



# 2022 Annual Groundwater Monitoring and Corrective Action Report

**Plant Yates – AP-1  
Permit 038-017D(CCR)  
Newnan, Georgia**

July 29, 2022



# 2022 Annual Groundwater Monitoring and Corrective Action Report

**Plant Yates – AP-1**  
**Permit 038-017D(CCR)**  
**Newnan, Georgia**

July 29, 2022

**Prepared By:**

Arcadis U.S., Inc.  
2839 Paces Ferry Road, Suite 900  
Atlanta  
Georgia 30339  
Phone: 770 431 8666  
Fax: 770 435 2666

**Prepared For:**

Georgia Power Company  
Newnan, Georgia  
Coweta County



---

Kelley Sharpe  
Project Task Manager



---

Geoffrey Gay, P.E.  
Technical Expert (Eng) / Project Manager

## Summary

This summary of the 2022 Annual Groundwater Monitoring and Corrective Action Report provides the status of the groundwater monitoring and corrective action program from July 2021 through June 2022 at Georgia Power Company’s (Georgia Power’s) Plant Yates Ash Pond (AP) AP-1 (the site). Arcadis U.S., Inc. (Arcadis) prepared this summary on behalf of Georgia Power to meet the requirements listed in Part A, Section 6<sup>1</sup> of the U.S. Environmental Protection Agency (USEPA) Coal Combustion Residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D).

Plant Yates is located at 708 Dyer Road, approximately 8 miles northwest of Newnan and 13 miles southeast of Carrollton in Coweta County, Georgia. Plant Yates originally operated seven coal-fired steam generating units. Five of the units were retired in 2015, and two units were converted from coal to natural gas. CCR material resulting from power generation have historically been transferred and stored at the site. The site is located on the southwestern portion of the Plant Yates property. AP-1 was closed by removal of CCR material. The GA EPD approved Closure Permit No. 038-017D(CCR) for Plant Yates AP-1 on January 6, 2022.

Groundwater at the site is monitored using a comprehensive monitoring system of wells installed to meet federal and state monitoring requirements of Solid Waste Permit (038-017D(CCR)). Routine sampling and reporting began in 2019 after the completion of eight background sampling events.

Based on groundwater conditions at the site, an assessment monitoring program was established on November 13, 2019. During this 2022 annual reporting period, the site remained in assessment monitoring.

During this reporting period, Arcadis conducted groundwater sampling events in August 2021 and February 2022. Groundwater samples were submitted to Pace Analytical Services, LLC, for analysis. Per the CCR rule, groundwater results were evaluated in accordance with the certified statistical methods. That evaluation showed statistically significant values of Appendix III<sup>2</sup> parameters in wells provided in the table below. There were no statistically significant levels (SSLs) detected for Appendix IV<sup>3</sup> parameters<sup>4</sup>.



*Plant Yates and the site*

Appendix III Parameter	August 2021	February 2022
Boron	YGWC-44, YGWC-45, YGWC-46A	YGWC-44, YGWC-45, YGWC-46A
Calcium	YGWC-45, YGWC-46A, YGWC-52	YGWC-45, YGWC-46A, YGWC-52
Chloride	YGWC-44, YGWC-46A	YGWC-44, YGWC-46A

<sup>1</sup> 80 FR 21468, Apr. 17, 2015, as amended at 81 FR 51807, Aug. 5, 2016; 83 FR 36452, July 30, 2018; 85 FR 53561, Aug. 28, 2020

<sup>2</sup> Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS).

<sup>3</sup> Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228.

<sup>4</sup> A statistically significant level SSL-related constituent is determined by comparing the confidence intervals developed to either the constituent’s MCL, if available, the USEPA RSL, if no MCL is available, or the calculated background interwell prediction limit.

2022 Annual Groundwater Monitoring and Corrective Action Report  
 PLANT YATES – ASH POND 1

Appendix III Parameter	August 2021	February 2022
Sulfate	YGWC-46A	YGWC-45, YGWC-46A
Total Dissolved Solids	YGWC-44, YGWC-45, YGWC-46A, YGWC-52	YGWC-44, YGWC-45, YGWC-46A, YGWC-52

Based on review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program, the site will continue in assessment monitoring. Georgia Power will continue routine groundwater monitoring and reporting at the site. Reports will be posted to the website and provided to Georgia Environmental Protection Division (GA EPD) semiannually.

## Contents

Summary .....	i
Acronyms and Abbreviations.....	v
Professional Certification .....	vi
<b>1 Introduction.....</b>	<b>1</b>
<b>1.1 Site Description and Background.....</b>	<b>1</b>
<b>1.2 Site Geology and Hydrogeologic Setting.....</b>	<b>1</b>
<b>1.3 Groundwater Monitoring Well Network and CCR Unit Description.....</b>	<b>2</b>
<b>2 Groundwater Monitoring.....</b>	<b>2</b>
<b>2.1 Monitoring Well Installation and Maintenance .....</b>	<b>3</b>
<b>2.2 Assessment Monitoring.....</b>	<b>3</b>
<b>3 Sampling Methodology and Analysis.....</b>	<b>3</b>
<b>3.1 Groundwater Flow Direction, Gradient, and Velocity .....</b>	<b>3</b>
<b>3.2 Groundwater Sampling .....</b>	<b>4</b>
<b>3.3 Laboratory Analysis .....</b>	<b>4</b>
<b>3.4 Data Quality Assurance/Quality Control and Validation .....</b>	<b>5</b>
<b>4 Statistical Analysis.....</b>	<b>5</b>
<b>4.1 Statistical Methods.....</b>	<b>5</b>
<b>4.1.1 Appendix III Constituents .....</b>	<b>5</b>
<b>4.1.2 Appendix IV Assessment Monitoring Statistics .....</b>	<b>6</b>
<b>4.2 Statistical Analysis Results.....</b>	<b>7</b>
<b>4.2.1 Appendix III Constituents .....</b>	<b>7</b>
<b>4.2.2 Appendix IV Assessment Monitoring Constituents.....</b>	<b>7</b>
<b>5 Monitoring Program Status .....</b>	<b>7</b>
<b>6 Conclusions and Future Actions .....</b>	<b>7</b>
<b>7 References .....</b>	<b>8</b>

## Tables

<b>Table 1.</b>	<b>Monitoring Network Well Summary</b>
<b>Table 2.</b>	<b>Groundwater Sampling Event Summary</b>
<b>Table 3.</b>	<b>Summary of Groundwater Elevations</b>
<b>Table 4.</b>	<b>Groundwater Flow Velocity Calculations</b>
<b>Table 5.</b>	<b>Summary of Groundwater Monitoring Parameters</b>
<b>Table 6.</b>	<b>Summary of Groundwater Analytical Data</b>
<b>Table 7.</b>	<b>Summary of Background Levels and Groundwater Protection Standards</b>

## Figures

<b>Figure 1.</b>	<b>Site Location Map</b>
<b>Figure 2.</b>	<b>Plant Yates CCR Removal Areas</b>
<b>Figure 3.</b>	<b>Well Location Map</b>
<b>Figure 4.</b>	<b>Groundwater Elevation Map, August 2021</b>
<b>Figure 5.</b>	<b>Groundwater Elevation Map, February 2022</b>

## Appendices

<b>A</b>	<b>Laboratory Analytical and Data Validation Reports</b>
<b>B</b>	<b>Field Sampling Reports</b>
<b>C</b>	<b>Statistical Analysis</b>

## Acronyms and Abbreviations

ACC	Atlantic Coast Consulting, Inc.
AP	Plant Yates Ash Ponds
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
DO	dissolved oxygen
EPD	Environmental Protection Division
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
ORP	oxidation-reduction potential
QA/QC	Quality Assurance/Quality Control
SSI	Statistically Significant Increase
SSL	statistically significant level
TDS	total dissolved solids
USEPA	United States Environmental Protection Agency

## Professional Certification

This 2022 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. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management, and 40 CFR Part 258.50(g).

Arcadis U.S., Inc.



7.29.22

\_\_\_\_\_  
J. Geoffrey Gay, P.E.  
Technical Expert (Eng)  
Georgia Registration No. PE 27801

\_\_\_\_\_  
Date



# 1 Introduction

This 2022 Annual Groundwater Monitoring and Corrective Action Report documents groundwater monitoring conducted at the Georgia Power Company (GPC) Plant Yates Ash Pond (AP) AP-1 (the site) between July 2021 and June 2022. 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 GAEPD Rule 391-3-4-10(6)(a)-(c). An 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 the semiannual monitoring for Appendix III and IV of 40 CFR 257 constituents conducted in August 2021 and February 2022.

## 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 on-site landfill. GAEPD provided an acknowledgement of removal of CCR in a letter dated November 3, 2020. A permit application to comply with GAEPD Rules was submitted in November 2018 and approved on January 6, 2022 (038-017D(CCR)). Semiannual reporting is completed pursuant to 391-3-4-.10(6)(c). Areas where CCR Removal Reports have been submitted to GAEPD are shown in **Figure 2**.

## 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 2019).

A thin layer of soil from 1 to 2 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 conducted in 2017 (ACC 2021). 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 illustrated on **Figure 3**.

## 2 Groundwater Monitoring

Pursuant to 40 CFR § 257.90(e), the following describes monitoring-related activities performed in the second half of 2021 through the first half of 2022 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 3**.

**Table 2** summarizes groundwater sampling events conducted at the site during the second half of 2021 and first half of 2022. During the August 2021 and February 2022 event, groundwater samples were collected for both 40 CFR 257 Appendix III and the Appendix IV constituents. Laboratory reports for the monitoring events are presented in **Appendix A**. 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 before sampling, recording the site conditions, and performing exterior maintenance to provide safe access for sampling. Details regarding the wells are included in **Table 1**, and locations are presented on **Figure 3**.

Monitoring wells are inspected semiannually to determine if any repairs or corrective actions are necessary to meet the requirements of the Georgia Water Well Standards Act (O.C.G.A. § 12-5-134(5)(d)(vii)). In August 2021 and February 2022, monitoring wells were inspected, necessary corrective actions were identified and subsequently completed where necessary, as documented in **Appendix B**. There were no well maintenance issues during this period that required corrective actions. The August 2021 inspection documentation served as the required five year well inspection and was performed under the direction of a professional geologist or engineer registered in the State of Georgia.

## 2.2 Assessment Monitoring

SSIs of Appendix III constituents were identified in the initial detection monitoring event (March 2019). Pursuant to 40 CFR §§ 257.95(b) and 257.95(d)(1), groundwater samples collected in August 2021 and February 2022 from the CCR monitoring wells were analyzed for Appendix III and Appendix IV constituents.

# 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

Before 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 2021 and February 2022 monitoring event is summarized in **Table 3**. A potentiometric surface map is provided on **Figure 4**. 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<sub>e</sub> = 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 approximately 1.2 feet per day (438 feet per year) and 1.3 feet per day (475 feet per year). These calculated groundwater velocities across the site are generally consistent with historical calculations and with expected velocities in the site-specific geology.

## 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). Non-disposable equipment was decontaminated before use and between well locations.

An AquaTroll 600™ (In-Situ field instrument) was used to monitor and record field water quality parameters (pH, conductivity, temperature, oxidation-reduction potential [ORP], and dissolved oxygen [DO]) during well purging to verify stabilization before sampling. Turbidity was measured using a portable turbidimeter. Groundwater samples were collected when the following stabilization criteria were met for a minimum of three consecutive readings:

- $\pm 0.1$  standard units for pH;
- $\pm 5\%$  for specific conductance;
- Turbidity measurements less than 5 nephelometric turbidity units; and
- $\pm 10\%$  or  $\pm 0.2$  mg/L (whichever is greater) for DO where DO  $> 0.5$  mg/L. If DO  $< 0.5$  mg/L no stabilization criteria apply.

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 and daily field calibration forms are included in **Appendix B**.

## 3.3 Laboratory Analysis

Groundwater samples collected during the August 2021 and February 2022 semiannual assessment events were analyzed for Appendix III parameters as well as Appendix IV parameters in accordance with 40 CFR §§ 257.95(b) and 257.95(d)(1). **Table 5** provides a summary of the constituents monitored during the event. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in **Appendix A**.

Analytical data collected from the semiannual sampling are summarized in **Table 6**. 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 per 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 were 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 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 data are considered useable for meeting project objectives, and the results are considered valid. 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 August 2021 and February 2022. 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, USEPA 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 prediction limits for Appendix III parameters. This method uses sitewide 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 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 exhibiting 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

Parametric tolerance limits were used to calculate background limits from pooled upgradient well data for the wells identified in **Table 1** for Appendix IV parameters with a target of 95 percent confidence and 95 percent coverage.

