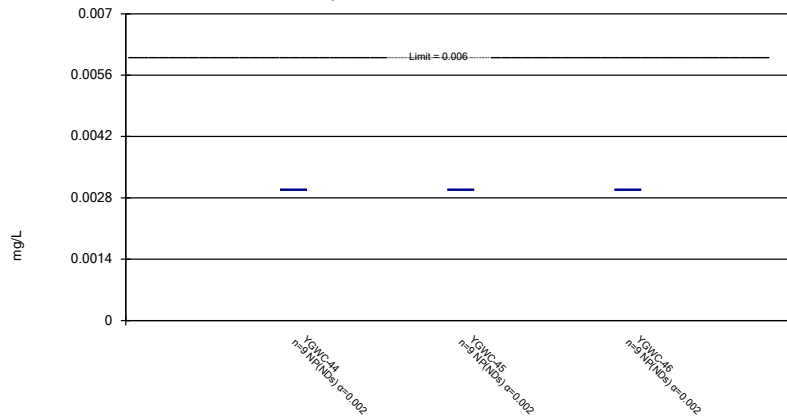
Confidence Interval All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond 1 Printed 3/26/2020, 5:49 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	YGWC-44	0.003	0.003	0.006	No	9	100	No	0.002	NP (NDs)
Antimony (mg/L)	YGWC-45	0.003	0.003	0.006	No	9	100	No	0.002	NP (NDs)
Antimony (mg/L)	YGWC-46	0.003	0.003	0.006	No	9	100	No	0.002	NP (NDs)
Arsenic (mg/L)	YGWC-44	0.005	0.0006	0.01	No	10	50	No	0.011	NP (normality)
Arsenic (mg/L)	YGWC-45	0.005	0.00061	0.01	No	10	60	No	0.011	NP (normality)
Arsenic (mg/L)	YGWC-46	0.005	0.00074	0.01	No	10	40	No	0.011	NP (normality)
Barium (mg/L)	YGWC-44	0.1221	0.1045	2	No	10	0	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.0771	0.0622	2	No	10	0	No	0.01	Param.
Barium (mg/L)	YGWC-46	0.03651	0.02569	2	No	10	0	No	0.01	Param.
Beryllium (mg/L)	YGWC-44	0.003	0.003	0.004	No	9	100	No	0.002	NP (NDs)
Beryllium (mg/L)	YGWC-45	0.003	0.003	0.004	No	9	100	No	0.002	NP (NDs)
Beryllium (mg/L)	YGWC-46	0.003	0.003	0.004	No	9	100	No	0.002	NP (NDs)
Cadmium (mg/L)	YGWC-44	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	YGWC-45	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	YGWC-46	0.0025	0.00012	0.005	No	10	80	No	0.011	NP (NDs)
Chromium (mg/L)	YGWC-44	0.01	0.01	0.1	No	9	100	No	0.002	NP (NDs)
Chromium (mg/L)	YGWC-45	0.01	0.0006	0.1	No	9	77.78	No	0.002	NP (NDs)
Chromium (mg/L)	YGWC-46	0.01	0.01	0.1	No	9	100	No	0.002	NP (NDs)
Cobalt (mg/L)	YGWC-44	0.005	0.0017	0.018	No	10	10	No	0.011	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0009302	0.0007409	0.018	No	9	0	No	0.01	Param.
Cobalt (mg/L)	YGWC-46	0.03998	0.01692	0.018	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.474	0.3193	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.761	0.8092	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46	1.435	0.7424	5	No	11	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-44	0.3	0.07	4	No	11	72.73	No	0.006	NP (normality)
Fluoride (mg/L)	YGWC-45	0.39	0.11	4	No	11	36.36	No	0.006	NP (Cohens/xfrm)
Fluoride (mg/L)	YGWC-46	0.3	0.04	4	No	11	36.36	No	0.006	NP (Cohens/xfrm)
Lead (mg/L)	YGWC-44	0.005	0.005	0.005	No	9	100	No	0.002	NP (NDs)
Lead (mg/L)	YGWC-45	0.005	0.0001	0.005	No	9	88.89	No	0.002	NP (NDs)
Lead (mg/L)	YGWC-46	0.005	0.005	0.005	No	9	100	No	0.002	NP (NDs)
Lithium (mg/L)	YGWC-44	0.01373	0.01199	0.03	No	10	0	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.01525	0.01219	0.03	No	10	0	No	0.01	Param.
Lithium (mg/L)	YGWC-46	0.01054	0.007659	0.03	No	10	0	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0005	0.00006	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0005	0.000071	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-46	0.0005	0.00007	0.002	No	9	88.89	No	0.002	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.01	0.01	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.01	0.0012	0.01	No	10	30	No	0.011	NP (normality)
Molybdenum (mg/L)	YGWC-46	0.01	0.0012	0.01	No	10	30	No	0.011	NP (Cohens/xfrm)
Selenium (mg/L)	YGWC-44	0.01	0.01	0.05	No	9	100	No	0.002	NP (NDs)
Selenium (mg/L)	YGWC-45	0.01	0.01	0.05	No	9	100	No	0.002	NP (NDs)
Selenium (mg/L)	YGWC-46	0.01	0.01	0.05	No	9	100	No	0.002	NP (NDs)
Thallium (mg/L)	YGWC-44	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-45	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-46	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)

Non-Parametric Confidence Interval

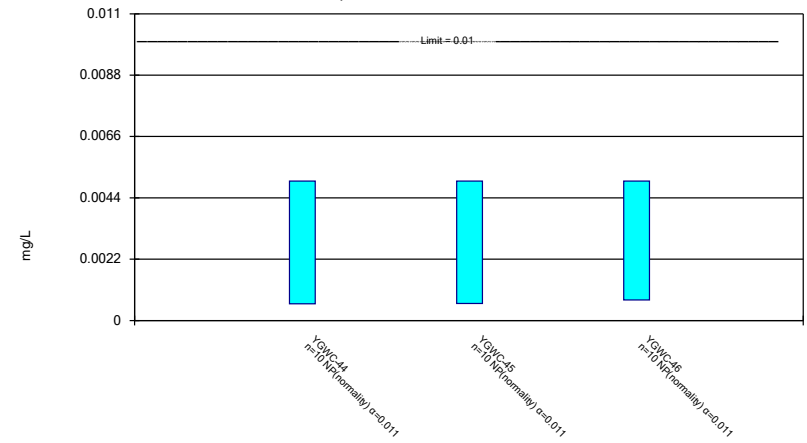
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

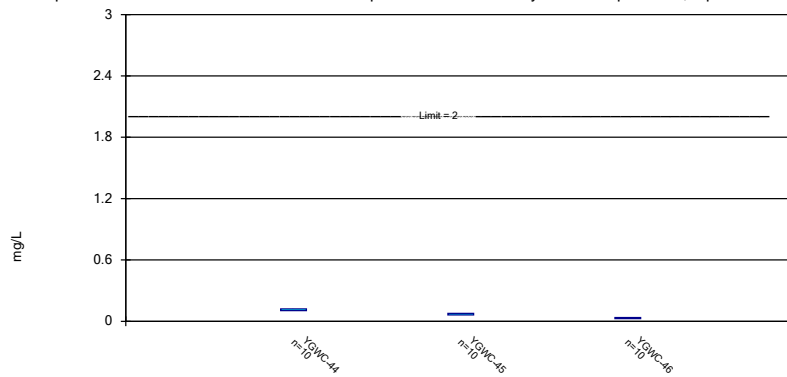
Compliance Limit is not exceeded.



Constituent: Arsenic Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Parametric Confidence Interval

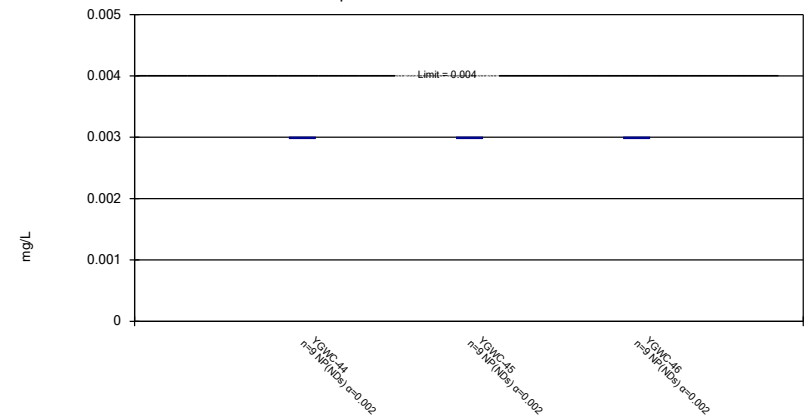
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

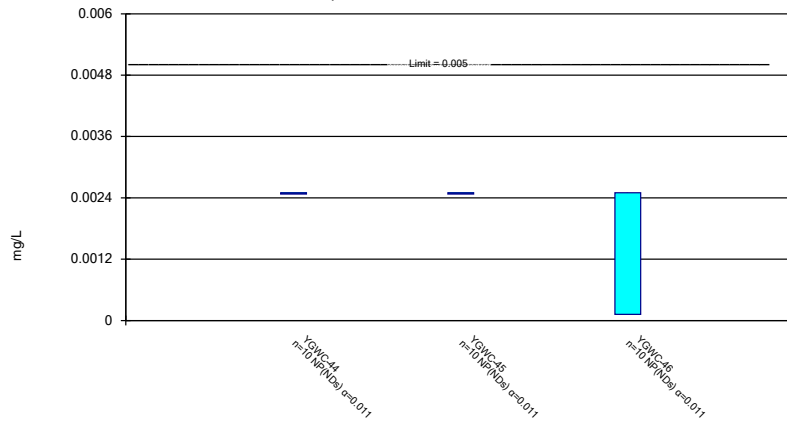
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

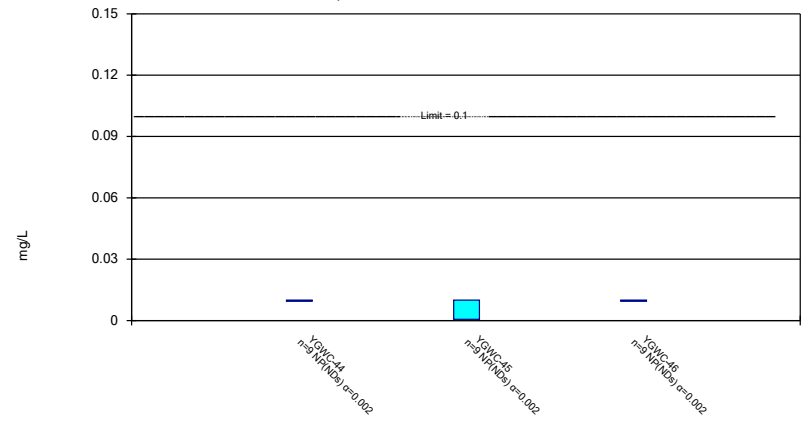
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

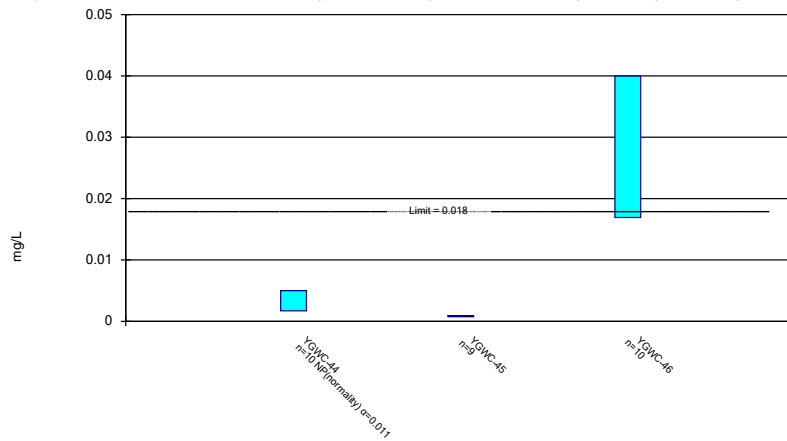
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Parametric and Non-Parametric (NP) Confidence Interval