The confidence and coverage levels for non-parametric tolerance limits depend on 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;
- For the following constituents:
  - Cobalt 0.006 milligram per liter (mg/L)
  - Lead 0.015 mg/L
  - Lithium 0.040 mg/L
  - Molybdenum 0.100 mg/L; and
- The background level for constituents for which 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). On February 22, 2022, GA EPD updated the Rules for Solid Waste Management 391-3-4-.10(6) to incorporate updated Federal GWPS where an MCL has not been established. These levels were specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L), except when site specific background concentrations of these constituents is higher. Statistical evaluation for the Spring 2022 event was updated to reflect these changes.

GWPS have been established for statistical comparison of Appendix IV constituents at AP-1. **Table 7** summarizes the background levels established at each monitoring well for the August 2021 and February 2022 sampling events along with the GWPS.

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. 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 semiannual assessment monitoring events (August 2021 and February 2022) were statistically analyzed in accordance with the Statistical Analysis Plan (Groundwater Stats Consulting 2019).

### 4.2.1 Appendix III Constituents

Based on review of the Appendix III statistical analysis presented in **Appendix C**, Appendix III constituent concentrations have not returned to background levels, and assessment monitoring should continue pursuant to 40 CFR § 257.95(f). A table summarizing these constituents and wells is provided in **Appendix C**.

### 4.2.2 Appendix IV Assessment Monitoring Constituents

Statistical analysis of the August 2021 and February 2022 Appendix IV data at AP-1 was completed using the GWPS established according to both 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a). No Statistically Significant Levels (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 SSLs for Appendix III parameters.

## 6 Conclusions and Future Actions

This 2022 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.

The next assessment monitoring event is scheduled for August 2022. The August semiannual monitoring event will include sampling and analysis of all Appendix III and IV constituents.

## 7 References

- ACC. 2019 *First Semiannual Groundwater Monitoring and Corrective Action Report*. Prepared for Georgia Environmental Protection Division. July 2019.
- ACC. 2021 *Hydrogeologic Assessment Report – Part B: Supporting Documents (rev. 3) Ash Pond 1 Closure Permit Application*. September.
- Driscoll, F.G. 1986. *Groundwater and Wells*, Johnson Screens, Saint Paul, Minnesota, 1089 pp.
- Freeze, R.A. and Cherry, J.A. 1979. *Groundwater*, Prentice-Hall, Englewood Cliffs, New Jersey, 604 pp.
- Georgia Environmental Protection Division (GAEPD). 2017. Groundwater Alternative Source Demonstration. Coweta County- Plant Yates Industrial Landfill Permit No. 038-104D(LI). September 15.
- Groundwater Stats Consulting, LLC. 2019. *Statistical Analysis Plan – Plant Yates Ash Pond 1*. Prepared for Georgia Environmental Protection Division.
- Newell, C.J., L.P. Hopkins, and P.B. Bedient. 1990. A Hydrogeologic Database for Ground-Water Modeling. *Ground Water*. 28(5):703-714.
- USEPA. 1989. RCRA Facility Investigation (RFI) Guidance, Interim Final, Vol I. [EPA 530/SW-89-031], OWSER Directive 9502.00-6D.
- USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance. Office of Resource Conservation and Recovery – Program Implementation and Information Division. March.
- USEPA. 2011. Data Validation Standard Operating Procedures. Science and Ecosystem Support Division. Region IV. Athens, GA. September.
- USEPA. 2017. National Functional Guidelines for Inorganic Superfund Methods Data Review. Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [EPA-540-R-2017-001]. Washington, DC. January



# Tables

**Table 1**  
**Monitoring Network Well Summary**  
**2022 Annual Groundwater Monitoring and Corrective Action Report**  
**Georgia Power Company**  
**Plant Yates AP-1**



Well ID	Installation Date	Top of Casing Elevation (ft)	Bottom Depth (ft bTOC)	Bottom Elevation (ft)	Depth to Top of Screen (ft bTOC)	Top of Screen Elevation (ft)	Hydraulic Location / Purpose
<b>Upgradient Wells</b>							
YGWA-4I	5/21/2014	784.21	48.81	735.40	38.51	745.70	Upgradient
YGWA-5I	5/21/2014	784.54	58.94	725.60	48.64	735.90	Upgradient
YGWA-5D	5/21/2014	784.53	129.13	655.40	78.83	706.00	Upgradient
YGWA-17S	9/10/2015	783.05	39.85	743.20	29.55	753.20	Upgradient
YGWA-18S	9/8/2015	790.57	39.97	750.60	29.97	760.90	Upgradient
YGWA-18I	9/8/2015	790.57	79.97	710.60	69.67	720.90	Upgradient
YGWA-20S	9/29/2015	767.12	29.52	737.60	19.22	747.90	Upgradient
YGWA-21I	9/28/2015	783.70	79.90	703.80	69.60	714.10	Upgradient
YGWA-39	7/7/2016	818.19	68.59	749.60	58.09	760.10	Upgradient
YGWA-40	7/7/2016	815.73	48.23	767.50	37.73	778.00	Upgradient
YGWA-1I	5/20/2014	836.60	53.60	783.00	43.30	793.30	Upgradient
YGWA-1D	5/20/2014	837.25	128.85	708.40	78.05	759.20	Upgradient
YGWA-2I	5/20/2014	866.25	63.75	802.50	53.45	812.80	Upgradient
YGWA-3I	5/20/2014	796.55	59.05	737.50	48.85	747.70	Upgradient
YGWA-3D	5/20/2014	796.78	134.18	662.60	83.88	712.90	Upgradient
YGWA-14S	5/20/2014	748.76	34.96	713.80	24.66	724.10	Upgradient
YGWA-30I	9/23/2015	762.58	59.48	703.10	49.18	713.40	Upgradient
YGWA-47	7/11/2016	758.22	59.19	696.41	48.62	709.60	Upgradient
GWA-2	4/12/2007	805.62	52.02	753.60	41.82	763.80	Upgradient
<b>Downgradient Wells</b>							
YGWC-44	7/13/2016	758.35	89.85	665.65	78.35	680.00	Downgradient
YGWC-45	7/10/2016	719.36	72.86	643.64	62.86	656.50	Downgradient
YGWC-46A	6/1/2020	733.04	70.79	659.31	60.79	672.25	Downgradient
YGWC-52	5/28/2020	755.86	79.22	673.68	69.22	686.64	Downgradient
<b>Non-Network Wells</b>							
PZ-09S	5/19/2014	712.08	59.28	650.52	48.98	663.10	Piezometer
PZ-09I	5/19/2014	712.13	79.33	630.47	69.03	643.10	Piezometer
PZ-10S	5/19/2014	700.43	18.63	679.47	8.33	692.10	Piezometer
PZ-10I	5/19/2014	700.25	48.95	648.85	38.65	661.60	Piezometer
PZ-53	11/18/2019	732.90	72.00	657.90	61.71	671.19	Downgradient

**Notes**

ft bTOC - feet below top of casing

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

Horizontal locations are relative to the Georgia State Plane Coordinate System, West Zone, NAD1983, US Survey Feet

Table 2  
 Groundwater Sampling Event Summary  
 2022 Annual Groundwater Monitoring and Corrective Action Report  
 Georgia Power Company  
 Plant Yates AP-1



Well ID	Hydraulic Location	Semiannual Assessment	
		August 2021	February 2022
YGWA-47	Upgradient	X	X
YGWC-44	Downgradient	X	X
YGWC-45	Downgradient	X	X
YGWC-46A	Downgradient	X	X
YGWC-52	Downgradient	X	X

**Notes**

1. All well analyzed for Appendix III and IV.  
 Appendix III = Constituents for Detection Monitoring - 40 CFR Part 257 Appendix III.  
 Appendix IV = Constituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.

**Table 3**  
**Summary of Groundwater Elevations**  
**2022 Annual Groundwater Monitoring and Corrective Action Report**  
**Georgia Power Company**  
**Plant Yates AP-1**



Well ID	Dated Measured	TOC (ft)	Depth-to-Water (ft bTOC)	Groundwater Elevation (ft)
YGWA-47	8/16/2021	758.22	34.68	723.54
YGWC-44	8/16/2021	758.35	49.94	708.41
YGWC-45	8/16/2021	719.36	22.36	697.00
YGWC-46A	8/16/2021	733.04	38.40	694.64
YGWC-52	8/16/2021	755.86	38.43	717.43
PZ-09S	8/16/2021	712.08	17.92	694.16
PZ-09I	8/16/2021	712.13	18.18	693.95
PZ-10S	8/16/2021	700.43	7.39	693.04
PZ-10I	8/16/2021	700.25	13.81	686.44
PZ-53	8/16/2021	732.90	38.26	694.64
YGWA-47	2/7/2022	758.22	34.83	723.39
YGWC-44	2/7/2022	758.35	49.46	708.89
YGWC-45	2/7/2022	719.36	21.93	697.43
YGWC-46A	2/7/2022	733.04	37.19	695.85
YGWC-52	2/7/2022	755.86	37.48	718.38
PZ-09S	2/7/2022	712.08	16.18	695.90
PZ-09I	2/7/2022	712.13	16.43	695.70
PZ-10S	2/7/2022	700.43	6.34	694.09
PZ-10I	2/7/2022	700.25	11.85	688.40
PZ-53	2/7/2022	732.90	37.05	695.85

**Notes**

ft bTOC - feet below top of casing

TOC - top of casing

Elevation in U.S. Survey Feet (NAVD88)

**Table 4**  
**Groundwater Flow Velocity Calculations**  
**2022 Annual Groundwater Monitoring and Corrective Action Report**  
**Georgia Power Company**  
**Plant Yates - AP-1**



**Equation**

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

where: V = groundwater velocity  
 K = hydraulic conductivity  
 dh/dl = i = hydraulic gradient  
 n<sub>e</sub> = effective porosity

**Values Used in Calculation**

Value		Source
K:	3.70E-03 cm/sec 10.5 ft/day	See note 1
i = 0.025	unitless	Hydraulic gradient from: YGWA-47 to PZ-09S (Aug. 2021) Distance (ft): 1173 Elevations (ft): YGWA-47 : 723.54 PZ-09S: 694.16
i = 0.023	unitless	YGWA-47 to PZ-09S (Feb. 2022) Distance (ft): 1173 Elevations (ft): YGWA-47 : 723.39 PZ-09S: 695.90
n <sub>e</sub> = 0.20	unitless	See note 2

**Average Linear Velocity**

Aug. 2021

$$V_{\min} = \frac{(10.5) (0.025)}{0.20}$$

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

Feb. 2022

$$V_{\min} = \frac{(10.5) (0.023)}{0.20}$$

$$V_{\min} = 1.2 \text{ ft/day, or } 438 \text{ ft/year}$$

**Notes**

1. Slug tests performed by Atlantic Coast Consulting, Inc. in 2017 (ACC 2021).
2. Default value recommended by USEPA for silty sand-type soil (USEPA 1989).

**Table 5**  
**Summary of Groundwater Monitoring Parameters**  
**2022 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	Beryllium
pH	Cadmium
Sulfate	Chromium
Total Dissolved Solids	Cobalt
	Fluoride
	Lead
	Lithium
	Mercury
	Molybdenum
	Combined Radium - 226/228
	Selenium
	Thallium

**Notes:**

CFR - Code of Federal Regulations

Table 6  
 Summary of Groundwater Analytical Data  
 2022 Annual Groundwater Monitoring and Corrective Action Report  
 Georgia Power Company  
 Plant Yates AP-1

Analyte	Location	YGWA-47		YGWC-44		YGWC-45		
	Sample Date	8/19/2021	2/8/2022	8/19/2021	2/9/2022	8/19/2021	2/9/2022	
	Units							
Appendix III	pH	SU	5.50	5.40	5.73	5.73	6.13	6.15
	Boron	mg/l	0.011 J	0.015 J	0.56	0.58	0.31	0.34
	Calcium	mg/l	9.6	9.4	31.7	30.8	50.4	49.3
	Chloride	mg/l	3.5	3.2	13.0	13.5	4.1	4.9
	Fluoride	mg/l	< 0.050	< 0.050	< 0.050	< 0.050	0.075 J	0.063 J
	Sulfate	mg/l	52.6	50.9	115	121	149	164
	Total Dissolved Solids	mg/l	134	151	333	311	391	400
Appendix IV	Antimony	mg/l	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078
	Arsenic	mg/l	< 0.0011	0.0027 J	< 0.0011	< 0.0011	< 0.0011	< 0.0011
	Barium	mg/l	0.029	0.030	0.089	0.083	0.055	0.053
	Beryllium	mg/l	< 0.000054	0.000056 J	< 0.000054	< 0.000054	< 0.000054	< 0.000054
	Cadmium	mg/l	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011
	Chromium	mg/l	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011
	Cobalt	mg/l	0.00099 J	0.0013 J	0.0014 J	0.0027 J	0.00048 J	0.00051 J
	Fluoride	mg/l	< 0.050	< 0.050	< 0.050	< 0.050	0.075 J	0.063 J
	Lead	mg/l	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089
	Lithium	mg/l	0.0038 J	0.0039 J	0.013 J	0.014 J	0.012 J	0.012 J
	Mercury	mg/l	< 0.000078	< 0.00013	< 0.000078	< 0.00013	< 0.000078	< 0.00013
	Molybdenum	mg/l	< 0.00074	< 0.00074	< 0.00074	< 0.00074	0.0012 J	0.0012 J
	Combined Radium - 226/228	pci/l	1.07 U	0.400 U	0.261 U	0.332 U	1.38	1.11
	Selenium	mg/l	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
	Thallium	mg/l	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018

**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.

**Laboratory Qualifiers:**

< Analyte was not detected above the laboratory method detection limit (MDL).

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.

Table 6  
 Summary of Groundwater Analytical Data  
 2022 Annual Groundwater Monitoring and Corrective Action Report  
 Georgia Power Company  
 Plant Yates AP-1

Analyte	Location	YGWC-46A		YGWC-52		
	Sample Date	8/27/2021	2/9/2022	8/20/2021	2/9/2022	
	Units					
Appendix III	pH	SU	6.83	6.98	6.71	5.99
	Boron	mg/l	1.9	2.1	< 0.0086	0.0089 J
	Calcium	mg/l	108	109	47.9	42.2
	Chloride	mg/l	29.3	28.2	3.1	3.2
	Fluoride	mg/l	0.13	0.12	< 0.050	< 0.050
	Sulfate	mg/l	423	415	122	119
	Total Dissolved Solids	mg/l	810	846	289	278
Appendix IV	Antimony	mg/l	< 0.00078	< 0.00078	< 0.00078	< 0.00078
	Arsenic	mg/l	0.0022 J	< 0.0011	< 0.0011	< 0.0011
	Barium	mg/l	0.043	0.042	0.019	0.018
	Beryllium	mg/l	< 0.000054	< 0.000054	< 0.000054	< 0.000054
	Cadmium	mg/l	< 0.00011	< 0.00011	< 0.00011	< 0.00011
	Chromium	mg/l	< 0.0011	< 0.0011	< 0.0011	0.0012 J
	Cobalt	mg/l	0.00056 J	0.00060 J	0.0013 J	0.0015 J
	Fluoride	mg/l	0.13	0.12	< 0.050	< 0.050
	Lead	mg/l	< 0.00089	< 0.00089	< 0.00089	< 0.00089
	Lithium	mg/l	0.014 J	0.014 J	0.0043 J	0.0042 J
	Mercury	mg/l	< 0.000078	< 0.00013	< 0.000078	< 0.00013
	Molybdenum	mg/l	0.0022 J	0.0021 J	< 0.00074	< 0.00074
	Combined Radium - 226/228	pci/l	1.83	1.74	0.496 U	0.926
	Selenium	mg/l	< 0.0014	< 0.0014	< 0.0014	< 0.0014
	Thallium	mg/l	< 0.00018	< 0.00018	< 0.00018	< 0.00018

**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.

**Laboratory Qualifiers:**

< Analyte was not detected above the laboratory method detection limit (MDL).

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.



**Table 7**  
**Summary of Background Levels and Groundwater Protection Standards**  
**2022 Annual Groundwater Monitoring and Corrective Action Report**  
**Georgia Power Company**  
**Plant Yates - AP-1**



Constituent	Units	Background	GWPS
<b>August 2021</b>			
Antimony	mg/L	0.0047	0.006
Arsenic	mg/L	0.005	0.010
Barium	mg/L	0.071	2
Beryllium	mg/L	0.0005	0.004
Cadmium	mg/L	0.0005	0.005
Chromium	mg/L	0.0093	0.100
Cobalt	mg/L	0.035	0.035 <sup>1</sup>
Fluoride	mg/L	0.68	4
Lead	mg/L	0.0013	0.015
Lithium	mg/L	0.03	0.040
Mercury	mg/L	0.0002	0.002
Molybdenum	mg/L	0.014	0.1
Selenium	mg/L	0.005	0.050
Thallium	mg/L	0.001	0.002
Combined Radium - 226/228	pCi/L	6.92	6.92 <sup>1</sup>

**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.

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

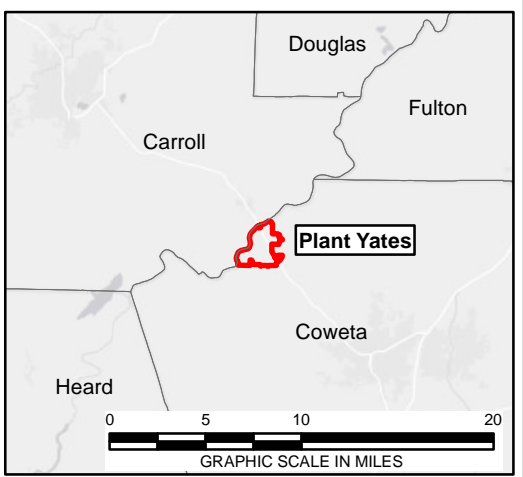
**Acronyms and Abbreviations:**

GWPS - Groundwater Protection Standard

mg/L - milligrams per liter

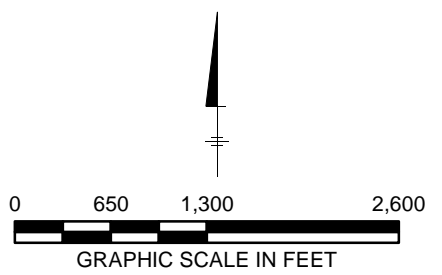
pCi/L - picoCuries per liter

# Figures



**LEGEND**  
 [Yellow dashed line] APPROXIMATE PROPERTY BOUNDARY  
 [Black dashed line] PERMITTED UNIT BOUNDARY

**NOTE:**  
 AERIAL IMAGE SOURCES: JANUARY 10, 2022 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.



COORDINATE SYSTEM: NAD 1983 STATEPLANE  
 GEORGIA WEST FIPS 1002 FEET

**Georgia Power**  
 PLANT YATES AP-1  
 NEWNAN, GA  
 2022 ANNUAL GROUNDWATER MONITORING  
 AND CORRECTIVE ACTION REPORT

**SITE LOCATION MAP**

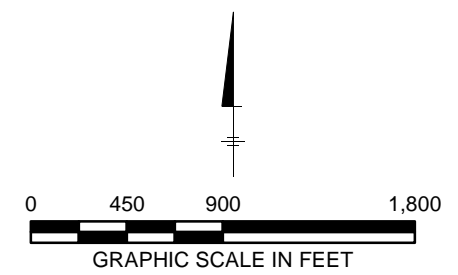
**ARCADIS** | FIGURE **1**



**LEGEND**

- SAPROLITE NETWORK MONITORING WELL LOCATION
- 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
- AREA WHERE ASH HAS BEEN CERTIFIED REMOVED AS OF 7/29/2022

**NOTE:**  
 AERIAL IMAGE SOURCES: JANUARY 10, 2022 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.



COORDINATE SYSTEM: NAD 1983 STATEPLANE  
 GEORGIA WEST FIPS 1002 FEET

**Georgia Power**  
 PLANT YATES AP-1  
 NEWNAN, GA  
 2022 ANNUAL GROUNDWATER MONITORING  
 AND CORRECTIVE ACTION REPORT

**PLANT YATES CCR REMOVAL AREAS**

**ARCADIS** FIGURE  
**2**

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

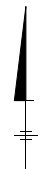
84°54'10"W



### 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
- PERMITTED UNIT BOUNDARY

**NOTE:**  
 AERIAL IMAGE SOURCES: JANUARY 10, 2022 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.



0 112.5 225 450



GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE  
 GEORGIA WEST FIPS 1002 FEET



PLANT YATES AP-1  
 NEWNAN, GA  
 2022 ANNUAL GROUNDWATER MONITORING  
 AND CORRECTIVE ACTION REPORT

### WELL LOCATION MAP



FIGURE  
**3**

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



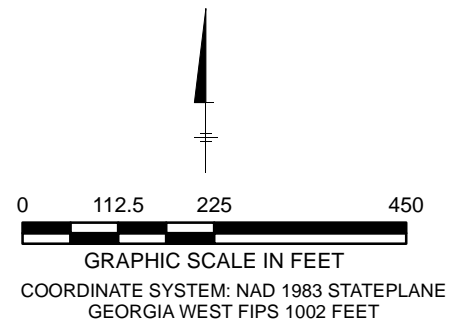
### LEGEND

- 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
- PERMITTED UNIT BOUNDARY
- APPROXIMATE POTENTIOMETRIC CONTOUR (FEET) DASHED WHERE INFERRER

708.94 GROUNDWATER ELEVATION (FEET)

### NOTES:

1. \* = GROUNDWATER ELEVATION WAS NOT USED FOR POTENTIOMETRIC CONTOURING.
2. ELEVATION IS PRESENTED IN U.S. SURVEY FEET (NAVD 1988).
3. AERIAL IMAGE SOURCES: JANUARY 10, 2022 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.



Georgia Power

PLANT YATES AP-1  
NEWNAN, GA  
2022 ANNUAL GROUNDWATER MONITORING  
AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP,  
AUGUST 2021

ARCADIS

FIGURE  
**4**

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



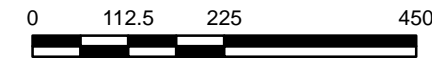
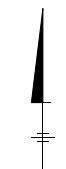
### LEGEND

- 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
- PERMITTED UNIT BOUNDARY
- APPROXIMATE POTENTIOMETRIC CONTOUR (FEET) DASHED WHERE INFERRER

708.94 GROUNDWATER ELEVATION (FEET)

### NOTES:

1. \* = GROUNDWATER ELEVATION WAS NOT USED FOR POTENTIOMETRIC CONTOURING.
2. ELEVATION IS PRESENTED IN U.S. SURVEY FEET (NAVD 1988).
3. AERIAL IMAGE SOURCES: JANUARY 10, 2022 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.



GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE  
GEORGIA WEST FIPS 1002 FEET



PLANT YATES AP-1  
NEWNAN, GA  
2022 ANNUAL GROUNDWATER MONITORING  
AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP,  
FEBRUARY 2022



FIGURE  
**5**

# Appendix A

## Laboratory Analytical and Data Validation Reports



# **August 2021 Event**

September 27, 2021

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

RE: Project: YATES AP-1 DG RADS  
Pace Project No.: 92557049

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between August 20, 2021 and August 27, 2021. 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,



Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: YATES AP-1 DG RADS  
Pace Project No.: 92557049

---

### **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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: YATES AP-1 DG RADS

Pace Project No.: 92557049

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92557049001	YGWC-52	Water	08/20/21 14:40	08/20/21 17:30
92557049002	YGWC-44	Water	08/19/21 14:38	08/20/21 17:30
92557049003	YGWC-45	Water	08/19/21 11:11	08/20/21 17:30
92557049004	AP-1-EB-1	Water	08/19/21 16:01	08/20/21 17:30
92557049005	AP-1-FB-1	Water	08/19/21 09:01	08/20/21 17:30
92557049006	YGWC-46A	Water	08/27/21 13:01	08/27/21 16:40
92557049007	AP-1-DUP-1	Water	08/27/21 00:00	08/27/21 16:40

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES AP-1 DG RADS  
Pace Project No.: 92557049

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92557049001	YGWC-52	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557049002	YGWC-44	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557049003	YGWC-45	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557049004	AP-1-EB-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557049005	AP-1-FB-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557049006	YGWC-46A	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557049007	AP-1-DUP-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES AP-1 DG RADS  
Pace Project No.: 92557049

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92557049001</b>	<b>YGWC-52</b>					
EPA 9315	Radium-226	0.152 ± 0.134 (0.247) C:89% T:NA	pCi/L		09/20/21 12:33	
EPA 9320	Radium-228	0.344 ± 0.360 (0.745) C:72% T:90%	pCi/L		09/17/21 13:57	
Total Radium Calculation	Total Radium	0.496 ± 0.494 (0.992)	pCi/L		09/21/21 16:28	
<b>92557049002</b>	<b>YGWC-44</b>					
EPA 9315	Radium-226	0.0505 ± 0.103 (0.240) C:86% T:NA	pCi/L		09/20/21 12:33	
EPA 9320	Radium-228	0.210 ± 0.369 (0.805) C:74% T:88%	pCi/L		09/17/21 13:57	
Total Radium Calculation	Total Radium	0.261 ± 0.472 (1.05)	pCi/L		09/21/21 16:28	
<b>92557049003</b>	<b>YGWC-45</b>					
EPA 9315	Radium-226	0.893 ± 0.311 (0.337) C:84% T:NA	pCi/L		09/20/21 12:33	
EPA 9320	Radium-228	0.485 ± 0.449 (0.924) C:74% T:90%	pCi/L		09/17/21 13:57	
Total Radium Calculation	Total Radium	1.38 ± 0.760 (1.26)	pCi/L		09/21/21 16:28	
<b>92557049004</b>	<b>AP-1-EB-1</b>					
EPA 9315	Radium-226	0.0750 ± 0.126 (0.283) C:85% T:NA	pCi/L		09/20/21 12:33	
EPA 9320	Radium-228	-0.0878 ± 0.339 (0.807) C:78% T:84%	pCi/L		09/17/21 13:57	
Total Radium Calculation	Total Radium	0.0750 ± 0.465 (1.09)	pCi/L		09/21/21 16:28	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES AP-1 DG RADS  
Pace Project No.: 92557049