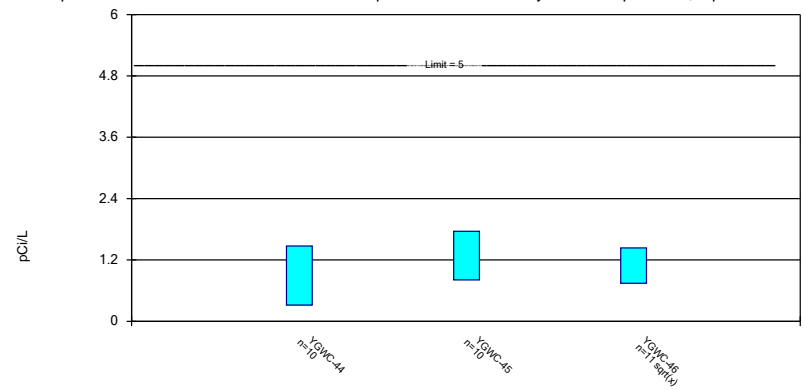
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Parametric Confidence Interval

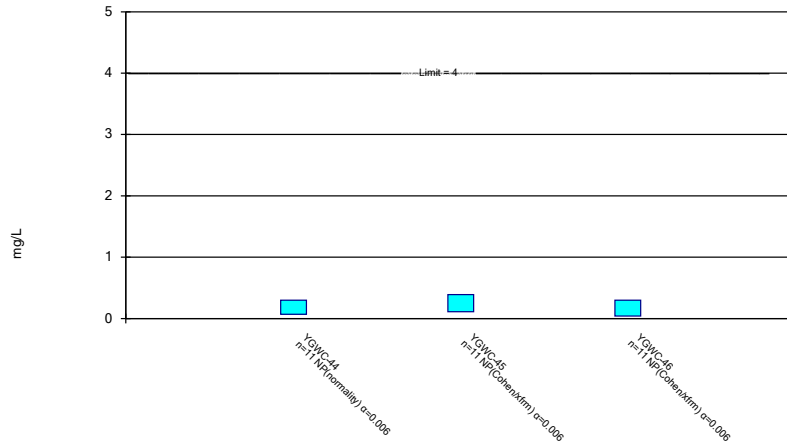
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

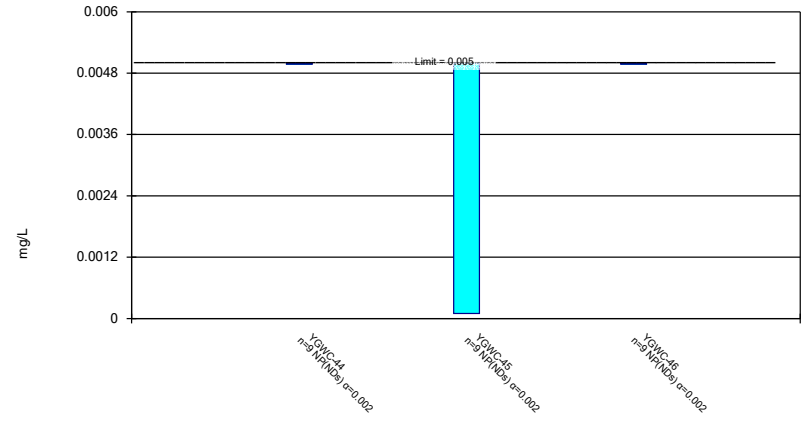
Compliance Limit is not exceeded.



Constituent: Fluoride Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

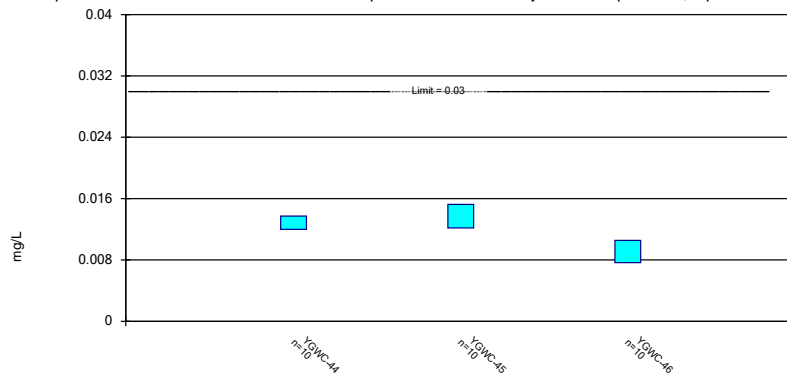
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Parametric Confidence Interval

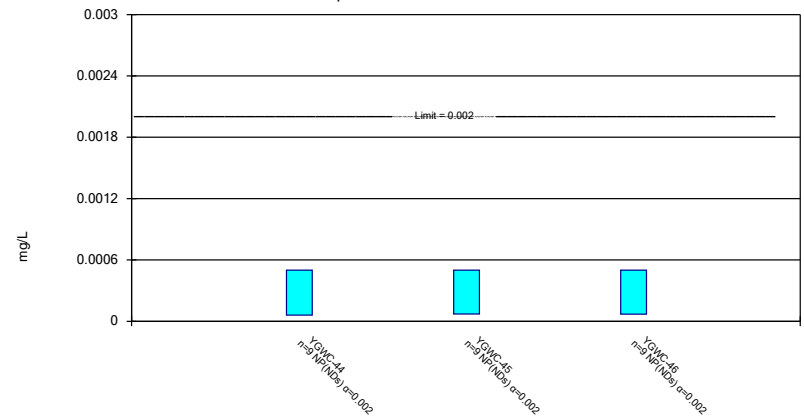
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

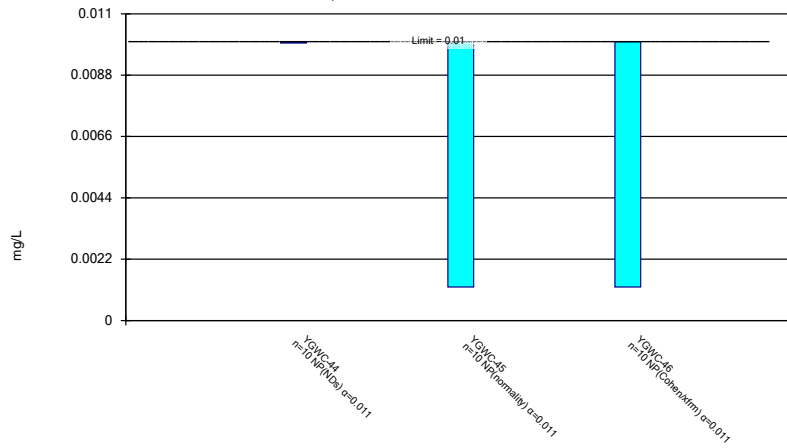
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
 Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

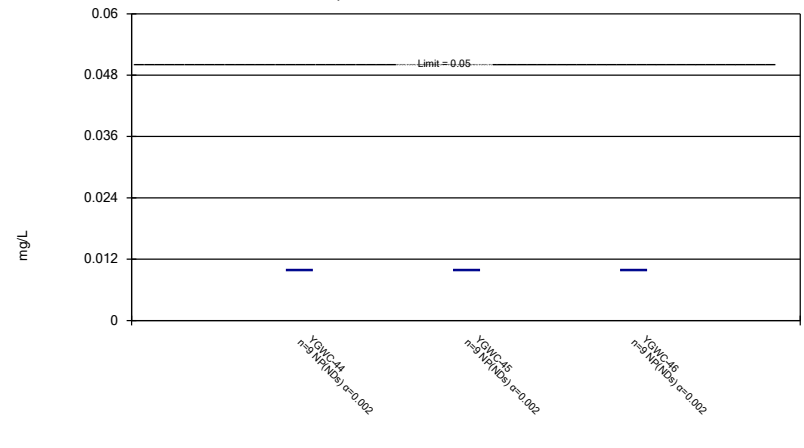
Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

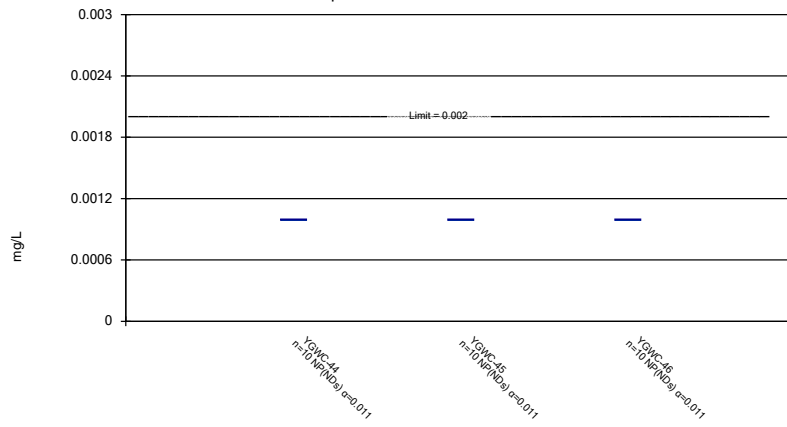
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 3/26/2020 5:48 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.003	<0.003	
9/1/2016			<0.003
11/14/2016		<0.003	
11/15/2016	<0.003		
11/16/2016			<0.003
2/27/2017		<0.003	<0.003
2/28/2017	<0.003		
5/8/2017	<0.003		<0.003
5/9/2017		<0.003	
7/13/2017	<0.003	<0.003	<0.003
10/10/2017	<0.003	<0.003	
10/11/2017			<0.003
4/3/2018		<0.003	
4/4/2018	<0.003		<0.003
9/19/2018	<0.003	<0.003	<0.003
8/20/2019	<0.003	<0.003	
8/21/2019			<0.003
Mean	0.003	0.003	0.003
Std. Dev.	0	0	0
Upper Lim.	0.003	0.003	0.003
Lower Lim.	0.003	0.003	0.003

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.005	<0.005	
9/1/2016			<0.005
11/14/2016		<0.005	
11/15/2016	<0.005		
11/16/2016			<0.005
2/27/2017		<0.005	<0.005
2/28/2017	0.0005 (J)		
5/8/2017	0.0006 (J)		0.0007 (J)
5/9/2017		<0.005	
7/13/2017	<0.005	<0.005	0.0011 (J)
10/10/2017	0.0007 (J)	0.0006 (J)	
10/11/2017			0.0011 (J)
4/3/2018		0.00061 (J)	
4/4/2018	<0.005		0.00087 (J)
9/19/2018	0.00086 (J)	0.00072 (J)	0.0012 (J)
8/20/2019	0.00097 (J)	0.00078 (J)	
8/21/2019			0.00074 (J)
10/8/2019	<0.005		
10/9/2019		<0.005	<0.005
Mean	0.002863	0.003271	0.002571
Std. Dev.	0.002256	0.002233	0.002096
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.0006	0.00061	0.00074

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	0.126	0.0754	
9/1/2016			0.0414
11/14/2016		0.0701	
11/15/2016	0.115		
11/16/2016			0.0365
2/27/2017		0.0834	0.0326
2/28/2017	0.121		
5/8/2017	0.125		0.0332
5/9/2017		0.0779	
7/13/2017	0.106	0.0719	0.0365
10/10/2017	0.112	0.0708	
10/11/2017			0.0288
4/3/2018		0.068	
4/4/2018	0.12		0.025
9/19/2018	0.11	0.064	0.03
8/20/2019	0.1	0.057	
8/21/2019			0.023
10/8/2019	0.098		
10/9/2019		0.058	0.024
Mean	0.1133	0.06965	0.0311
Std. Dev.	0.0099	0.008348	0.006063
Upper Lim.	0.1221	0.0771	0.03651
Lower Lim.	0.1045	0.0622	0.02569

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.003	<0.003	
9/1/2016			<0.003
11/14/2016		<0.003	
11/15/2016	<0.003		
11/16/2016			<0.003
2/27/2017		<0.003	<0.003
2/28/2017	<0.003		
5/8/2017	<0.003		<0.003
5/9/2017		<0.003	
7/13/2017	<0.003	<0.003	<0.003
10/10/2017	<0.003	<0.003	
10/11/2017			<0.003
4/3/2018		<0.003	
4/4/2018	<0.003		<0.003
9/19/2018	<0.003	<0.003	<0.003
8/20/2019	<0.003	<0.003	
8/21/2019			<0.003
Mean	0.003	0.003	0.003
Std. Dev.	0	0	0
Upper Lim.	0.003	0.003	0.003
Lower Lim.	0.003	0.003	0.003