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92557049005</b>	<b>AP-1-FB-1</b>					
EPA 9315	Radium-226	0.167 ± 0.135 (0.237)	pCi/L		09/20/21 12:33	
EPA 9320	Radium-228	C:96% T:NA 0.0637 ± 0.437 (0.994)	pCi/L		09/17/21 13:57	
Total Radium Calculation	Total Radium	C:74% T:83% 0.231 ± 0.572 (1.23)	pCi/L		09/21/21 16:28	
<b>92557049006</b>	<b>YGWC-46A</b>					
EPA 9315	Radium-226	0.968 ± 0.297 (0.209)	pCi/L		09/20/21 12:33	
EPA 9320	Radium-228	C:96% T:NA 0.866 ± 0.441 (0.775)	pCi/L		09/17/21 13:58	
Total Radium Calculation	Total Radium	C:73% T:91% 1.83 ± 0.738 (0.984)	pCi/L		09/21/21 16:37	
<b>92557049007</b>	<b>AP-1-DUP-1</b>					
EPA 9315	Radium-226	0.822 ± 0.266 (0.219)	pCi/L		09/20/21 12:31	
EPA 9320	Radium-228	C:97% T:NA 0.684 ± 0.420 (0.785)	pCi/L		09/17/21 13:58	
Total Radium Calculation	Total Radium	C:73% T:89% 1.51 ± 0.686 (1.00)	pCi/L		09/21/21 16:37	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 DG RADS

Pace Project No.: 92557049

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWC-52</b> <b>Lab ID: 92557049001</b> Collected: 08/20/21 14:40      Received: 08/20/21 17:30      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.152 ± 0.134 (0.247)</b> <b>C:89% T:NA</b>	pCi/L	09/20/21 12:33	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.344 ± 0.360 (0.745)</b> <b>C:72% T:90%</b>	pCi/L	09/17/21 13:57	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.496 ± 0.494 (0.992)</b>	pCi/L	09/21/21 16:28	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 DG RADS

Pace Project No.: 92557049

**Sample: YGWC-44**      **Lab ID: 92557049002**      Collected: 08/19/21 14:38      Received: 08/20/21 17:30      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	<b>0.0505 ± 0.103 (0.240)</b> C:86% T:NA	pCi/L	09/20/21 12:33	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.210 ± 0.369 (0.805)</b> C:74% T:88%	pCi/L	09/17/21 13:57	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.261 ± 0.472 (1.05)</b>	pCi/L	09/21/21 16:28	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 DG RADS

Pace Project No.: 92557049

**Sample: YGWC-45**      **Lab ID: 92557049003**      Collected: 08/19/21 11:11      Received: 08/20/21 17:30      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	<b>0.893 ± 0.311 (0.337)</b> <b>C:84% T:NA</b>	pCi/L	09/20/21 12:33	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.485 ± 0.449 (0.924)</b> <b>C:74% T:90%</b>	pCi/L	09/17/21 13:57	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.38 ± 0.760 (1.26)</b>	pCi/L	09/21/21 16:28	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 DG RADS

Pace Project No.: 92557049

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: AP-1-EB-1</b> <b>Lab ID: 92557049004</b> Collected: 08/19/21 16:01      Received: 08/20/21 17:30      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0750 ± 0.126 (0.283)</b> <b>C:85% T:NA</b>	pCi/L	09/20/21 12:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.0878 ± 0.339 (0.807)</b> <b>C:78% T:84%</b>	pCi/L	09/17/21 13:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.0750 ± 0.465 (1.09)</b>	pCi/L	09/21/21 16:28	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 DG RADS

Pace Project No.: 92557049

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: AP-1-FB-1</b> <b>Lab ID: 92557049005</b> Collected: 08/19/21 09:01      Received: 08/20/21 17:30      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.167 ± 0.135 (0.237)</b> <b>C:96% T:NA</b>	pCi/L	09/20/21 12:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.0637 ± 0.437 (0.994)</b> <b>C:74% T:83%</b>	pCi/L	09/17/21 13:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.231 ± 0.572 (1.23)</b>	pCi/L	09/21/21 16:28	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 DG RADS

Pace Project No.: 92557049

**Sample: YGWC-46A**      **Lab ID: 92557049006**      Collected: 08/27/21 13:01      Received: 08/27/21 16:40      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	<b>0.968 ± 0.297 (0.209)</b> <b>C:96% T:NA</b>	pCi/L	09/20/21 12:33	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.866 ± 0.441 (0.775)</b> <b>C:73% T:91%</b>	pCi/L	09/17/21 13:58	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.83 ± 0.738 (0.984)</b>	pCi/L	09/21/21 16:37	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 DG RADS

Pace Project No.: 92557049

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: AP-1-DUP-1</b> <b>Lab ID: 92557049007</b> Collected: 08/27/21 00:00      Received: 08/27/21 16:40      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.822 ± 0.266 (0.219)</b> <b>C:97% T:NA</b>	pCi/L	09/20/21 12:31	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.684 ± 0.420 (0.785)</b> <b>C:73% T:89%</b>	pCi/L	09/17/21 13:58	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.51 ± 0.686 (1.00)</b>	pCi/L	09/21/21 16:37	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP-1 DG RADS

Pace Project No.: 92557049

QC Batch: 463391

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92557049001, 92557049002, 92557049003, 92557049004, 92557049005, 92557049006, 92557049007

METHOD BLANK: 2237294

Matrix: Water

Associated Lab Samples: 92557049001, 92557049002, 92557049003, 92557049004, 92557049005, 92557049006, 92557049007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.204 ± 0.288 (0.618) C:77% T:85%	pCi/L	09/17/21 10:46	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.





## QUALIFIERS

Project: YATES AP-1 DG RADS  
Pace Project No.: 92557049

---

### 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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AP-1 DG RADS  
Pace Project No.: 92557049

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557049001	YGWC-52	EPA 9315	463393		
92557049002	YGWC-44	EPA 9315	463393		
92557049003	YGWC-45	EPA 9315	463393		
92557049004	AP-1-EB-1	EPA 9315	463393		
92557049005	AP-1-FB-1	EPA 9315	463393		
92557049006	YGWC-46A	EPA 9315	463393		
92557049007	AP-1-DUP-1	EPA 9315	463393		
92557049001	YGWC-52	EPA 9320	463391		
92557049002	YGWC-44	EPA 9320	463391		
92557049003	YGWC-45	EPA 9320	463391		
92557049004	AP-1-EB-1	EPA 9320	463391		
92557049005	AP-1-FB-1	EPA 9320	463391		
92557049006	YGWC-46A	EPA 9320	463391		
92557049007	AP-1-DUP-1	EPA 9320	463391		
92557049001	YGWC-52	Total Radium Calculation	464971		
92557049002	YGWC-44	Total Radium Calculation	464971		
92557049003	YGWC-45	Total Radium Calculation	464971		
92557049004	AP-1-EB-1	Total Radium Calculation	464971		
92557049005	AP-1-FB-1	Total Radium Calculation	464971		
92557049006	YGWC-46A	Total Radium Calculation	464973		
92557049007	AP-1-DUP-1	Total Radium Calculation	464973		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: Go Power

Project #:

**WO#: 92557049**



Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other \_\_\_\_\_

Custody Seal Present?  Yes  No    Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 8/23/11

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Biological Tissue Frozen?

Thermometer:  IR Gun ID: 083    Type of Ice:  Wet  Blue  None

Yes  No  N/A

Cooler Temp: 2.0    Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

Cooler Temp Corrected (°C): 2.0

Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States (CA, NY, or SC (check maps))?  
 Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

		Comments/Discrepancy:
Chain of Custody Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix	<u>W</u>	
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_



Document Name:  
Sample Condition Upon Receipt (SCUR)  
Document No.:  
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020  
Page 2 of 2  
Issuing Authority:  
Pace Carolinas Quality Office

\*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/2015 (water) DOC, LLRig

\*\*Bottom half of box is to list number of bottles

Project #

**WO#: 92557049**

PM: NMG

Due Date: 09/13/21

CLIENT: GA-GA Power

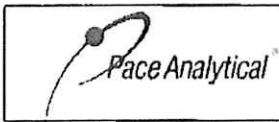
Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	W6FU 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)	AG1ADG3A-250 mL Amber NH4Cl (N/A)(Cl-)	DC9H-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)	VD9K (6 vials per kit)-G155 & 1 (N/A)	VJGR (3 vials per kit) VP47/0.45 kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - Lab)	SP2T-150 mL Sterile Plastic (N/A - Lab)	HP4A-250 mL Plastic (N/A) (N/A)	AG9U-150 mL Amber Unpreserved vials (N/A)	VX9U-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1																													
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

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 Department of Environment and Natural Resources, Office of Water Quality, Raleigh, NC. Out of field, incorrect preservative, out of temp, incorrect containers.





**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

**Sample Condition Upon Receipt**

Client Name: GA Power

Project #:

**WO#: 92557049**

PM: NMG Due Date: 09/13/21  
 CLIENT: GA-GA Power

Courier:  Commercial  Fed Ex  Pace  UPS  USPS  Other:  Client

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 8/27/21  
COM

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 083 Type of Ice:  Wet  Blue  None

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.0

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-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	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

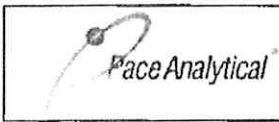
Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_



Document Name: <b>Sample Condition Upon Receipt(SCUR)</b>	Document Revised: October 28, 2020 Page 2 of 2
Document No.: <b>F-CAR-CS-033-Rev.07</b>	Issuing Authority: Pace Carolinas Quality Office

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

Project #

**WO# : 92557049**

PM: NMG

Due Date: 09/13/21

CLIENT: GA-GA Power

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

\*\*Bottom half of box is to list number of bottles

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	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) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	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)	AG3A(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 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 Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1																													
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

**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 (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.





# Quality Control Sample Performance Assessment

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*



Test: Ra-226  
Analyst: LAL  
Date: 9/13/2021  
Worklist: 62587  
Matrix: DW

Method Blank Assessment	
MB Sample ID	2237295
MB concentration:	0.056
M/B Counting Uncertainty:	0.118
MB MDC:	0.276
MB Numerical Performance Indicator:	0.93
MB Status vs. Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCS (Y or N)?	Y
Count Date:	9/20/2021	LCS62587	9/20/2021
Spike I.D.:	19-033		
Decay Corrected Spike Concentration (pCi/mL):	24.034		24.034
Volume Used (mL):	0.10		0.10
Aliquot Volume (L, g, F):	0.502		0.524
Target Conc. (pCi/L, g, F):	4.787		4.586
Uncertainty (Calculated):	0.057		0.055
Result (pCi/L, g, F):	5.465		4.582
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.589		0.525
Numerical Performance Indicator:	2.25		-0.01
Percent Recovery:	114.16%		99.92%
Status vs Numerical Indicator:	N/A		N/A
Status vs Recovery:	Pass		Pass
Upper % Recovery Limits:	125%		125%
Lower % Recovery Limits:	75%		75%

Duplicate Sample Assessment	
Sample I.D.:	92557062001
Duplicate Sample I.D.:	92557062001DUP
Sample Result (pCi/L, g, F):	0.067
Sample Result Counting Uncertainty (pCi/L, g, F):	0.125
Sample Duplicate Result (pCi/L, g, F):	0.253
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.173
Are sample and/or duplicate results below RL?	See Below #
Duplicate Numerical Performance Indicator:	-1.708
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	116.14%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**
% RPD Limit:	25%

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

Comments:

\*\*\*Beta must be re-processed due to unacceptable precision: N/A

WAM 9/21/21

OK

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

WAM 9/21/21

# Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228  
Analyst: JC2  
Date: 9/15/2021  
Worklist: 62586  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2237294
MB concentration:	0.204
MB 2 Sigma CSU:	0.288
MB MDC:	0.618
MB Numerical Performance Indicator:	1.39
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	
	LCSD62586	Y
Count Date:	9/17/2021	LCSD62586
Spike I.D.:	21-029	9/17/2021
Decay Corrected Spike Concentration (pCi/mL):	38.188	38.188
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.805	0.805
Target Conc. (pCi/L, g, F):	4.744	4.742
Uncertainty (Calculated):	0.232	0.232
Result (pCi/L, g, F):	4.633	3.778
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.070	0.892
Numerical Performance Indicator:	-0.20	-2.05
Percent Recovery:	97.66%	79.67%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment	Enter Duplicate sample IDs if other than LCS/LCSD in the space below:
Sample I.D.:	LCSD62586
Duplicate Sample I.D.:	LCSD62586
Sample Result (pCi/L, g, F):	4.633
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.070
Sample Duplicate Result (pCi/L, g, F):	3.778
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.892
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	1.202
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	20.29%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

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

Comments:

*Handwritten signature/initials*

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 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: (Based on the Percent Recoveries) MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:

*Handwritten signature/initials*

September 10, 2021

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

RE: Project: YATES AP-1 DG  
Pace Project No.: 92557073

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between August 20, 2021 and August 27, 2021. 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,



Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: YATES AP-1 DG

Pace Project No.: 92557073

---

### **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  
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

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

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: YATES AP-1 DG  
Pace Project No.: 92557073

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92557073001	YGWC-52	Water	08/20/21 14:40	08/20/21 17:30
92557073002	YGWC-44	Water	08/19/21 14:38	08/20/21 17:30
92557073003	YGWC-45	Water	08/19/21 11:11	08/20/21 17:30
92557073004	AP-1-EB-1	Water	08/19/21 16:01	08/20/21 17:30
92557073005	AP-1-FB-1	Water	08/19/21 09:01	08/20/21 17:30
92557073006	YGWC-46A	Water	08/27/21 13:01	08/27/21 16:40
92557073007	AP-1-DUP-1	Water	08/27/21 00:00	08/27/21 16:40

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES AP-1 DG  
Pace Project No.: 92557073

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92557073001	YGWC-52	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557073002	YGWC-44	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557073003	YGWC-45	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557073004	AP-1-EB-1	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557073005	AP-1-FB-1	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557073006	YGWC-46A	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557073007	AP-1-DUP-1	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville  
PASI-C = Pace Analytical Services - Charlotte

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES AP-1 DG

Pace Project No.: 92557073

---

<b>Lab ID</b>	<b>Sample ID</b>	<b>Method</b>	<b>Analysts</b>	<b>Analytes Reported</b>
---------------	------------------	---------------	-----------------	--------------------------

---

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES AP-1 DG

Pace Project No.: 92557073

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92557073001</b>	<b>YGWC-52</b>					
	Performed by	CUSTOME			08/23/21 16:45	
		R				
	pH	6.71	Std. Units		08/23/21 16:45	
EPA 6010D	Calcium	47.9	mg/L	1.0	08/26/21 13:45	
EPA 6020B	Barium	0.019	mg/L	0.0050	08/31/21 15:31	
EPA 6020B	Cobalt	0.0013J	mg/L	0.0050	08/31/21 15:31	
EPA 6020B	Lithium	0.0043J	mg/L	0.030	08/31/21 15:31	
SM 2540C-2011	Total Dissolved Solids	289	mg/L	10.0	08/26/21 19:24	
EPA 300.0 Rev 2.1 1993	Chloride	3.1	mg/L	1.0	08/29/21 03:32	
EPA 300.0 Rev 2.1 1993	Sulfate	122	mg/L	3.0	08/29/21 13:31	
<b>92557073002</b>	<b>YGWC-44</b>					
	Performed by	CUSTOME			08/23/21 16:45	
		R				
	pH	5.73	Std. Units		08/23/21 16:45	
EPA 6010D	Calcium	31.7	mg/L	1.0	08/26/21 13:49	
EPA 6020B	Barium	0.089	mg/L	0.0050	08/31/21 15:36	
EPA 6020B	Boron	0.56	mg/L	0.040	08/31/21 15:36	
EPA 6020B	Cobalt	0.0014J	mg/L	0.0050	08/31/21 15:36	
EPA 6020B	Lithium	0.013J	mg/L	0.030	08/31/21 15:36	
SM 2540C-2011	Total Dissolved Solids	333	mg/L	10.0	08/26/21 18:48	
EPA 300.0 Rev 2.1 1993	Chloride	13.0	mg/L	1.0	08/29/21 03:48	
EPA 300.0 Rev 2.1 1993	Sulfate	115	mg/L	3.0	08/29/21 13:46	
<b>92557073003</b>	<b>YGWC-45</b>					
	Performed by	CUSTOME			08/23/21 16:46	
		R				
	pH	6.13	Std. Units		08/23/21 16:46	
EPA 6010D	Calcium	50.4	mg/L	1.0	08/26/21 13:54	
EPA 6020B	Barium	0.055	mg/L	0.0050	08/31/21 15:42	
EPA 6020B	Boron	0.31	mg/L	0.040	08/31/21 15:42	
EPA 6020B	Cobalt	0.00048J	mg/L	0.0050	08/31/21 15:42	
EPA 6020B	Lithium	0.012J	mg/L	0.030	08/31/21 15:42	
EPA 6020B	Molybdenum	0.0012J	mg/L	0.010	08/31/21 15:42	
SM 2540C-2011	Total Dissolved Solids	391	mg/L	10.0	08/26/21 19:23	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	08/29/21 04:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.075J	mg/L	0.10	08/29/21 04:03	
EPA 300.0 Rev 2.1 1993	Sulfate	149	mg/L	3.0	08/29/21 14:01	
<b>92557073006</b>	<b>YGWC-46A</b>					
	Performed by	CUSTOME			08/30/21 09:52	
		R				
	pH	6.83	Std. Units		08/30/21 09:52	
EPA 6010D	Calcium	108	mg/L	1.0	09/09/21 16:21	
EPA 6020B	Arsenic	0.0022J	mg/L	0.0050	09/09/21 19:33	
EPA 6020B	Barium	0.043	mg/L	0.0050	09/09/21 19:33	
EPA 6020B	Boron	1.9	mg/L	0.040	09/09/21 19:33	
EPA 6020B	Cobalt	0.00056J	mg/L	0.0050	09/09/21 19:33	
EPA 6020B	Lithium	0.014J	mg/L	0.030	09/09/21 19:33	
EPA 6020B	Molybdenum	0.0022J	mg/L	0.010	09/09/21 19:33	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: YATES AP-1 DG

Pace Project No.: 92557073

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92557073006</b>	<b>YGWC-46A</b>					
SM 2540C-2011	Total Dissolved Solids	810	mg/L	20.0	08/31/21 16:51	
EPA 300.0 Rev 2.1 1993	Chloride	29.3	mg/L	1.0	09/06/21 02:28	
EPA 300.0 Rev 2.1 1993	Fluoride	0.13	mg/L	0.10	09/06/21 02:28	
EPA 300.0 Rev 2.1 1993	Sulfate	423	mg/L	9.0	09/06/21 16:19	
<b>92557073007</b>	<b>AP-1-DUP-1</b>					
EPA 6010D	Calcium	107	mg/L	1.0	09/09/21 16:41	
EPA 6020B	Arsenic	0.0022J	mg/L	0.0050	09/09/21 19:38	
EPA 6020B	Barium	0.046	mg/L	0.0050	09/09/21 19:38	
EPA 6020B	Boron	1.9	mg/L	0.040	09/09/21 19:38	
EPA 6020B	Cobalt	0.00060J	mg/L	0.0050	09/09/21 19:38	
EPA 6020B	Lithium	0.014J	mg/L	0.030	09/09/21 19:38	
EPA 6020B	Molybdenum	0.0023J	mg/L	0.010	09/09/21 19:38	
SM 2540C-2011	Total Dissolved Solids	810	mg/L	20.0	08/31/21 16:51	
EPA 300.0 Rev 2.1 1993	Chloride	29.2	mg/L	1.0	09/06/21 02:44	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	09/06/21 02:44	
EPA 300.0 Rev 2.1 1993	Sulfate	427	mg/L	9.0	09/06/21 16:35	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1 DG

Pace Project No.: 92557073

Sample: YGWC-52		Lab ID: 92557073001		Collected: 08/20/21 14:40		Received: 08/20/21 17:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/23/21 16:45		
pH	<b>6.71</b>	Std. Units			1		08/23/21 16:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>47.9</b>	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 13:45	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/26/21 09:56	08/31/21 15:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:31	7440-38-2	
Barium	<b>0.019</b>	mg/L	0.0050	0.00067	1	08/26/21 09:56	08/31/21 15:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/26/21 09:56	08/31/21 15:31	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/26/21 09:56	08/31/21 15:31	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/26/21 09:56	08/31/21 15:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:31	7440-47-3	
Cobalt	<b>0.0013J</b>	mg/L	0.0050	0.00039	1	08/26/21 09:56	08/31/21 15:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/26/21 09:56	08/31/21 15:31	7439-92-1	
Lithium	<b>0.0043J</b>	mg/L	0.030	0.00073	1	08/26/21 09:56	08/31/21 15:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/26/21 09:56	08/31/21 15:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/26/21 09:56	08/31/21 15:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/26/21 09:56	08/31/21 15:31	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 15:04	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>289</b>	mg/L	10.0	10.0	1		08/26/21 19:24		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>3.1</b>	mg/L	1.0	0.60	1		08/29/21 03:32	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/21 03:32	16984-48-8	
Sulfate	<b>122</b>	mg/L	3.0	1.5	3		08/29/21 13:31	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1 DG  
Pace Project No.: 92557073

Sample: YGWC-44		Lab ID: 92557073002		Collected: 08/19/21 14:38		Received: 08/20/21 17:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/23/21 16:45		
pH	<b>5.73</b>	Std. Units			1		08/23/21 16:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>31.7</b>	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 13:49	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/26/21 09:56	08/31/21 15:36	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:36	7440-38-2	
Barium	<b>0.089</b>	mg/L	0.0050	0.00067	1	08/26/21 09:56	08/31/21 15:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/26/21 09:56	08/31/21 15:36	7440-41-7	
Boron	<b>0.56</b>	mg/L	0.040	0.0086	1	08/26/21 09:56	08/31/21 15:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/26/21 09:56	08/31/21 15:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:36	7440-47-3	
Cobalt	<b>0.0014J</b>	mg/L	0.0050	0.00039	1	08/26/21 09:56	08/31/21 15:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/26/21 09:56	08/31/21 15:36	7439-92-1	
Lithium	<b>0.013J</b>	mg/L	0.030	0.00073	1	08/26/21 09:56	08/31/21 15:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/26/21 09:56	08/31/21 15:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/26/21 09:56	08/31/21 15:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/26/21 09:56	08/31/21 15:36	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 15:24	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>333</b>	mg/L	10.0	10.0	1		08/26/21 18:48		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>13.0</b>	mg/L	1.0	0.60	1		08/29/21 03:48	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/21 03:48	16984-48-8	
Sulfate	<b>115</b>	mg/L	3.0	1.5	3		08/29/21 13:46	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1 DG  
Pace Project No.: 92557073

Sample: YGWC-45		Lab ID: 92557073003		Collected: 08/19/21 11:11		Received: 08/20/21 17:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/23/21 16:46		
pH	<b>6.13</b>	Std. Units			1		08/23/21 16:46		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>50.4</b>	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 13:54	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/26/21 09:56	08/31/21 15:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:42	7440-38-2	
Barium	<b>0.055</b>	mg/L	0.0050	0.00067	1	08/26/21 09:56	08/31/21 15:42	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/26/21 09:56	08/31/21 15:42	7440-41-7	
Boron	<b>0.31</b>	mg/L	0.040	0.0086	1	08/26/21 09:56	08/31/21 15:42	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/26/21 09:56	08/31/21 15:42	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:42	7440-47-3	
Cobalt	<b>0.00048J</b>	mg/L	0.0050	0.00039	1	08/26/21 09:56	08/31/21 15:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/26/21 09:56	08/31/21 15:42	7439-92-1	
Lithium	<b>0.012J</b>	mg/L	0.030	0.00073	1	08/26/21 09:56	08/31/21 15:42	7439-93-2	
Molybdenum	<b>0.0012J</b>	mg/L	0.010	0.00074	1	08/26/21 09:56	08/31/21 15:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/26/21 09:56	08/31/21 15:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/26/21 09:56	08/31/21 15:42	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 15:27	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>391</b>	mg/L	10.0	10.0	1		08/26/21 19:23		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>4.1</b>	mg/L	1.0	0.60	1		08/29/21 04:03	16887-00-6	
Fluoride	<b>0.075J</b>	mg/L	0.10	0.050	1		08/29/21 04:03	16984-48-8	
Sulfate	<b>149</b>	mg/L	3.0	1.5	3		08/29/21 14:01	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1 DG  
Pace Project No.: 92557073