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.0025	<0.0025	
9/1/2016			<0.0025
11/14/2016		<0.0025	
11/15/2016	<0.0025		
11/16/2016			<0.0025
2/27/2017		<0.0025	<0.0025
2/28/2017	<0.0025		
5/8/2017	<0.0025		0.0001 (J)
5/9/2017		<0.0025	
7/13/2017	<0.0025	<0.0025	<0.0025
10/10/2017	<0.0025	<0.0025	
10/11/2017			<0.0025
4/3/2018		<0.0025	
4/4/2018	<0.0025		<0.0025
9/19/2018	<0.0025	<0.0025	<0.0025
8/20/2019	<0.0025	<0.0025	
8/21/2019			0.00012 (J)
10/8/2019	<0.0025		
10/9/2019		<0.0025	<0.0025
Mean	0.0025	0.0025	0.002022
Std. Dev.	0	0	0.001008
Upper Lim.	0.0025	0.0025	0.0025
Lower Lim.	0.0025	0.0025	0.00012

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.01	<0.01	
9/1/2016			<0.01
11/14/2016		0.0061 (J)	
11/15/2016	<0.01		
11/16/2016			<0.01
2/27/2017		<0.01	<0.01
2/28/2017	<0.01		
5/8/2017	<0.01		<0.01
5/9/2017		<0.01	
7/13/2017	<0.01	0.0006 (J)	<0.01
10/10/2017	<0.01	<0.01	
10/11/2017			<0.01
4/3/2018		<0.01	
4/4/2018	<0.01		<0.01
9/19/2018	<0.01	<0.01	<0.01
8/20/2019	<0.01	<0.01	
8/21/2019			<0.01
Mean	0.01	0.008522	0.01
Std. Dev.	0	0.003239	0
Upper Lim.	0.01	0.01	0.01
Lower Lim.	0.01	0.0006	0.01

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	0.0119	0.0009 (J)	
9/1/2016			0.0171
11/14/2016		0.0009 (J)	
11/15/2016	0.0033 (J)		
11/16/2016			0.0145
2/27/2017		0.001 (J)	0.0161
2/28/2017	0.0017 (J)		
5/8/2017	0.0018 (J)		0.0367
5/9/2017		0.0008 (J)	
7/13/2017	0.0022 (J)	0.0009 (J)	0.0265
10/10/2017	0.0017 (J)	0.0008 (J)	
10/11/2017			0.0556
4/3/2018		<0.01 (o)	
4/4/2018	<0.01		0.025
9/19/2018	0.0025 (J)	0.00081 (J)	0.042
8/20/2019	0.002 (J)	0.00071 (J)	
8/21/2019			0.027
10/8/2019	0.0017 (J)		
10/9/2019		0.0007 (J)	0.024
Mean	0.00338	0.0008356	0.02845
Std. Dev.	0.003167	9.799E-05	0.01292
Upper Lim.	0.005	0.0009302	0.03998
Lower Lim.	0.0017	0.0007409	0.01692

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	2.15	1.65	
9/1/2016			2.28
11/14/2016		0.981 (U)	
11/15/2016	0.676 (U)		
11/16/2016			0.639 (U)
11/28/2016			0.996
2/27/2017		0.528 (U)	0.617 (U)
2/28/2017	0.241 (U)		
5/8/2017	0.508 (U)		0.949
5/9/2017		1.4	
7/13/2017	0.77 (U)	0.611 (U)	1.41
10/10/2017	1.43	1.47	
10/11/2017			0.856 (U)
4/3/2018		1.53	
4/4/2018	0.325 (U)		0.974
9/19/2018	0.386 (U)	0.839 (U)	1.15 (U)
8/20/2019	1.71	2.23	
8/21/2019			1.31
10/8/2019	0.769 (U)		
10/9/2019		1.61	0.892 (U)
Mean	0.8965	1.285	1.098
Std. Dev.	0.6469	0.5331	0.4619
Upper Lim.	1.474	1.761	1.435
Lower Lim.	0.3193	0.8092	0.7424

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.3	0.11 (J)	
9/1/2016			0.08 (J)
11/14/2016		0.71	
11/15/2016	0.12 (J)		
11/16/2016			0.04 (J)
2/27/2017		0.22 (J)	0.05 (J)
2/28/2017	0.07 (J)		
5/8/2017	0.04 (J)		0.004 (J)
5/9/2017		0.2 (J)	
7/13/2017	<0.3	0.11 (J)	0.35
10/10/2017	<0.3	0.39	
10/11/2017			<0.3
4/3/2018		<0.3	
4/4/2018	<0.3		<0.3
9/19/2018	<0.3	<0.3	<0.3
3/27/2019	<0.3	0.18 (J)	0.12 (J)
8/20/2019	<0.3	<0.3	
8/21/2019			<0.3
10/8/2019	<0.3		
10/9/2019		<0.3	0.12 (J)
Mean	0.2391	0.2836	0.1785
Std. Dev.	0.1059	0.1662	0.1308
Upper Lim.	0.3	0.39	0.3
Lower Lim.	0.07	0.11	0.04

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.005	<0.005	
9/1/2016			<0.005
11/14/2016		<0.005	
11/15/2016	<0.005		
11/16/2016			<0.005
2/27/2017		<0.005	<0.005
2/28/2017	<0.005		
5/8/2017	<0.005		<0.005
5/9/2017		0.0001 (J)	
7/13/2017	<0.005	<0.005	<0.005
10/10/2017	<0.005	<0.005	
10/11/2017			<0.005
4/3/2018		<0.005	
4/4/2018	<0.005		<0.005
9/19/2018	<0.005	<0.005	<0.005
8/20/2019	<0.005	<0.005	
8/21/2019			<0.005
Mean	0.005	0.004456	0.005
Std. Dev.	0	0.001633	0
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.005	0.0001	0.005

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	0.0115 (J)	0.0147 (J)	
9/1/2016			0.0077 (J)
11/14/2016		0.0175 (J)	
11/15/2016	0.0148 (J)		
11/16/2016			0.0075 (J)
2/27/2017		0.0135 (J)	0.0084 (J)
2/28/2017	0.0124 (J)		
5/8/2017	0.0132 (J)		0.0087 (J)
5/9/2017		0.0136 (J)	
7/13/2017	0.0124 (J)	0.0129 (J)	0.0104 (J)
10/10/2017	0.0123 (J)	0.015 (J)	
10/11/2017			0.0099 (J)
4/3/2018		0.014 (J)	
4/4/2018	0.014 (J)		0.012 (J)
9/19/2018	0.013 (J)	0.012 (J)	0.011 (J)
8/20/2019	0.013 (J)	0.012 (J)	
8/21/2019			0.0076 (J)
10/8/2019	0.012 (J)		
10/9/2019		0.012 (J)	0.0078 (J)
Mean	0.01286	0.01372	0.0091
Std. Dev.	0.0009743	0.001718	0.001615
Upper Lim.	0.01373	0.01525	0.01054
Lower Lim.	0.01199	0.01219	0.007659

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.0005	<0.0005	
9/1/2016			<0.0005
11/14/2016		<0.0005	
11/15/2016	<0.0005		
11/16/2016			<0.0005
2/27/2017		<0.0005	<0.0005
2/28/2017	<0.0005		
5/8/2017	<0.0005		<0.0005
5/9/2017		<0.0005	
7/13/2017	<0.0005	<0.0005	<0.0005
10/10/2017	<0.0005	<0.0005	
10/11/2017			<0.0005
4/3/2018		<0.0005	
4/4/2018	<0.0005		<0.0005
9/19/2018	6E-05 (J)	7.1E-05 (J)	7E-05 (J)
8/20/2019	<0.0005	<0.0005	
8/21/2019			<0.0005
Mean	0.0004511	0.0004523	0.0004522
Std. Dev.	0.0001467	0.000143	0.0001433
Upper Lim.	0.0005	0.0005	0.0005
Lower Lim.	6E-05	7.1E-05	7E-05

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.01	0.0024 (J)	
9/1/2016			<0.01
11/14/2016		<0.01	
11/15/2016	<0.01		
11/16/2016			<0.01
2/27/2017		0.0018 (J)	<0.01
2/28/2017	0.0005 (J)		
5/8/2017	<0.01		0.0008 (J)
5/9/2017		0.0015 (J)	
7/13/2017	<0.01	0.0015 (J)	0.0015 (J)
10/10/2017	<0.01	0.0015 (J)	
10/11/2017			0.002 (J)
4/3/2018		<0.01	
4/4/2018	<0.01		0.0021 (J)
9/19/2018	<0.01	<0.01	0.0039 (J)
8/20/2019	<0.01	0.0011 (J)	
8/21/2019			0.0012 (J)
10/8/2019	<0.01		
10/9/2019		0.0012 (J)	0.0013 (J)
Mean	0.00905	0.0041	0.00428
Std. Dev.	0.003004	0.004087	0.004034
Upper Lim.	0.01	0.01	0.01
Lower Lim.	0.01	0.0012	0.0012

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.01	<0.01	
9/1/2016			<0.01
11/14/2016		<0.01	
11/15/2016	<0.01		
11/16/2016			<0.01
2/27/2017		<0.01	<0.01
2/28/2017	<0.01		
5/8/2017	<0.01		<0.01
5/9/2017		<0.01	
7/13/2017	<0.01	<0.01	<0.01
10/10/2017	<0.01	<0.01	
10/11/2017			<0.01
4/3/2018		<0.01	
4/4/2018	<0.01		<0.01
9/19/2018	<0.01	<0.01	<0.01
8/20/2019	<0.01	<0.01	
8/21/2019			<0.01
Mean	0.01	0.01	0.01
Std. Dev.	0	0	0
Upper Lim.	0.01	0.01	0.01
Lower Lim.	0.01	0.01	0.01

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

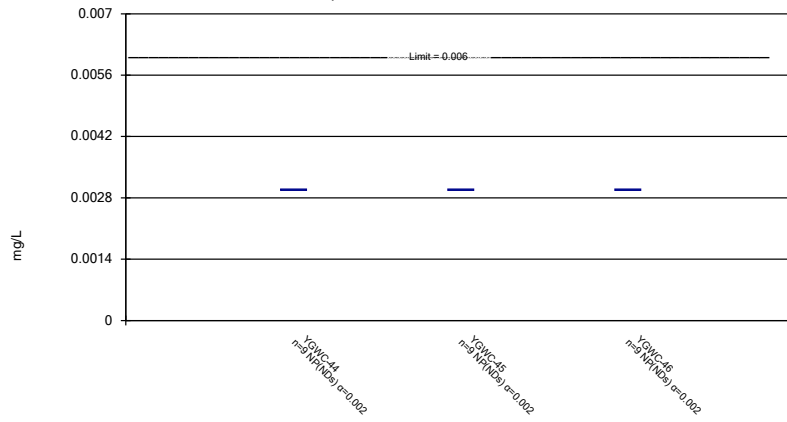
	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.001	<0.001	
9/1/2016			<0.001
11/14/2016		<0.001	
11/15/2016	<0.001		
11/16/2016			<0.001
2/27/2017		<0.001	<0.001
2/28/2017	<0.001		
5/8/2017	<0.001		<0.001
5/9/2017		<0.001	
7/13/2017	<0.001	<0.001	<0.001
10/10/2017	<0.001	<0.001	
10/11/2017			<0.001
4/3/2018		<0.001	
4/4/2018	<0.001		<0.001
9/19/2018	<0.001	<0.001	<0.001
8/20/2019	<0.001	<0.001	
8/21/2019			<0.001
10/8/2019	<0.001		
10/9/2019		<0.001	<0.001
Mean	0.001	0.001	0.001
Std. Dev.	0	0	0
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.001	0.001	0.001

Confidence Interval All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond 1 Printed 3/26/2020, 5:50 PM