Sample: AP-1-EB-1		Lab ID: 92557073004		Collected: 08/19/21 16:01		Received: 08/20/21 17:30		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 13:59	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	08/26/21 09:56	08/31/21 15:48	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:48	7440-38-2		
Barium	ND	mg/L	0.0050	0.00067	1	08/26/21 09:56	08/31/21 15:48	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	08/26/21 09:56	08/31/21 15:48	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	08/26/21 09:56	08/31/21 15:48	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	08/26/21 09:56	08/31/21 15:48	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:48	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	08/26/21 09:56	08/31/21 15:48	7440-48-4		
Lead	ND	mg/L	0.0010	0.00089	1	08/26/21 09:56	08/31/21 15:48	7439-92-1		
Lithium	ND	mg/L	0.030	0.00073	1	08/26/21 09:56	08/31/21 15:48	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	08/26/21 09:56	08/31/21 15:48	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	08/26/21 09:56	08/31/21 15:48	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	08/26/21 09:56	08/31/21 15:48	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 15:29	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		08/26/21 19:23			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		08/29/21 04:18	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		08/29/21 04:18	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		08/29/21 04:18	14808-79-8		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1 DG  
Pace Project No.: 92557073

Sample: AP-1-FB-1      Lab ID: 92557073005      Collected: 08/19/21 09:01      Received: 08/20/21 17:30      Matrix: Water									
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D    Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	ND	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 14:04	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/26/21 09:56	08/31/21 15:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:53	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/26/21 09:56	08/31/21 15:53	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/26/21 09:56	08/31/21 15:53	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/26/21 09:56	08/31/21 15:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/26/21 09:56	08/31/21 15:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/26/21 09:56	08/31/21 15:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/26/21 09:56	08/31/21 15:53	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/26/21 09:56	08/31/21 15:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/26/21 09:56	08/31/21 15:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/26/21 09:56	08/31/21 15:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/26/21 09:56	08/31/21 15:53	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A    Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 17:01	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		08/26/21 19:23		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		08/29/21 04:34	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/21 04:34	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/29/21 04:34	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1 DG  
Pace Project No.: 92557073

Sample: YGWC-46A		Lab ID: 92557073006		Collected: 08/27/21 13:01		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/30/21 09:52		
pH	<b>6.83</b>	Std. Units			1		08/30/21 09:52		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>108</b>	mg/L	1.0	0.12	1	09/09/21 11:30	09/09/21 16:21	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 19:33	7440-36-0	
Arsenic	<b>0.0022J</b>	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:33	7440-38-2	
Barium	<b>0.043</b>	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 19:33	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 19:33	7440-41-7	
Boron	<b>1.9</b>	mg/L	0.040	0.0086	1	09/09/21 11:00	09/09/21 19:33	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 19:33	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:33	7440-47-3	
Cobalt	<b>0.00056J</b>	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 19:33	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 19:33	7439-92-1	
Lithium	<b>0.014J</b>	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:33	7439-93-2	
Molybdenum	<b>0.0022J</b>	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 19:33	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 19:33	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/09/21 11:00	09/09/21 19:33	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 17:04	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>810</b>	mg/L	20.0	20.0	1		08/31/21 16:51		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>29.3</b>	mg/L	1.0	0.60	1		09/06/21 02:28	16887-00-6	
Fluoride	<b>0.13</b>	mg/L	0.10	0.050	1		09/06/21 02:28	16984-48-8	
Sulfate	<b>423</b>	mg/L	9.0	4.5	9		09/06/21 16:19	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1 DG  
Pace Project No.: 92557073

Sample: AP-1-DUP-1		Lab ID: 92557073007		Collected: 08/27/21 00:00		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>107</b>	mg/L	1.0	0.12	1	09/09/21 11:30	09/09/21 16:41	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 19:38	7440-36-0	
Arsenic	<b>0.0022J</b>	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:38	7440-38-2	
Barium	<b>0.046</b>	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 19:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 19:38	7440-41-7	
Boron	<b>1.9</b>	mg/L	0.040	0.0086	1	09/09/21 11:00	09/09/21 19:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 19:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:38	7440-47-3	
Cobalt	<b>0.00060J</b>	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 19:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 19:38	7439-92-1	
Lithium	<b>0.014J</b>	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:38	7439-93-2	
Molybdenum	<b>0.0023J</b>	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 19:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 19:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/09/21 11:00	09/09/21 19:38	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 17:07	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>810</b>	mg/L	20.0	20.0	1		08/31/21 16:51		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>29.2</b>	mg/L	1.0	0.60	1		09/06/21 02:44	16887-00-6	
Fluoride	<b>0.12</b>	mg/L	0.10	0.050	1		09/06/21 02:44	16984-48-8	
Sulfate	<b>427</b>	mg/L	9.0	4.5	9		09/06/21 16:35	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: YATES AP-1 DG  
Pace Project No.: 92557073

QC Batch: 643161 Analysis Method: EPA 6010D  
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92557073001, 92557073002, 92557073003, 92557073004, 92557073005

METHOD BLANK: 3374851 Matrix: Water  
Associated Lab Samples: 92557073001, 92557073002, 92557073003, 92557073004, 92557073005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/26/21 12:37	

LABORATORY CONTROL SAMPLE: 3374852

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3374853 3374854

Parameter	Units	3374853		3374854		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555938008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Calcium	mg/L	139	1	1	137	134	-232	-508	75-125	2	20 M1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1 DG

Pace Project No.: 92557073

QC Batch: 645799	Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A	Analysis Description: 6010D ATL
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92557073006, 92557073007

METHOD BLANK: 3387400 Matrix: Water

Associated Lab Samples: 92557073006, 92557073007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/09/21 14:40	

LABORATORY CONTROL SAMPLE: 3387401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387402 3387403

Parameter	Units	3387402		3387403		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	79.9	1	1	78.2	78.5	-168	-139	75-125	0	20 M1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1 DG  
Pace Project No.: 92557073

QC Batch: 643162 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92557073001, 92557073002, 92557073003, 92557073004, 92557073005

METHOD BLANK: 3374855 Matrix: Water  
Associated Lab Samples: 92557073001, 92557073002, 92557073003, 92557073004, 92557073005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	08/31/21 14:14	
Arsenic	mg/L	ND	0.0050	0.0011	08/31/21 14:14	
Barium	mg/L	ND	0.0050	0.00067	08/31/21 14:14	
Beryllium	mg/L	ND	0.00050	0.000054	08/31/21 14:14	
Boron	mg/L	ND	0.040	0.0086	08/31/21 14:14	
Cadmium	mg/L	ND	0.00050	0.00011	08/31/21 14:14	
Chromium	mg/L	ND	0.0050	0.0011	08/31/21 14:14	
Cobalt	mg/L	ND	0.0050	0.00039	08/31/21 14:14	
Lead	mg/L	ND	0.0010	0.00089	08/31/21 14:14	
Lithium	mg/L	ND	0.030	0.00073	08/31/21 14:14	
Molybdenum	mg/L	ND	0.010	0.00074	08/31/21 14:14	
Selenium	mg/L	ND	0.0050	0.0014	08/31/21 14:14	
Thallium	mg/L	ND	0.0010	0.00018	08/31/21 14:14	

LABORATORY CONTROL SAMPLE: 3374856

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.097	97	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.097	97	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3374857 3374858

Parameter	Units	92555938008 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.098	100	98	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: YATES AP-1 DG

Pace Project No.: 92557073

Parameter	Units	3374857		3374858		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		92555938008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.27	0.1	0.1	0.36	0.35	89	86	75-125	1	20		
Beryllium	mg/L	ND	0.1	0.1	0.090	0.093	90	93	75-125	3	20		
Boron	mg/L	0.011J	1	1	0.90	0.92	89	91	75-125	2	20		
Cadmium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.11	101	105	75-125	4	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20		
Lithium	mg/L	0.0032J	0.1	0.1	0.096	0.099	93	96	75-125	3	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20		
Selenium	mg/L	ND	0.1	0.1	0.099	0.098	98	97	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	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**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1 DG  
Pace Project No.: 92557073

QC Batch: 645800 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92557073006, 92557073007

METHOD BLANK: 3387411 Matrix: Water

Associated Lab Samples: 92557073006, 92557073007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/09/21 16:19	
Arsenic	mg/L	ND	0.0050	0.0011	09/09/21 16:19	
Barium	mg/L	ND	0.0050	0.00067	09/09/21 16:19	
Beryllium	mg/L	ND	0.00050	0.000054	09/09/21 16:19	
Boron	mg/L	ND	0.040	0.0086	09/09/21 16:19	
Cadmium	mg/L	ND	0.00050	0.00011	09/09/21 16:19	
Chromium	mg/L	ND	0.0050	0.0011	09/09/21 16:19	
Cobalt	mg/L	ND	0.0050	0.00039	09/09/21 16:19	
Lead	mg/L	ND	0.0010	0.00089	09/09/21 16:19	
Lithium	mg/L	ND	0.030	0.00073	09/09/21 16:19	
Molybdenum	mg/L	ND	0.010	0.00074	09/09/21 16:19	
Selenium	mg/L	ND	0.0050	0.0014	09/09/21 16:19	
Thallium	mg/L	ND	0.0010	0.00018	09/09/21 16:19	

LABORATORY CONTROL SAMPLE: 3387412

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387413 3387414

Parameter	Units	92557720004 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: YATES AP-1 DG

Pace Project No.: 92557073

Parameter	Units	92557720004		3387413		3387414		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		MS	MSD	MS	MSD	MS	MSD							
Barium	mg/L	0.049	0.1	0.1	0.1	0.15	0.15	102	102	75-125	0	20		
Beryllium	mg/L	0.00019J	0.1	0.1	0.1	0.10	0.095	101	95	75-125	6	20		
Boron	mg/L	1.3	1	1	1	2.1	2.1	85	78	75-125	3	20		
Cadmium	mg/L	ND	0.1	0.1	0.1	0.10	0.10	101	102	75-125	2	20		
Chromium	mg/L	ND	0.1	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Cobalt	mg/L	ND	0.1	0.1	0.1	0.10	0.098	101	98	75-125	3	20		
Lead	mg/L	ND	0.1	0.1	0.1	0.099	0.099	99	99	75-125	0	20		
Lithium	mg/L	0.0026J	0.1	0.1	0.1	0.10	0.097	100	94	75-125	6	20		
Molybdenum	mg/L	ND	0.1	0.1	0.1	0.10	0.11	104	106	75-125	2	20		
Selenium	mg/L	0.032	0.1	0.1	0.1	0.13	0.13	102	103	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.1	0.099	0.10	99	100	75-125	1	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**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: YATES AP-1 DG

Pace Project No.: 92557073

---

QC Batch: 646051	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92557073001, 92557073002, 92557073003, 92557073004

---

METHOD BLANK: 3388610 Matrix: Water  
Associated Lab Samples: 92557073001, 92557073002, 92557073003, 92557073004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/09/21 14:58	

---

LABORATORY CONTROL SAMPLE: 3388611

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	102	80-120	

---

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388612 3388613

Parameter	Units	3388612		3388613		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	0.0026	0.0025	103	101	75-125	1	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**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1 DG  
Pace Project No.: 92557073

QC Batch: 646057 Analysis Method: EPA 7470A  
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92557073005, 92557073006, 92557073007

METHOD BLANK: 3388621 Matrix: Water  
Associated Lab Samples: 92557073005, 92557073006, 92557073007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/09/21 16:28	

LABORATORY CONTROL SAMPLE: 3388622

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388623 3388624

Parameter	Units	MS		MSD		% Rec		% Rec Limits	RPD	Max RPD	Qual
		Spike Conc.	Result	Spike Conc.	Result	% Rec	% Rec				
Mercury	mg/L	ND	0.0025	0.0025	0.0025	98	88	75-125	12	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: YATES AP-1 DG

Pace Project No.: 92557073

QC Batch: 643140

Analysis Method: SM 2540C-2011

QC Batch Method: SM 2540C-2011

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92557073002

METHOD BLANK: 3374769

Matrix: Water

Associated Lab Samples: 92557073002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/26/21 18:46	

LABORATORY CONTROL SAMPLE: 3374770

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	409	102	90-111	

SAMPLE DUPLICATE: 3374771

Parameter	Units	92555504015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	816	876	7	10	

SAMPLE DUPLICATE: 3374772

Parameter	Units	92555938012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1 DG

Pace Project No.: 92557073

QC Batch: 643142

Analysis Method: SM 2540C-2011

QC Batch Method: SM 2540C-2011

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92557073001, 92557073003, 92557073004, 92557073005

METHOD BLANK: 3374773

Matrix: Water

Associated Lab Samples: 92557073001, 92557073003, 92557073004, 92557073005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/26/21 19:22	

LABORATORY CONTROL SAMPLE: 3374774

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	396	99	90-111	

SAMPLE DUPLICATE: 3374775

Parameter	Units	92557073003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	391	407	4	10	

SAMPLE DUPLICATE: 3374776

Parameter	Units	92557089008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	134	144	7	10	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1 DG  
Pace Project No.: 92557073

QC Batch: 644074 Analysis Method: SM 2540C-2011  
QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92557073006, 92557073007

METHOD BLANK: 3379370 Matrix: Water  
Associated Lab Samples: 92557073006, 92557073007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/31/21 16:50	

LABORATORY CONTROL SAMPLE: 3379371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	405	101	90-111	

SAMPLE DUPLICATE: 3379372

Parameter	Units	92558254005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	123	128	4	10	

SAMPLE DUPLICATE: 3379373

Parameter	Units	92558251001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	150	151	1	10	

SAMPLE DUPLICATE: 3380417

Parameter	Units	92555945014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	396	414	4	10 H1	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1 DG  
Pace Project No.: 92557073

QC Batch: 643665 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: 92557073001, 92557073002, 92557073003, 92557073004, 92557073005

METHOD BLANK: 3377162 Matrix: Water  
Associated Lab Samples: 92557073001, 92557073002, 92557073003, 92557073004, 92557073005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/29/21 01:44	
Fluoride	mg/L	ND	0.10	0.050	08/29/21 01:44	
Sulfate	mg/L	ND	1.0	0.50	08/29/21 01:44	

LABORATORY CONTROL SAMPLE: 3377163

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	46.1	92	90-110	
Fluoride	mg/L	2.5	2.3	93	90-110	
Sulfate	mg/L	50	46.6	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3377164 3377165

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555948025 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	ND	50	50	50	61.0	59.7	122	119	90-110	2	10	M1
Fluoride	mg/L	ND	2.5	2.5	2.5	3.1	3.1	126	123	90-110	2	10	M1
Sulfate	mg/L	ND	50	50	50	62.7	61.8	125	124	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3377166 3377167

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92557081005 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	5.4	50	50	50	54.0	53.8	97	97	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.4	2.4	95	95	90-110	0	10	
Sulfate	mg/L	345	50	50	50	385	382	80	73	90-110	1	10	M1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1 DG  
Pace Project No.: 92557073

QC Batch: 645268 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: 92557073006, 92557073007

METHOD BLANK: 3385176 Matrix: Water  
Associated Lab Samples: 92557073006, 92557073007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/05/21 23:01	
Fluoride	mg/L	ND	0.10	0.050	09/05/21 23:01	
Sulfate	mg/L	ND	1.0	0.50	09/05/21 23:01	

LABORATORY CONTROL SAMPLE: 3385177

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.2	98	90-110	
Fluoride	mg/L	2.5	2.3	94	90-110	
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385178 3385179

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555948053	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	274	50	50	326	328	105	109	90-110	1	10		
Fluoride	mg/L	0.15	2.5	2.5	3.6	3.6	139	139	90-110	0	10	M1	
Sulfate	mg/L	285	50	50	344	347	119	124	90-110	1	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385180 3385181

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92558251001	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	0.99J	50	50	66.4	67.0	131	132	90-110	1	10	M1	
Fluoride	mg/L	0.12	2.5	2.5	3.4	3.4	133	132	90-110	0	10	M1	
Sulfate	mg/L	16.7	50	50	85.1	85.4	137	137	90-110	0	10	M1	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: YATES AP-1 DG

Pace Project No.: 92557073

---

### 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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

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.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AP-1 DG  
Pace Project No.: 92557073

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557073001	YGWC-52				
92557073002	YGWC-44				
92557073003	YGWC-45				
92557073006	YGWC-46A				
92557073001	YGWC-52	EPA 3010A	643161	EPA 6010D	643227
92557073002	YGWC-44	EPA 3010A	643161	EPA 6010D	643227
92557073003	YGWC-45	EPA 3010A	643161	EPA 6010D	643227
92557073004	AP-1-EB-1	EPA 3010A	643161	EPA 6010D	643227
92557073005	AP-1-FB-1	EPA 3010A	643161	EPA 6010D	643227
92557073006	YGWC-46A	EPA 3010A	645799	EPA 6010D	646162
92557073007	AP-1-DUP-1	EPA 3010A	645799	EPA 6010D	646162
92557073001	YGWC-52	EPA 3005A	643162	EPA 6020B	643244
92557073002	YGWC-44	EPA 3005A	643162	EPA 6020B	643244
92557073003	YGWC-45	EPA 3005A	643162	EPA 6020B	643244
92557073004	AP-1-EB-1	EPA 3005A	643162	EPA 6020B	643244
92557073005	AP-1-FB-1	EPA 3005A	643162	EPA 6020B	643244
92557073006	YGWC-46A	EPA 3005A	645800	EPA 6020B	646175
92557073007	AP-1-DUP-1	EPA 3005A	645800	EPA 6020B	646175
92557073001	YGWC-52	EPA 7470A	646051	EPA 7470A	646167
92557073002	YGWC-44	EPA 7470A	646051	EPA 7470A	646167
92557073003	YGWC-45	EPA 7470A	646051	EPA 7470A	646167
92557073004	AP-1-EB-1	EPA 7470A	646051	EPA 7470A	646167
92557073005	AP-1-FB-1	EPA 7470A	646057	EPA 7470A	646168
92557073006	YGWC-46A	EPA 7470A	646057	EPA 7470A	646168
92557073007	AP-1-DUP-1	EPA 7470A	646057	EPA 7470A	646168
92557073001	YGWC-52	SM 2540C-2011	643142		
92557073002	YGWC-44	SM 2540C-2011	643140		
92557073003	YGWC-45	SM 2540C-2011	643142		
92557073004	AP-1-EB-1	SM 2540C-2011	643142		
92557073005	AP-1-FB-1	SM 2540C-2011	643142		
92557073006	YGWC-46A	SM 2540C-2011	644074		
92557073007	AP-1-DUP-1	SM 2540C-2011	644074		
92557073001	YGWC-52	EPA 300.0 Rev 2.1 1993	643665		
92557073002	YGWC-44	EPA 300.0 Rev 2.1 1993	643665		
92557073003	YGWC-45	EPA 300.0 Rev 2.1 1993	643665		
92557073004	AP-1-EB-1	EPA 300.0 Rev 2.1 1993	643665		
92557073005	AP-1-FB-1	EPA 300.0 Rev 2.1 1993	643665		
92557073006	YGWC-46A	EPA 300.0 Rev 2.1 1993	645268		
92557073007	AP-1-DUP-1	EPA 300.0 Rev 2.1 1993	645268		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Document Name:  
**Sample Condition Upon Receipt (SCUR)**  
 Document No.:  
 F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020  
 Page 1 of 2  
 Issuing Authority:  
 Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

**Sample Condition Upon Receipt**

Client Name: Gf Power

Project #:

**WO#: 92557073**



Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 8/23/21 cm

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Thermometer:  IR Gun ID: 083 Type of Ice:  Wet  Blue  None

Yes  No  N/A

Cooler Temp: 2.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.0

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-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	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_





Document Name:  
 Sample Condition Upon Receipt(SCUR)  
 Document No.:  
 F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020  
 Page 2 of 2  
 Issuing Authority:  
 Pace Carolinas Quality Office

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

Project #

**WO# : 92557073**

PM: NMG

Due Date: 09/03/21

CLIENT: GA-GA Power

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/BO15 (water) DOC, LLHg

\*\*Bottom half of box is to list number of bottles

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	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) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic NaOH (pH > 12) (Cl-)	WG7U-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)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DC9H-40 mL VOA HCl (N/A)	VC9T-40 mL VOA Na2S2O3 (N/A)	VC9U-40 mL VOA Ump (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-VO35 kit (N/A)	VJGR (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 (N/A)-H2O4 (9.8-9.9)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

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 DEHQ Certification Office (i.e. 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.

ITEM #	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED			DATE	TIME	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	RELINQUISHED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS										
			START	END	# OF CONTAINERS												Unpreserved	H2SO4	HNO3	HCI	NaOH	Na2S2O8	Methanol	Other	Analyses Test	Y/N
1	YGMC-52	WT G	08/20/14	15:00	08/20/14	14:40		X								<p><b>SAMPLE ID</b></p> <p>One Character per box (A-Z, 0-9, -, /)</p> <p>Sample IDs must be unique</p>										
2	YGMC-44	WT G	08/19/14	13:22	08/19/14	14:38		X																		
3	YGMC-45	WT G	08/19/14	21:50	08/19/14	21:11		X																		
4	YGMC-46	WT G																								
5	YGMC-47	WT G																								
6	AP-1-EB-1	WT G	08/19/14	08:08	08/19/14	16:01		X																		
7	AP-1-FB-1	WT G	08/20/14	05:00	08/20/14	08:01		X																		
8																										
9																										
10																										
11																										
12																										

SAMPLER NAME AND SIGNATURE		DATE SIGNED		TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
<i>[Signature]</i>		08/20/14		5.0	Y	N	Y
<i>[Signature]</i>		08/20/14					

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

**Sample Condition Upon Receipt**

Client Name: GA Power

Project:

**WO# : 92557073**

PM: NMG Due Date: 09/03/21  
CLIENT: GA-GA Power

Courier:  Fed Ex  UPS  USPS  Crnt  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 8/27/21  
COM

Packing Material:  Bubble Wrap  Bubble Bags  None  Other  
Thermometer:  IR Gun ID: 083 Type of Ice:  Wet  Blue  None

Biological Tissue Frozen?  Yes  No  N/A

Cooler Temp: 3.0 Correction Factor: 0.0  
Add/Subtract (°C)

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.0

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-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	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_



Document Name:  
**Sample Condition Upon Receipt(SCUR)**  
 Document No.:  
**F-CAR-CS-033-Rev.07**

Document Revised: October 28, 2020  
 Page 2 of 2  
 Issuing Authority:  
 Pace Carolinas Quality Office

\*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 bottles

Project #

**WO# : 92557073**

PM: NMG

Due Date: 09/03/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	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) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	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)	AG3A(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 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 Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1																													
2		1	1		1	1																		2	1				
3		1	1		1	1																		2	1				
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

**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 (i.e. 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

Section B

Section C

Page : 01

Required Client Information:		Required Project Information:		Invoice Information:		Regulatory Agency	
Company:	Georgia Power	Report To:	SCS Contacts	Attention:	Southern Co.	CCR	
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:		State / Location	
Phone:		Purchase Order #:		Address:		GA	
Requested Due Date:	10 Day	Project Name:	Yates AP-1	Pace Quotes:			
		Project Number:		Pace Project Manager:	Kevin Herring/Nicole D'Ono		
				Pace Profile #:	10840		

ITEM #	SAMPLE ID One Character per box: (A-Z, 0-9 /, .) Sample IDs must be unique	MATRIX Drinking Water Wastewater Surface Water Product Soil/Sediment Ice Wipe Air Dust Tissue	CODE DW WW SW P SL WP AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analyses Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	TEMP in C	SAMPLE CONDITIONS			
						DATE	TIME								DATE	TIME	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)
1																		
2																		
3																		
4	YGWC-49A																	
5	AP-1-DUP-1			WT G	8/27/14													
6				WT G	8/27/14													
7																		
8																		
9																		
10																		
11																		
12																		
ADDITIONAL COMMENTS																		
Anions Suite 300.0 (Cl, F, Sulfate)																		
App III Metals: Boron 60208, Ca 60100																		
App IV: Metals 60208: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Thallium (Tl)																		
REINQUISHED BY / AFFILIATION: <i>[Signature]</i> Arcadis DATE: 8/27/14 TIME: 1440																		
ACCEPTED BY / AFFILIATION: <i>[Signature]</i> DATE: 8/27/14 TIME: 1440																		

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	<i>Mark Chase</i>
SIGNATURE of SAMPLER:	<i>[Signature]</i>
DATE Signed:	

October 12, 2021

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

RE: Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Dear Ms. Petty:

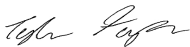
Enclosed are the analytical results for sample(s) received by the laboratory between August 20, 2021 and September 03, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where 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,



Tyler Forney for  
Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

---

### **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  
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

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

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92557089001	UP-DUP-1	Water	08/20/21 00:00	08/20/21 17:30
92557089002	GWA-2	Water	08/20/21 12:00	08/20/21 17:30
92557089003	YGWA-14S	Water	08/19/21 11:00	08/20/21 17:30
92557089004	UP-DUP-2	Water	08/19/21 00:00	08/20/21 17:30
92557089005	YGWA-1D	Water	08/19/21 11:10	08/20/21 17:30
92557089006	YGWA-1I	Water	08/19/21 12:49	08/20/21 17:30
92557089007	YGWA-3D	Water	08/19/21 14:45	08/20/21 17:30
92557089008	YGWA-47	Water	08/19/21 10:26	08/20/21 17:30
92557089009	YGWA-30I	Water	08/19/21 12:20	08/20/21 17:30
92557720005	YGWA-39	Water	08/26/21 12:30	08/27/21 16:40
92558251001	YGWA-2I	Water	08/27/21 11:33	08/27/21 16:40
92558251002	YGWA-3I	Water	08/27/21 09:55	08/27/21 16:40
92558254001	UP-FB-2	Water	08/26/21 17:10	08/27/21 16:40
92558254002	YGWA-4I	Water	08/26/21 11:29	08/27/21 16:40
92558254003	YGWA-5I	Water	08/26/21 16:28	08/27/21 16:40
92558254004	UP-DUP-3	Water	08/26/21 00:00	08/27/21 16:40
92558254005	YGWA-5D	Water	08/26/21 13:35	08/27/21 16:40
92558254006	YGWA-17S	Water	08/27/21 10:45	08/27/21 16:40
92558254007	YGWA-18S	Water	08/26/21 15:35	08/27/21 16:40
92558254008	YGWA-18I	Water	08/27/21 09:35	08/27/21 16:40
92558254009	YGWA-20S	Water	08/27/21 13:10	08/27/21 16:40
92558254014	YGWA-21I	Water	09/01/21 14:40	09/02/21 17:02
92559527001	YGWA-40	Water	09/03/21 10:20	09/03/21 17:30