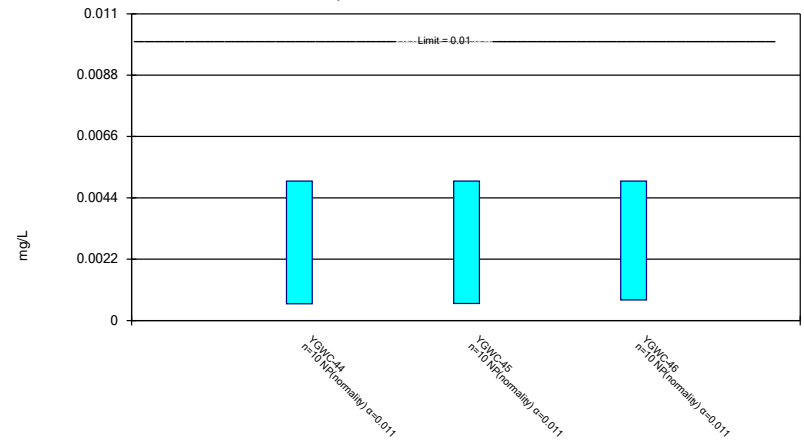
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	YGWC-44	0.003	0.003	0.006	No	9	100	No	0.002	NP (NDs)
Antimony (mg/L)	YGWC-45	0.003	0.003	0.006	No	9	100	No	0.002	NP (NDs)
Antimony (mg/L)	YGWC-46	0.003	0.003	0.006	No	9	100	No	0.002	NP (NDs)
Arsenic (mg/L)	YGWC-44	0.005	0.0006	0.01	No	10	50	No	0.011	NP (normality)
Arsenic (mg/L)	YGWC-45	0.005	0.00061	0.01	No	10	60	No	0.011	NP (normality)
Arsenic (mg/L)	YGWC-46	0.005	0.00074	0.01	No	10	40	No	0.011	NP (normality)
Barium (mg/L)	YGWC-44	0.1221	0.1045	2	No	10	0	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.0771	0.0622	2	No	10	0	No	0.01	Param.
Barium (mg/L)	YGWC-46	0.03651	0.02569	2	No	10	0	No	0.01	Param.
Beryllium (mg/L)	YGWC-44	0.003	0.003	0.004	No	9	100	No	0.002	NP (NDs)
Beryllium (mg/L)	YGWC-45	0.003	0.003	0.004	No	9	100	No	0.002	NP (NDs)
Beryllium (mg/L)	YGWC-46	0.003	0.003	0.004	No	9	100	No	0.002	NP (NDs)
Cadmium (mg/L)	YGWC-44	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	YGWC-45	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	YGWC-46	0.0025	0.00012	0.005	No	10	80	No	0.011	NP (NDs)
Chromium (mg/L)	YGWC-44	0.01	0.01	0.1	No	9	100	No	0.002	NP (NDs)
Chromium (mg/L)	YGWC-45	0.01	0.0006	0.1	No	9	77.78	No	0.002	NP (NDs)
Chromium (mg/L)	YGWC-46	0.01	0.01	0.1	No	9	100	No	0.002	NP (NDs)
Cobalt (mg/L)	YGWC-44	0.005	0.0017	0.018	No	10	10	No	0.011	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0009302	0.0007409	0.018	No	9	0	No	0.01	Param.
Cobalt (mg/L)	YGWC-46	0.03998	0.01692	0.018	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.474	0.3193	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.761	0.8092	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46	1.435	0.7424	5	No	11	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-44	0.3	0.07	4	No	11	72.73	No	0.006	NP (normality)
Fluoride (mg/L)	YGWC-45	0.39	0.11	4	No	11	36.36	No	0.006	NP (Cohens/xfrm)
Fluoride (mg/L)	YGWC-46	0.3	0.04	4	No	11	36.36	No	0.006	NP (Cohens/xfrm)
Lead (mg/L)	YGWC-44	0.005	0.005	0.015	No	9	100	No	0.002	NP (NDs)
Lead (mg/L)	YGWC-45	0.005	0.0001	0.015	No	9	88.89	No	0.002	NP (NDs)
Lead (mg/L)	YGWC-46	0.005	0.005	0.015	No	9	100	No	0.002	NP (NDs)
Lithium (mg/L)	YGWC-44	0.01373	0.01199	0.04	No	10	0	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.01525	0.01219	0.04	No	10	0	No	0.01	Param.
Lithium (mg/L)	YGWC-46	0.01054	0.007659	0.04	No	10	0	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0005	0.00006	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0005	0.000071	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-46	0.0005	0.00007	0.002	No	9	88.89	No	0.002	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.01	0.1	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.01	0.0012	0.1	No	10	30	No	0.011	NP (normality)
Molybdenum (mg/L)	YGWC-46	0.01	0.0012	0.1	No	10	30	No	0.011	NP (Cohens/xfrm)
Selenium (mg/L)	YGWC-44	0.01	0.01	0.05	No	9	100	No	0.002	NP (NDs)
Selenium (mg/L)	YGWC-45	0.01	0.01	0.05	No	9	100	No	0.002	NP (NDs)
Selenium (mg/L)	YGWC-46	0.01	0.01	0.05	No	9	100	No	0.002	NP (NDs)
Thallium (mg/L)	YGWC-44	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-45	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-46	0.001	0.001	0.002	No	10	100	No	0.011	NP (NDs)

Non-Parametric Confidence Interval
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

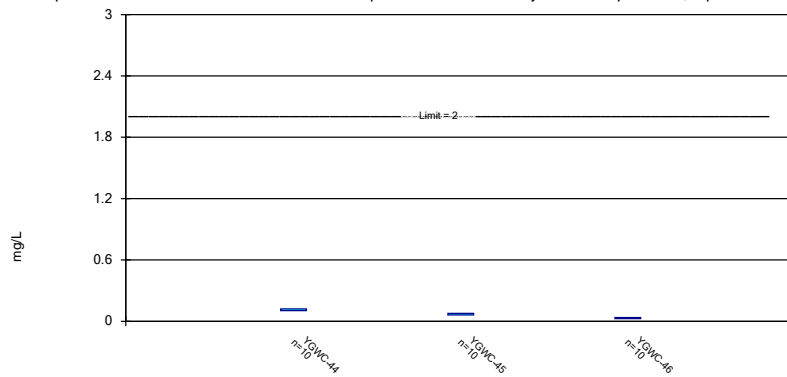
Non-Parametric Confidence Interval
Compliance Limit is not exceeded.



Constituent: Arsenic Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Parametric Confidence Interval

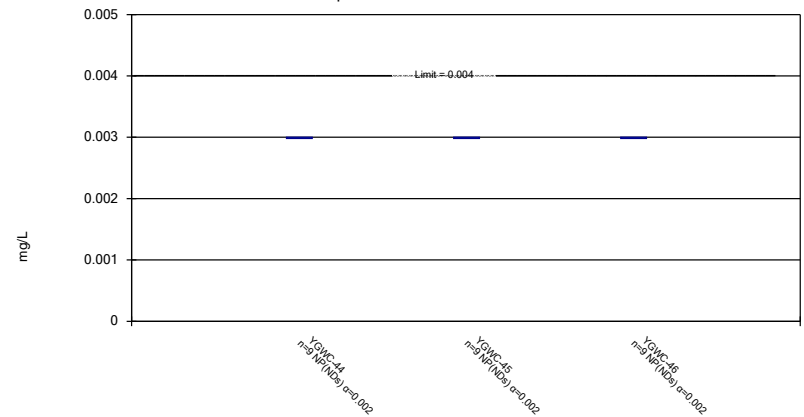
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

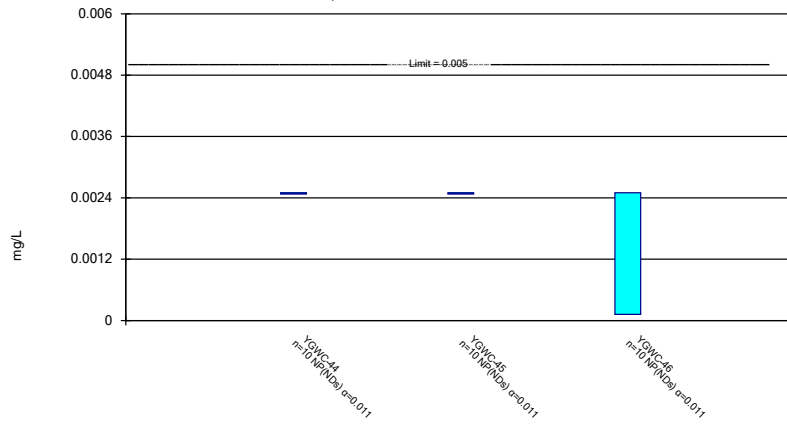
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



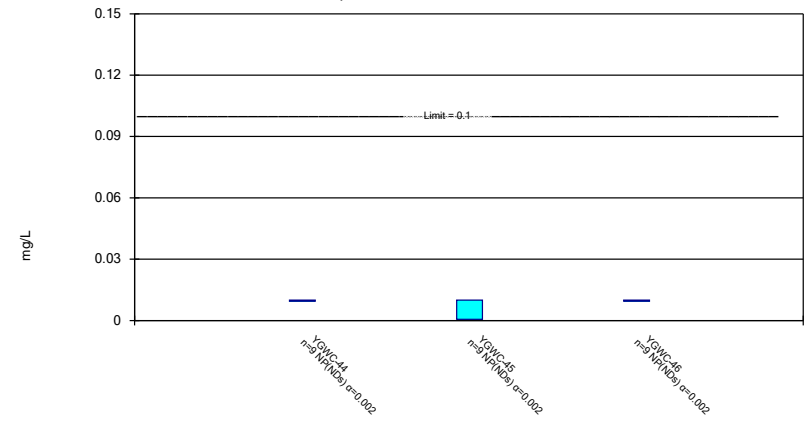
Constituent: Beryllium Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

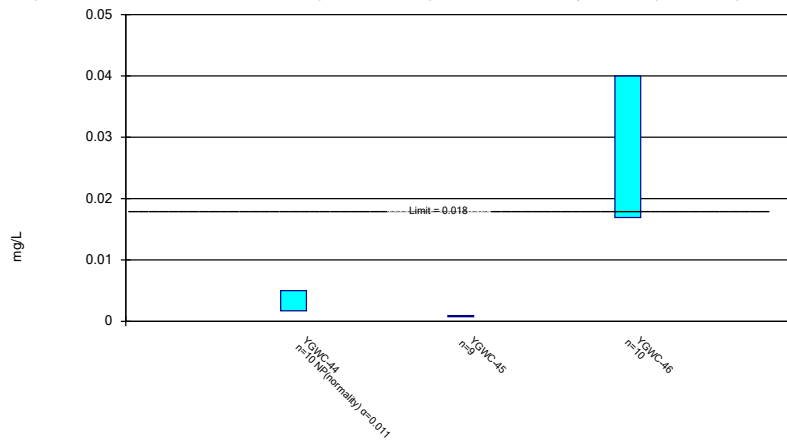
Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Parametric and Non-Parametric (NP) Confidence Interval

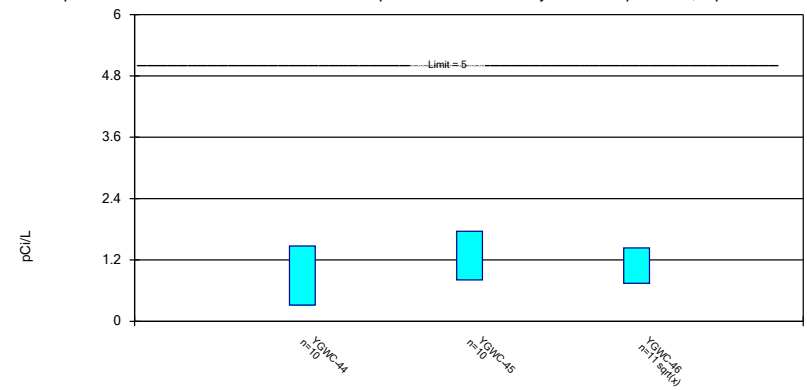
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 3/26/2020 5:49 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

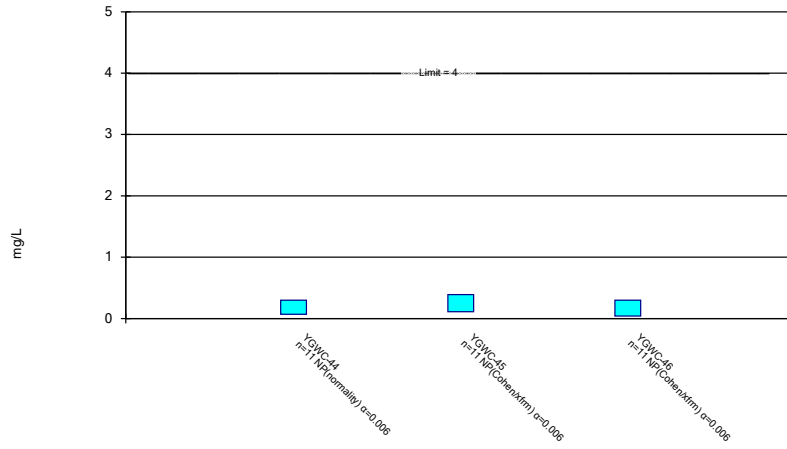
Parametric Confidence Interval

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



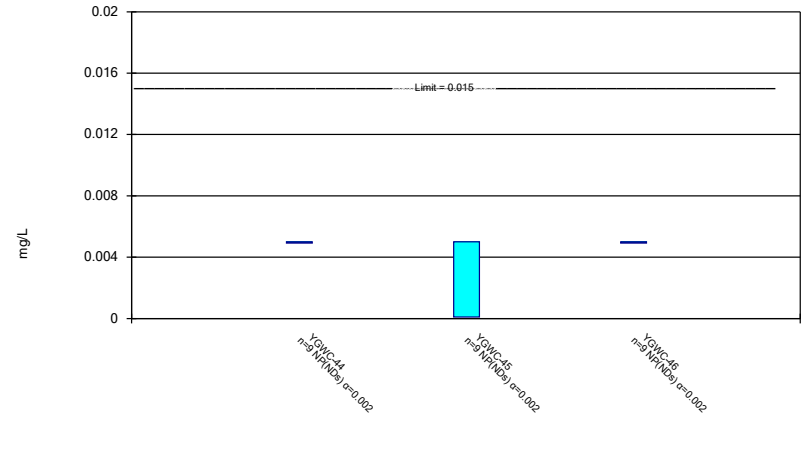
Constituent: Combined Radium 226 + 228 Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Fluoride Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

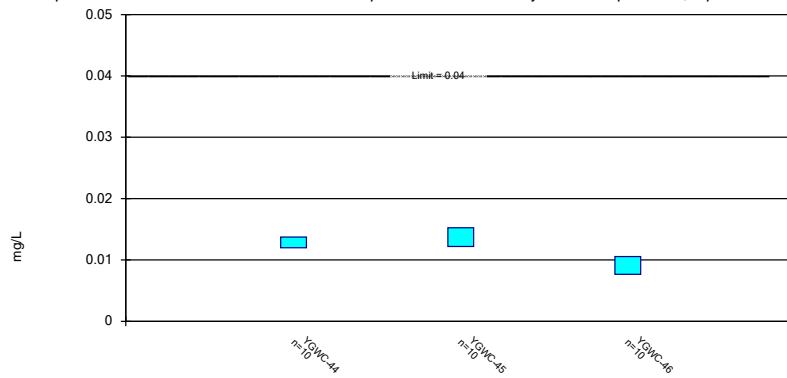
Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Parametric Confidence Interval

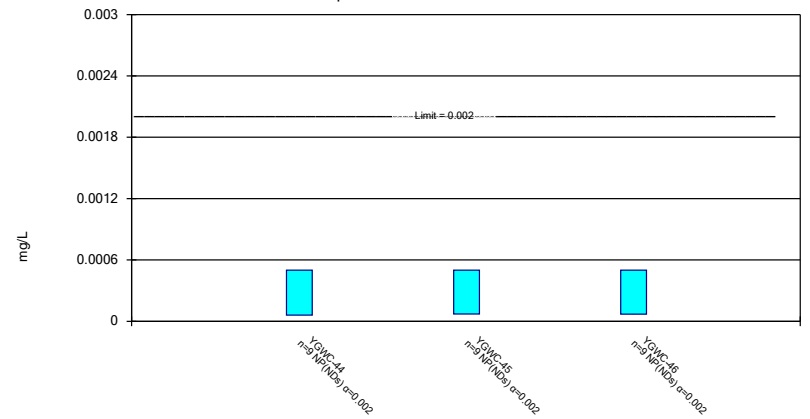
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

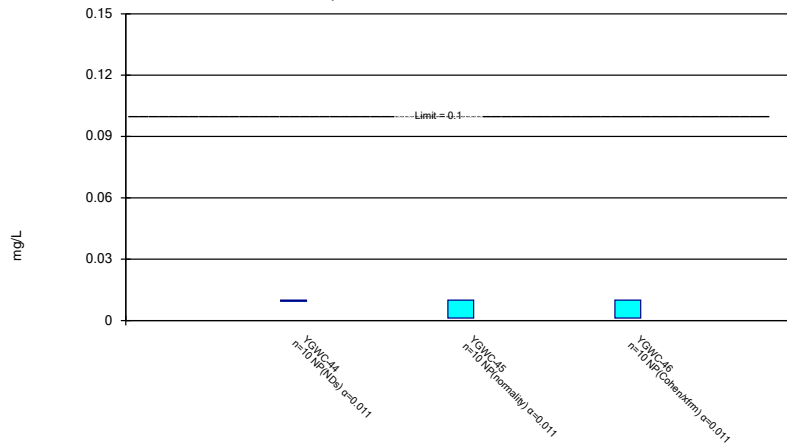
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

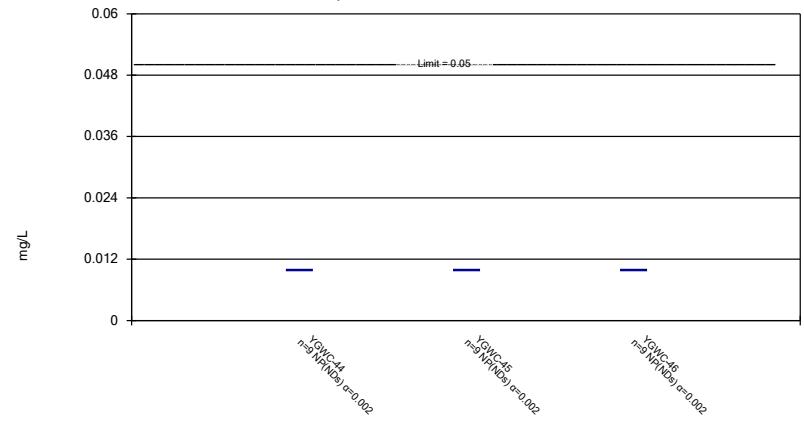
Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

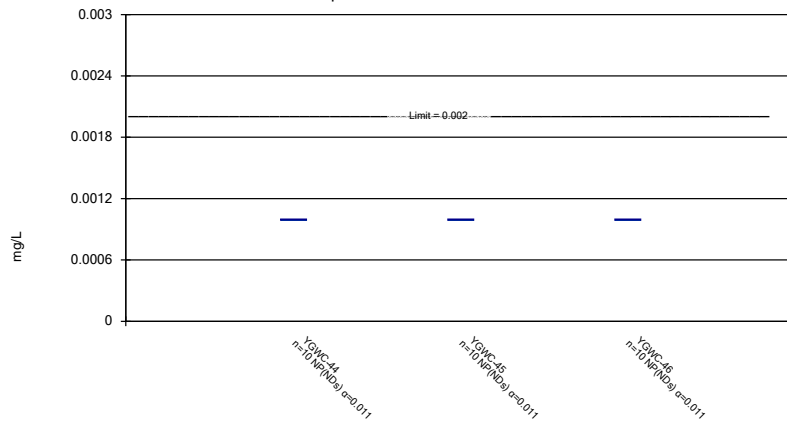
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.003	<0.003	
9/1/2016			<0.003
11/14/2016		<0.003	
11/15/2016	<0.003		
11/16/2016			<0.003
2/27/2017		<0.003	<0.003
2/28/2017	<0.003		
5/8/2017	<0.003		<0.003
5/9/2017		<0.003	
7/13/2017	<0.003	<0.003	<0.003
10/10/2017	<0.003	<0.003	
10/11/2017			<0.003
4/3/2018		<0.003	
4/4/2018	<0.003		<0.003
9/19/2018	<0.003	<0.003	<0.003
8/20/2019	<0.003	<0.003	
8/21/2019			<0.003
Mean	0.003	0.003	0.003
Std. Dev.	0	0	0
Upper Lim.	0.003	0.003	0.003
Lower Lim.	0.003	0.003	0.003

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.005	<0.005	
9/1/2016			<0.005
11/14/2016		<0.005	
11/15/2016	<0.005		
11/16/2016			<0.005
2/27/2017		<0.005	<0.005
2/28/2017	0.0005 (J)		
5/8/2017	0.0006 (J)		0.0007 (J)
5/9/2017		<0.005	
7/13/2017	<0.005	<0.005	0.0011 (J)
10/10/2017	0.0007 (J)	0.0006 (J)	
10/11/2017			0.0011 (J)
4/3/2018		0.00061 (J)	
4/4/2018	<0.005		0.00087 (J)
9/19/2018	0.00086 (J)	0.00072 (J)	0.0012 (J)
8/20/2019	0.00097 (J)	0.00078 (J)	
8/21/2019			0.00074 (J)
10/8/2019	<0.005		
10/9/2019		<0.005	<0.005
Mean	0.002863	0.003271	0.002571
Std. Dev.	0.002256	0.002233	0.002096
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.0006	0.00061	0.00074

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	0.126	0.0754	
9/1/2016			0.0414
11/14/2016		0.0701	
11/15/2016	0.115		
11/16/2016			0.0365
2/27/2017		0.0834	0.0326
2/28/2017	0.121		
5/8/2017	0.125		0.0332
5/9/2017		0.0779	
7/13/2017	0.106	0.0719	0.0365
10/10/2017	0.112	0.0708	
10/11/2017			0.0288
4/3/2018		0.068	
4/4/2018	0.12		0.025
9/19/2018	0.11	0.064	0.03
8/20/2019	0.1	0.057	
8/21/2019			0.023
10/8/2019	0.098		
10/9/2019		0.058	0.024
Mean	0.1133	0.06965	0.0311
Std. Dev.	0.0099	0.008348	0.006063
Upper Lim.	0.1221	0.0771	0.03651
Lower Lim.	0.1045	0.0622	0.02569

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.003	<0.003	
9/1/2016			<0.003
11/14/2016		<0.003	
11/15/2016	<0.003		
11/16/2016			<0.003
2/27/2017		<0.003	<0.003
2/28/2017	<0.003		
5/8/2017	<0.003		<0.003
5/9/2017		<0.003	
7/13/2017	<0.003	<0.003	<0.003
10/10/2017	<0.003	<0.003	
10/11/2017			<0.003
4/3/2018		<0.003	
4/4/2018	<0.003		<0.003
9/19/2018	<0.003	<0.003	<0.003
8/20/2019	<0.003	<0.003	
8/21/2019			<0.003
Mean	0.003	0.003	0.003
Std. Dev.	0	0	0
Upper Lim.	0.003	0.003	0.003
Lower Lim.	0.003	0.003	0.003

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.0025	<0.0025	
9/1/2016			<0.0025
11/14/2016		<0.0025	
11/15/2016	<0.0025		
11/16/2016			<0.0025
2/27/2017		<0.0025	<0.0025
2/28/2017	<0.0025		
5/8/2017	<0.0025		0.0001 (J)
5/9/2017		<0.0025	
7/13/2017	<0.0025	<0.0025	<0.0025
10/10/2017	<0.0025	<0.0025	
10/11/2017			<0.0025
4/3/2018		<0.0025	
4/4/2018	<0.0025		<0.0025
9/19/2018	<0.0025	<0.0025	<0.0025
8/20/2019	<0.0025	<0.0025	
8/21/2019			0.00012 (J)
10/8/2019	<0.0025		
10/9/2019		<0.0025	<0.0025
Mean	0.0025	0.0025	0.002022
Std. Dev.	0	0	0.001008
Upper Lim.	0.0025	0.0025	0.0025
Lower Lim.	0.0025	0.0025	0.00012

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.01	<0.01	
9/1/2016			<0.01
11/14/2016		0.0061 (J)	
11/15/2016	<0.01		
11/16/2016			<0.01
2/27/2017		<0.01	<0.01
2/28/2017	<0.01		
5/8/2017	<0.01		<0.01
5/9/2017		<0.01	
7/13/2017	<0.01	0.0006 (J)	<0.01
10/10/2017	<0.01	<0.01	
10/11/2017			<0.01
4/3/2018		<0.01	
4/4/2018	<0.01		<0.01
9/19/2018	<0.01	<0.01	<0.01
8/20/2019	<0.01	<0.01	
8/21/2019			<0.01
Mean	0.01	0.008522	0.01
Std. Dev.	0	0.003239	0
Upper Lim.	0.01	0.01	0.01
Lower Lim.	0.01	0.0006	0.01

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	0.0119	0.0009 (J)	
9/1/2016			0.0171
11/14/2016		0.0009 (J)	
11/15/2016	0.0033 (J)		
11/16/2016			0.0145
2/27/2017		0.001 (J)	0.0161
2/28/2017	0.0017 (J)		
5/8/2017	0.0018 (J)		0.0367
5/9/2017		0.0008 (J)	
7/13/2017	0.0022 (J)	0.0009 (J)	0.0265
10/10/2017	0.0017 (J)	0.0008 (J)	
10/11/2017			0.0556
4/3/2018		<0.01 (o)	
4/4/2018	<0.01		0.025
9/19/2018	0.0025 (J)	0.00081 (J)	0.042
8/20/2019	0.002 (J)	0.00071 (J)	
8/21/2019			0.027
10/8/2019	0.0017 (J)		
10/9/2019		0.0007 (J)	0.024
Mean	0.00338	0.0008356	0.02845
Std. Dev.	0.003167	9.799E-05	0.01292
Upper Lim.	0.005	0.0009302	0.03998
Lower Lim.	0.0017	0.0007409	0.01692

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	2.15	1.65	
9/1/2016			2.28
11/14/2016		0.981 (U)	
11/15/2016	0.676 (U)		
11/16/2016			0.639 (U)
11/28/2016			0.996
2/27/2017		0.528 (U)	0.617 (U)
2/28/2017	0.241 (U)		
5/8/2017	0.508 (U)		0.949
5/9/2017		1.4	
7/13/2017	0.77 (U)	0.611 (U)	1.41
10/10/2017	1.43	1.47	
10/11/2017			0.856 (U)
4/3/2018		1.53	
4/4/2018	0.325 (U)		0.974
9/19/2018	0.386 (U)	0.839 (U)	1.15 (U)
8/20/2019	1.71	2.23	
8/21/2019			1.31
10/8/2019	0.769 (U)		
10/9/2019		1.61	0.892 (U)
Mean	0.8965	1.285	1.098
Std. Dev.	0.6469	0.5331	0.4619
Upper Lim.	1.474	1.761	1.435
Lower Lim.	0.3193	0.8092	0.7424

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.3	0.11 (J)	
9/1/2016			0.08 (J)
11/14/2016		0.71	
11/15/2016	0.12 (J)		
11/16/2016			0.04 (J)
2/27/2017		0.22 (J)	0.05 (J)
2/28/2017	0.07 (J)		
5/8/2017	0.04 (J)		0.004 (J)
5/9/2017		0.2 (J)	
7/13/2017	<0.3	0.11 (J)	0.35
10/10/2017	<0.3	0.39	
10/11/2017			<0.3
4/3/2018		<0.3	
4/4/2018	<0.3		<0.3
9/19/2018	<0.3	<0.3	<0.3
3/27/2019	<0.3	0.18 (J)	0.12 (J)
8/20/2019	<0.3	<0.3	
8/21/2019			<0.3
10/8/2019	<0.3		
10/9/2019		<0.3	0.12 (J)
Mean	0.2391	0.2836	0.1785
Std. Dev.	0.1059	0.1662	0.1308
Upper Lim.	0.3	0.39	0.3
Lower Lim.	0.07	0.11	0.04

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.005	<0.005	
9/1/2016			<0.005
11/14/2016		<0.005	
11/15/2016	<0.005		
11/16/2016			<0.005
2/27/2017		<0.005	<0.005
2/28/2017	<0.005		
5/8/2017	<0.005		<0.005
5/9/2017		0.0001 (J)	
7/13/2017	<0.005	<0.005	<0.005
10/10/2017	<0.005	<0.005	
10/11/2017			<0.005
4/3/2018		<0.005	
4/4/2018	<0.005		<0.005
9/19/2018	<0.005	<0.005	<0.005
8/20/2019	<0.005	<0.005	
8/21/2019			<0.005
Mean	0.005	0.004456	0.005
Std. Dev.	0	0.001633	0
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.005	0.0001	0.005

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	0.0115 (J)	0.0147 (J)	
9/1/2016			0.0077 (J)
11/14/2016		0.0175 (J)	
11/15/2016	0.0148 (J)		
11/16/2016			0.0075 (J)
2/27/2017		0.0135 (J)	0.0084 (J)
2/28/2017	0.0124 (J)		
5/8/2017	0.0132 (J)		0.0087 (J)
5/9/2017		0.0136 (J)	
7/13/2017	0.0124 (J)	0.0129 (J)	0.0104 (J)
10/10/2017	0.0123 (J)	0.015 (J)	
10/11/2017			0.0099 (J)
4/3/2018		0.014 (J)	
4/4/2018	0.014 (J)		0.012 (J)
9/19/2018	0.013 (J)	0.012 (J)	0.011 (J)
8/20/2019	0.013 (J)	0.012 (J)	
8/21/2019			0.0076 (J)
10/8/2019	0.012 (J)		
10/9/2019		0.012 (J)	0.0078 (J)
Mean	0.01286	0.01372	0.0091
Std. Dev.	0.0009743	0.001718	0.001615
Upper Lim.	0.01373	0.01525	0.01054
Lower Lim.	0.01199	0.01219	0.007659

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.0005	<0.0005	
9/1/2016			<0.0005
11/14/2016		<0.0005	
11/15/2016	<0.0005		
11/16/2016			<0.0005
2/27/2017		<0.0005	<0.0005
2/28/2017	<0.0005		
5/8/2017	<0.0005		<0.0005
5/9/2017		<0.0005	
7/13/2017	<0.0005	<0.0005	<0.0005
10/10/2017	<0.0005	<0.0005	
10/11/2017			<0.0005
4/3/2018		<0.0005	
4/4/2018	<0.0005		<0.0005
9/19/2018	6E-05 (J)	7.1E-05 (J)	7E-05 (J)
8/20/2019	<0.0005	<0.0005	
8/21/2019			<0.0005
Mean	0.0004511	0.0004523	0.0004522
Std. Dev.	0.0001467	0.000143	0.0001433
Upper Lim.	0.0005	0.0005	0.0005
Lower Lim.	6E-05	7.1E-05	7E-05

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval

Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.01	0.0024 (J)	
9/1/2016			<0.01
11/14/2016		<0.01	
11/15/2016	<0.01		
11/16/2016			<0.01
2/27/2017		0.0018 (J)	<0.01
2/28/2017	0.0005 (J)		
5/8/2017	<0.01		0.0008 (J)
5/9/2017		0.0015 (J)	
7/13/2017	<0.01	0.0015 (J)	0.0015 (J)
10/10/2017	<0.01	0.0015 (J)	
10/11/2017			0.002 (J)
4/3/2018		<0.01	
4/4/2018	<0.01		0.0021 (J)
9/19/2018	<0.01	<0.01	0.0039 (J)
8/20/2019	<0.01	0.0011 (J)	
8/21/2019			0.0012 (J)
10/8/2019	<0.01		
10/9/2019		0.0012 (J)	0.0013 (J)
Mean	0.00905	0.0041	0.00428
Std. Dev.	0.003004	0.004087	0.004034
Upper Lim.	0.01	0.01	0.01
Lower Lim.	0.01	0.0012	0.0012

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.01	<0.01	
9/1/2016			<0.01
11/14/2016		<0.01	
11/15/2016	<0.01		
11/16/2016			<0.01
2/27/2017		<0.01	<0.01
2/28/2017	<0.01		
5/8/2017	<0.01		<0.01
5/9/2017		<0.01	
7/13/2017	<0.01	<0.01	<0.01
10/10/2017	<0.01	<0.01	
10/11/2017			<0.01
4/3/2018		<0.01	
4/4/2018	<0.01		<0.01
9/19/2018	<0.01	<0.01	<0.01
8/20/2019	<0.01	<0.01	
8/21/2019			<0.01
Mean	0.01	0.01	0.01
Std. Dev.	0	0	0
Upper Lim.	0.01	0.01	0.01
Lower Lim.	0.01	0.01	0.01

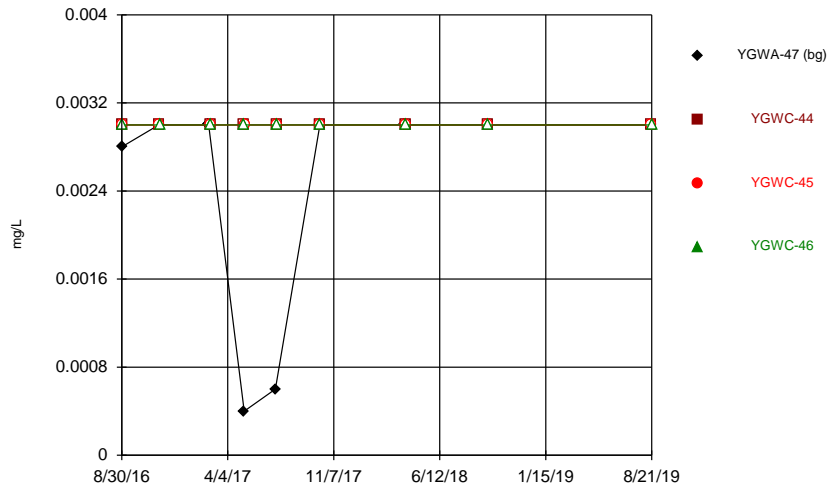
Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 3/26/2020 5:50 PM View: Confidence Interval
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

	YGWC-44	YGWC-45	YGWC-46
8/31/2016	<0.001	<0.001	
9/1/2016			<0.001
11/14/2016		<0.001	
11/15/2016	<0.001		
11/16/2016			<0.001
2/27/2017		<0.001	<0.001
2/28/2017	<0.001		
5/8/2017	<0.001		<0.001
5/9/2017		<0.001	
7/13/2017	<0.001	<0.001	<0.001
10/10/2017	<0.001	<0.001	
10/11/2017			<0.001
4/3/2018		<0.001	
4/4/2018	<0.001		<0.001
9/19/2018	<0.001	<0.001	<0.001
8/20/2019	<0.001	<0.001	
8/21/2019			<0.001
10/8/2019	<0.001		
10/9/2019		<0.001	<0.001
Mean	0.001	0.001	0.001
Std. Dev.	0	0	0
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.001	0.001	0.001

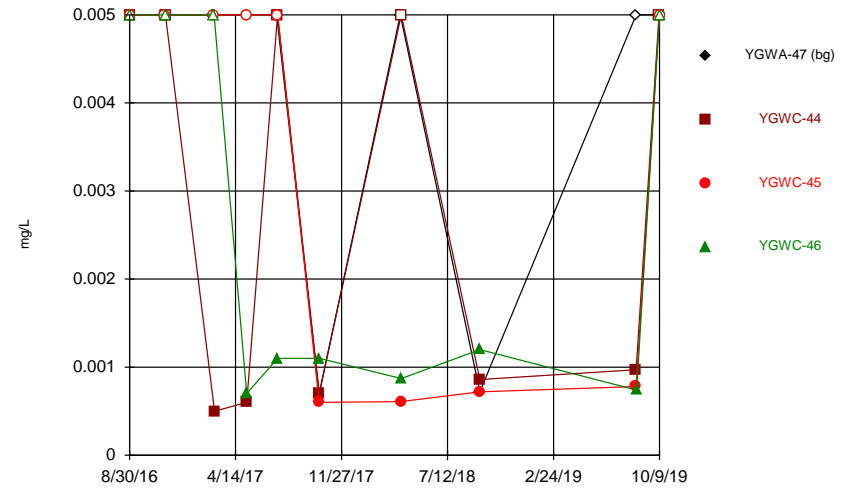
Time Series Plots (through October 2019)

Time Series



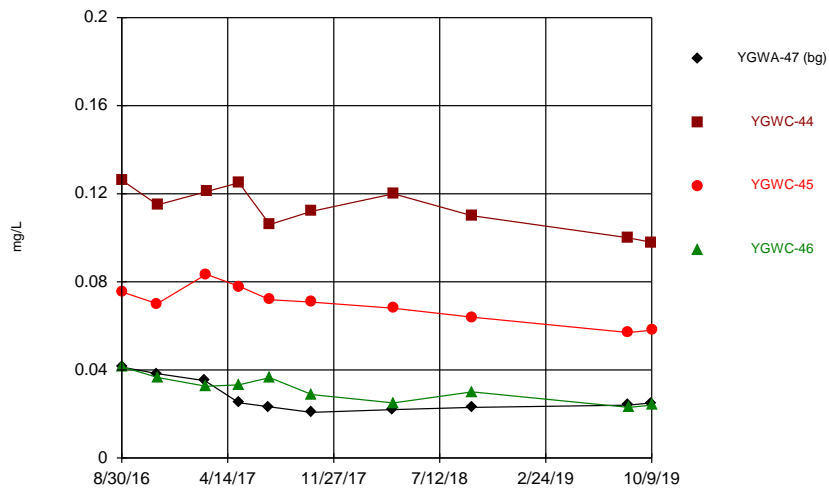
Constituent: Antimony Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



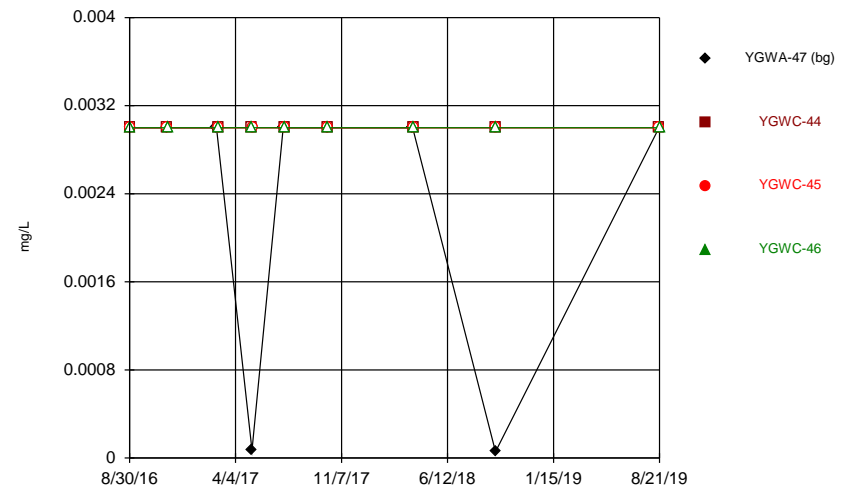
Constituent: Arsenic Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



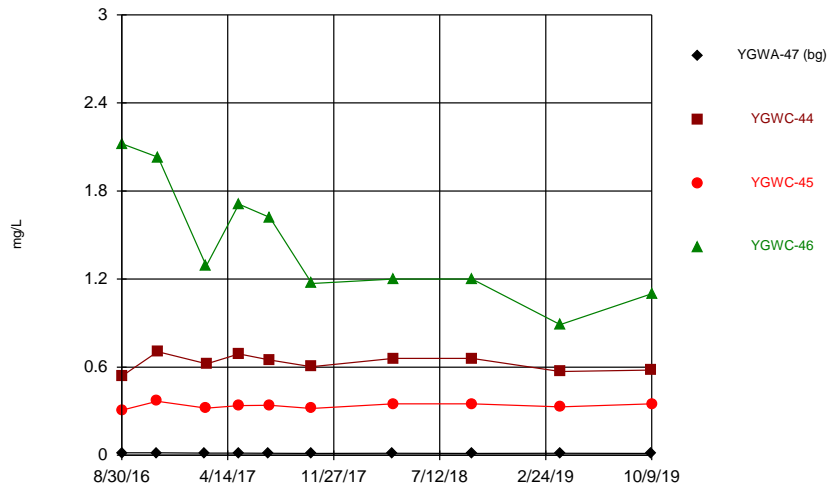
Constituent: Barium Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



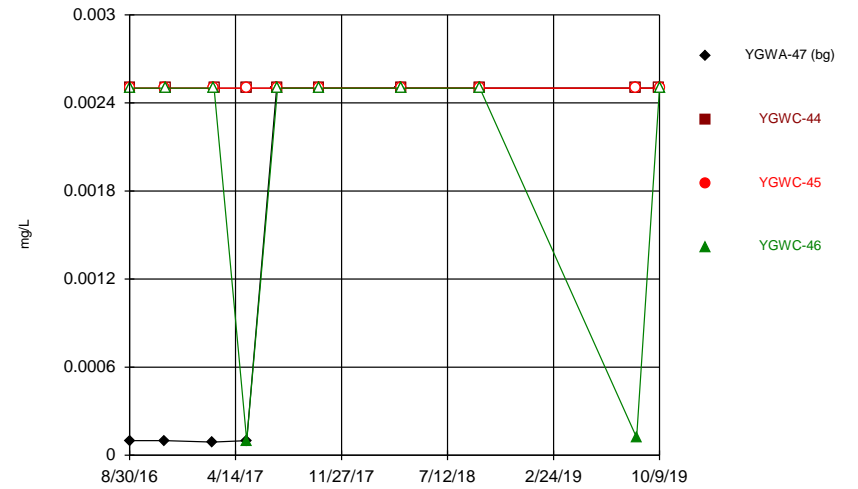
Constituent: Beryllium Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



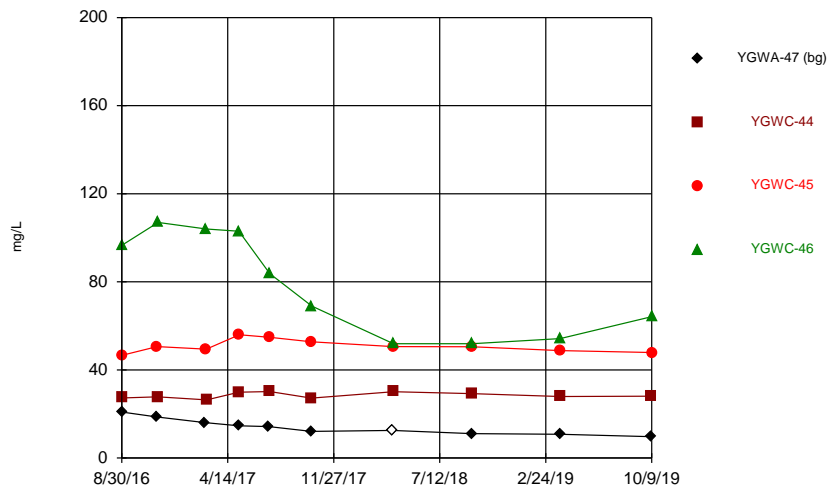
Constituent: Boron Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



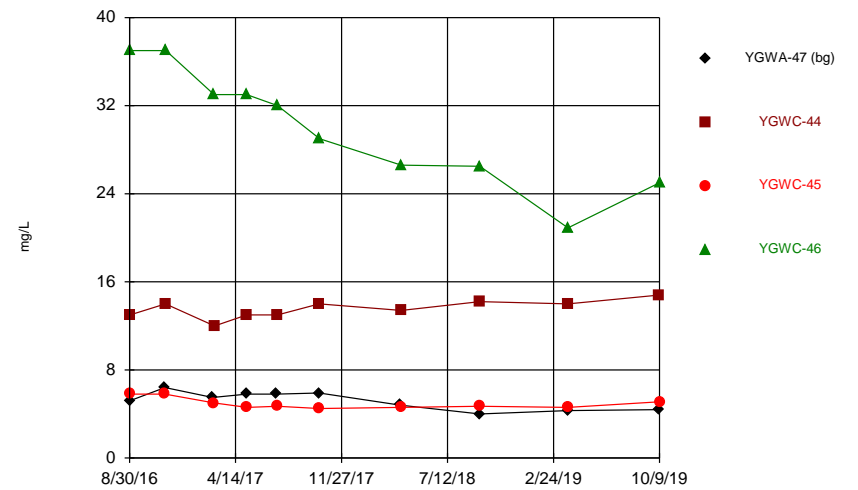
Constituent: Cadmium Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



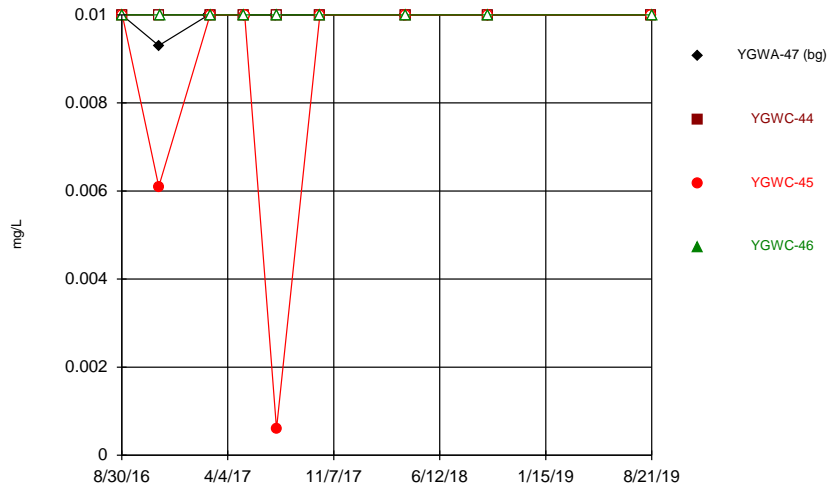
Constituent: Calcium Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



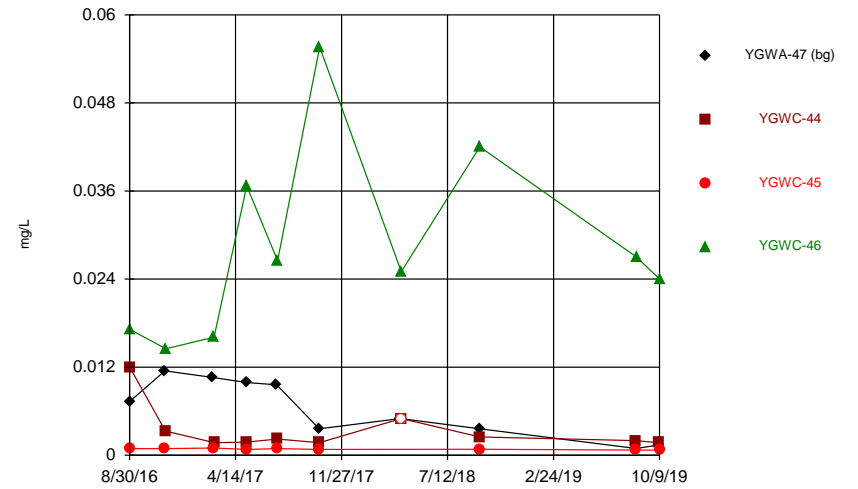
Constituent: Chloride Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



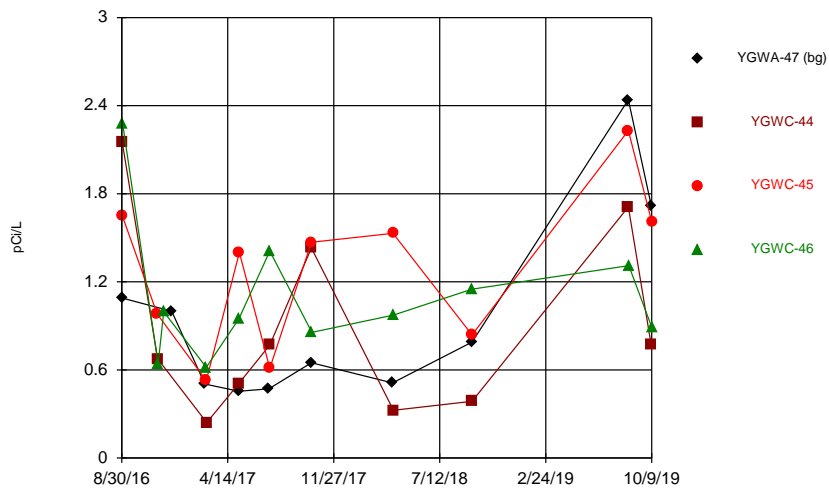
Constituent: Chromium Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



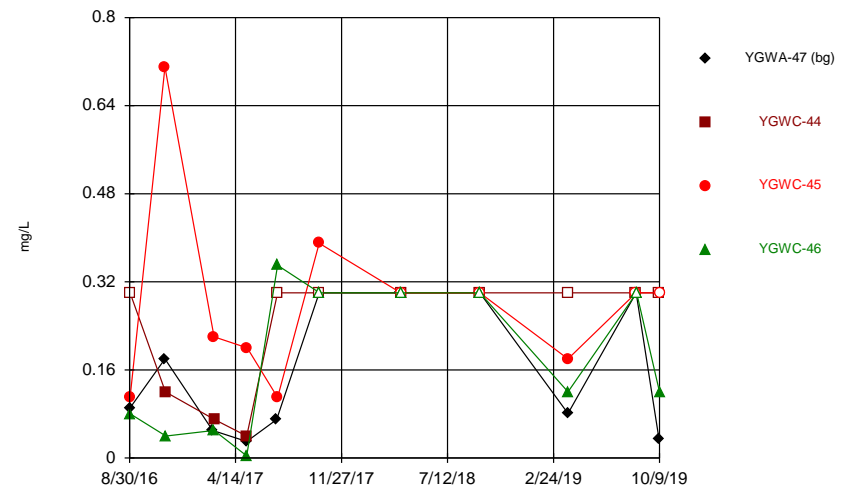
Constituent: Cobalt Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



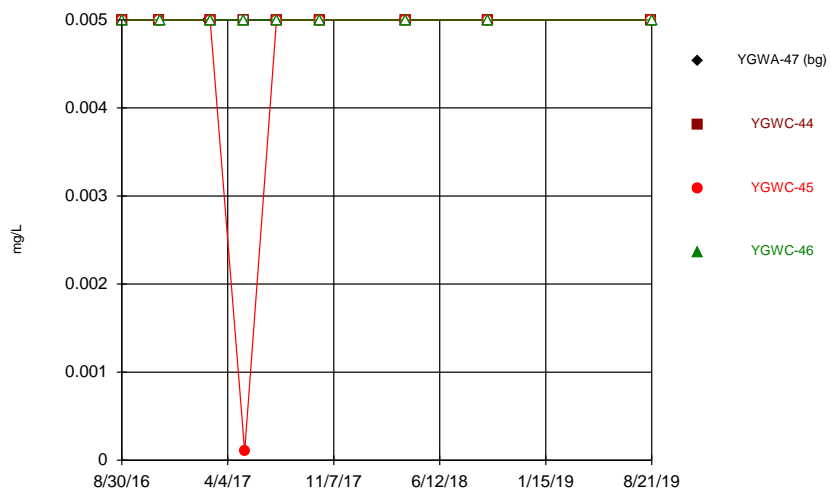
Constituent: Combined Radium 226 + 228 Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



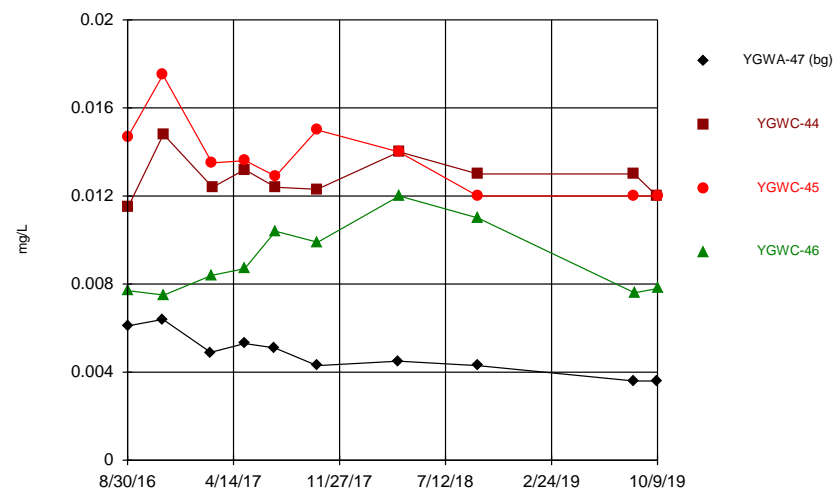
Constituent: Fluoride Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



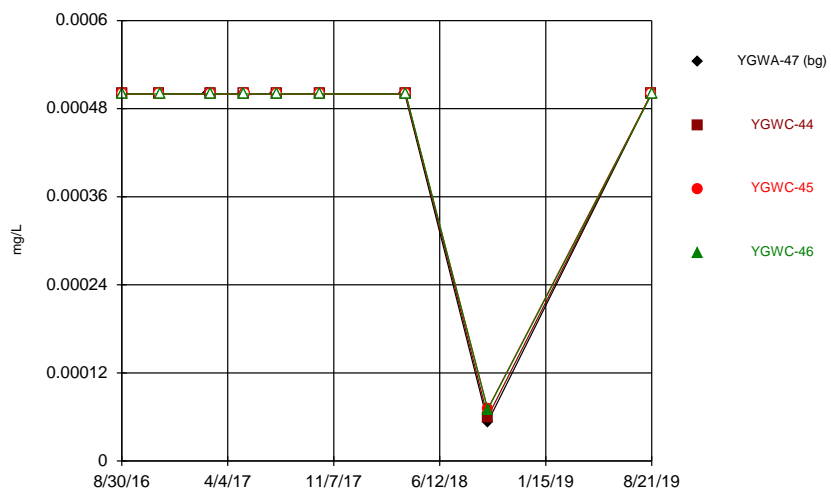
Constituent: Lead Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



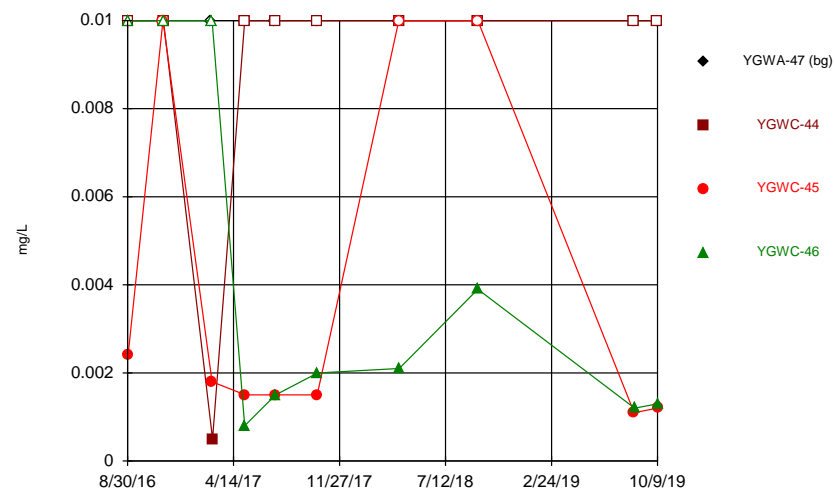
Constituent: Lithium Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



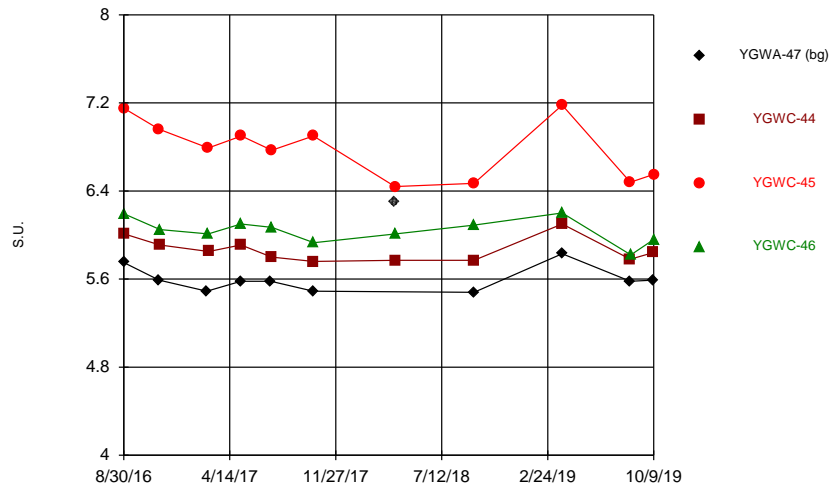
Constituent: Mercury Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



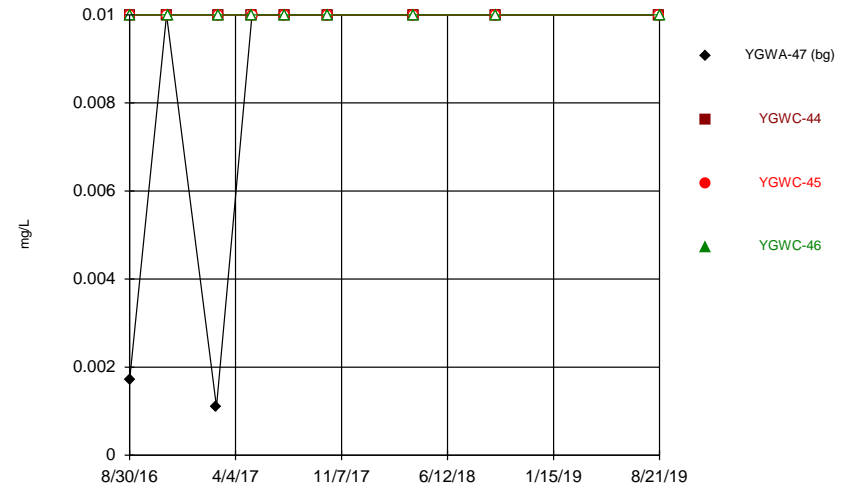
Constituent: Molybdenum Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



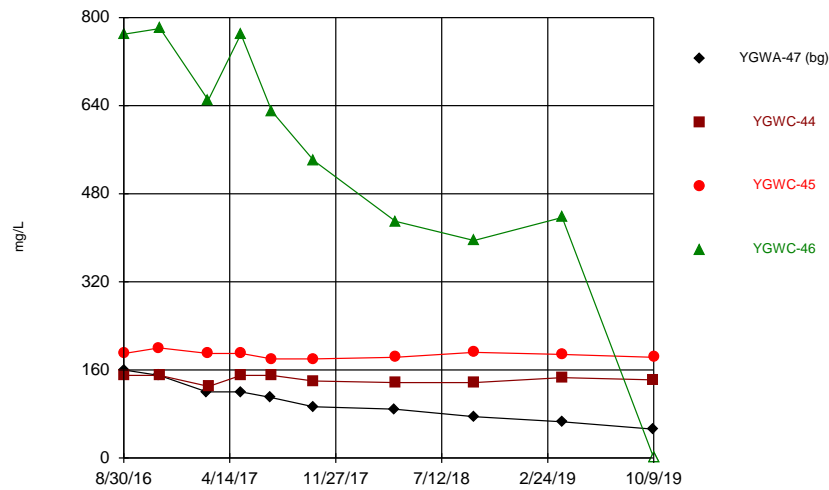
Constituent: pH Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



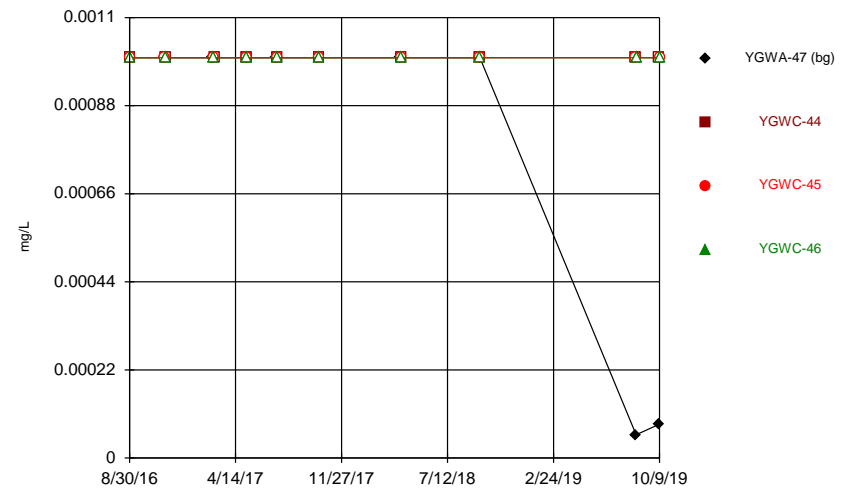
Constituent: Selenium Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



Constituent: Sulfate Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

Time Series



Constituent: Thallium Analysis Run 12/18/2019 3:13 PM View: AP-1 Time Series
Plant Yates Client: Southern Company Data: Yates Ash Pond 1

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