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92557089001	UP-DUP-1	EPA 6010D	KH	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089002	GWA-2	EPA 6010D	KH	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089003	YGWA-14S	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089004	UP-DUP-2	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089005	YGWA-1D	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089006	YGWA-1I	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089007	YGWA-3D	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089008	YGWA-47	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089009	YGWA-30I	EPA 6010D	KH	1
		EPA 6020B	CW1	12

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92557720005	YGWA-39	SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
92558251001	YGWA-2I	SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
92558251002	YGWA-3I	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254001	UP-FB-2	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254002	YGWA-4I	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254003	YGWA-5I	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254004	UP-DUP-3	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254005	YGWA-5D	EPA 6010D	DRB	1
		EPA 6020B	CW1	12

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92558254006	YGWA-17S	EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
92558254007	YGWA-18S	SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
92558254008	YGWA-18I	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254009	YGWA-20S	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
92558254014	YGWA-21I	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	15
92559527001	YGWA-40	EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	15

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

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92557089001</b>	<b>UP-DUP-1</b>					
EPA 6010D	Calcium	26.0	mg/L	1.0	08/31/21 16:52	
EPA 6020B	Barium	0.033	mg/L	0.0050	08/31/21 16:38	
EPA 6020B	Cobalt	0.065	mg/L	0.0050	08/31/21 16:38	
EPA 6020B	Copper	0.00087J	mg/L	0.0050	08/31/21 16:38	
EPA 6020B	Lithium	0.0027J	mg/L	0.030	08/31/21 16:38	
EPA 6020B	Nickel	0.013	mg/L	0.0050	08/31/21 16:38	
EPA 6020B	Zinc	0.012	mg/L	0.010	08/31/21 16:38	
SM 2540C-2011	Total Dissolved Solids	245	mg/L	10.0	08/27/21 14:06	
EPA 300.0 Rev 2.1 1993	Chloride	5.2	mg/L	1.0	08/31/21 01:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.079J	mg/L	0.10	08/31/21 01:54	
EPA 300.0 Rev 2.1 1993	Sulfate	120	mg/L	3.0	08/31/21 15:04	
<b>92557089002</b>	<b>GWA-2</b>					
	Performed by	CUSTOMER			08/23/21 17:45	
	pH	5.86	Std. Units		08/23/21 17:45	
EPA 6010D	Calcium	26.5	mg/L	1.0	08/31/21 16:56	
EPA 6020B	Barium	0.036	mg/L	0.0050	08/31/21 16:44	
EPA 6020B	Cobalt	0.074	mg/L	0.0050	08/31/21 16:44	
EPA 6020B	Copper	0.0012J	mg/L	0.0050	08/31/21 16:44	
EPA 6020B	Lithium	0.0028J	mg/L	0.030	08/31/21 16:44	
EPA 6020B	Nickel	0.014	mg/L	0.0050	08/31/21 16:44	
EPA 6020B	Zinc	0.014	mg/L	0.010	08/31/21 16:44	
SM 2540C-2011	Total Dissolved Solids	254	mg/L	10.0	08/27/21 14:06	
EPA 300.0 Rev 2.1 1993	Chloride	5.2	mg/L	1.0	08/31/21 02:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.060J	mg/L	0.10	08/31/21 02:08	
EPA 300.0 Rev 2.1 1993	Sulfate	121	mg/L	3.0	08/31/21 15:19	
<b>92557089003</b>	<b>YGWA-14S</b>					
	Performed by	CUSTOMER			08/23/21 17:45	
	pH	7.32	Std. Units		08/23/21 17:45	
EPA 6010D	Calcium	1.2	mg/L	1.0	08/31/21 17:01	
EPA 6020B	Barium	0.0077	mg/L	0.0050	08/31/21 16:49	
EPA 6020B	Beryllium	0.00022J	mg/L	0.00050	08/31/21 16:49	
EPA 6020B	Boron	0.018J	mg/L	0.040	08/31/21 16:49	
SM 2540C-2011	Total Dissolved Solids	54.0	mg/L	10.0	08/26/21 19:23	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	08/31/21 02:24	
EPA 300.0 Rev 2.1 1993	Sulfate	6.7	mg/L	1.0	08/31/21 02:24	
<b>92557089004</b>	<b>UP-DUP-2</b>					
EPA 6010D	Calcium	1.3	mg/L	1.0	08/31/21 17:06	
EPA 6020B	Barium	0.0080	mg/L	0.0050	08/31/21 16:55	
EPA 6020B	Beryllium	0.00020J	mg/L	0.00050	08/31/21 16:55	
EPA 6020B	Boron	0.017J	mg/L	0.040	08/31/21 16:55	
SM 2540C-2011	Total Dissolved Solids	55.0	mg/L	10.0	08/26/21 19:23	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	08/31/21 02:39	
EPA 300.0 Rev 2.1 1993	Sulfate	6.7	mg/L	1.0	08/31/21 02:39	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92557089005</b>	<b>YGWA-1D</b>					
	Performed by	CUSTOME			08/23/21 17:46	
		R				
	pH	6.32	Std. Units		08/23/21 17:46	
EPA 6010D	Calcium	14.2	mg/L	1.0	08/31/21 17:11	
EPA 6020B	Barium	0.0065	mg/L	0.0050	08/31/21 17:01	
EPA 6020B	Cobalt	0.00055J	mg/L	0.0050	08/31/21 17:01	
EPA 6020B	Lithium	0.013J	mg/L	0.030	08/31/21 17:01	
EPA 6020B	Molybdenum	0.0083J	mg/L	0.010	08/31/21 17:01	
SM 2540C-2011	Total Dissolved Solids	105	mg/L	10.0	08/26/21 19:23	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	08/31/21 03:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.074J	mg/L	0.10	08/31/21 03:24	
EPA 300.0 Rev 2.1 1993	Sulfate	8.9	mg/L	1.0	08/31/21 03:24	
<b>92557089006</b>	<b>YGWA-1I</b>					
	Performed by	CUSTOME			08/23/21 17:46	
		R				
	pH	6.38	Std. Units		08/23/21 17:46	
EPA 6010D	Calcium	2.0	mg/L	1.0	08/31/21 17:16	
EPA 6020B	Barium	0.0079	mg/L	0.0050	08/31/21 17:07	
EPA 6020B	Cobalt	0.0017J	mg/L	0.0050	08/31/21 17:07	
EPA 6020B	Lithium	0.0023J	mg/L	0.030	08/31/21 17:07	
EPA 6020B	Molybdenum	0.0050J	mg/L	0.010	08/31/21 17:07	
SM 2540C-2011	Total Dissolved Solids	44.0	mg/L	10.0	08/26/21 19:24	
EPA 300.0 Rev 2.1 1993	Chloride	1.3	mg/L	1.0	08/31/21 03:39	
EPA 300.0 Rev 2.1 1993	Sulfate	4.9	mg/L	1.0	08/31/21 03:39	
<b>92557089007</b>	<b>YGWA-3D</b>					
	Performed by	CUSTOME			08/23/21 17:46	
		R				
	pH	5.34	Std. Units		08/23/21 17:46	
EPA 6010D	Calcium	28.1	mg/L	1.0	08/31/21 17:20	
EPA 6020B	Barium	0.0052	mg/L	0.0050	08/31/21 17:38	
EPA 6020B	Lithium	0.023J	mg/L	0.030	08/31/21 17:38	
EPA 6020B	Molybdenum	0.013	mg/L	0.010	08/31/21 17:38	
SM 2540C-2011	Total Dissolved Solids	144	mg/L	10.0	08/26/21 19:24	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	08/31/21 03:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.47	mg/L	0.10	08/31/21 03:54	
EPA 300.0 Rev 2.1 1993	Sulfate	7.5	mg/L	1.0	08/31/21 03:54	
<b>92557089008</b>	<b>YGWA-47</b>					
	Performed by	CUSTOME			08/23/21 17:46	
		R				
	pH	5.50	Std. Units		08/23/21 17:46	
EPA 6010D	Calcium	9.6	mg/L	1.0	08/31/21 18:00	
EPA 6020B	Barium	0.029	mg/L	0.0050	08/31/21 17:44	
EPA 6020B	Boron	0.011J	mg/L	0.040	08/31/21 17:44	
EPA 6020B	Cobalt	0.00099J	mg/L	0.0050	08/31/21 17:44	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	08/31/21 17:44	
SM 2540C-2011	Total Dissolved Solids	134	mg/L	10.0	08/26/21 19:24	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	08/31/21 04:39	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92557089008</b>	<b>YGWA-47</b>					
EPA 300.0 Rev 2.1 1993	Sulfate	52.6	mg/L	1.0	08/31/21 04:39	
<b>92557089009</b>	<b>YGWA-30I</b>					
	Performed by	CUSTOME			09/07/21 08:26	
		R				
	Collected Time	5.43			09/07/21 08:26	
EPA 6010D	Calcium	1.2	mg/L	1.0	08/31/21 18:05	
EPA 6020B	Barium	0.0071	mg/L	0.0050	08/31/21 17:50	
EPA 6020B	Cobalt	0.0052	mg/L	0.0050	08/31/21 17:50	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	08/31/21 17:50	
SM 2540C-2011	Total Dissolved Solids	50.0	mg/L	10.0	08/26/21 19:24	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	08/31/21 04:54	
EPA 300.0 Rev 2.1 1993	Sulfate	1.0	mg/L	1.0	08/31/21 04:54	
<b>92557720005</b>	<b>YGWA-39</b>					
	Performed by	CUSTOME			08/30/21 09:54	
		R				
	pH	6.91	Std. Units		08/30/21 09:54	
EPA 6010D	Potassium	6.6	mg/L	0.20	09/09/21 15:23	
EPA 6010D	Sodium	29.6	mg/L	1.0	09/09/21 15:23	
EPA 6010D	Calcium	14.1	mg/L	1.0	09/09/21 15:23	
EPA 6010D	Magnesium	19.1	mg/L	0.050	09/09/21 15:23	
EPA 6020B	Barium	0.038	mg/L	0.0050	09/09/21 19:44	
EPA 6020B	Boron	0.095	mg/L	0.040	09/09/21 19:44	
EPA 6020B	Cadmium	0.00049J	mg/L	0.00050	09/09/21 19:44	
EPA 6020B	Cobalt	0.0011J	mg/L	0.0050	09/09/21 19:44	
EPA 6020B	Lithium	0.0082J	mg/L	0.030	09/09/21 19:44	
EPA 6020B	Molybdenum	0.0027J	mg/L	0.010	09/09/21 19:44	
SM 2540C-2011	Total Dissolved Solids	249	mg/L	10.0	08/31/21 16:26	
EPA 300.0 Rev 2.1 1993	Chloride	7.2	mg/L	1.0	09/06/21 03:00	
EPA 300.0 Rev 2.1 1993	Fluoride	0.063J	mg/L	0.10	09/06/21 03:00	
EPA 300.0 Rev 2.1 1993	Sulfate	19.2	mg/L	1.0	09/06/21 03:00	
<b>92558251001</b>	<b>YGWA-2I</b>					
	Performed by	CUSTOME			08/30/21 09:57	
		R				
	pH	7.14	Std. Units		08/30/21 09:57	
EPA 6010D	Calcium	22.6	mg/L	1.0	09/01/21 14:45	M1
EPA 6020B	Barium	0.0030J	mg/L	0.0050	09/09/21 19:50	
EPA 6020B	Lithium	0.0058J	mg/L	0.030	09/09/21 19:50	
EPA 6020B	Molybdenum	0.0048J	mg/L	0.010	09/09/21 19:50	
SM 2540C-2011	Total Dissolved Solids	150	mg/L	10.0	08/31/21 16:51	
EPA 300.0 Rev 2.1 1993	Chloride	0.99J	mg/L	1.0	09/06/21 03:16	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	09/06/21 03:16	M1
EPA 300.0 Rev 2.1 1993	Sulfate	16.7	mg/L	1.0	09/06/21 03:16	M1
<b>92558251002</b>	<b>YGWA-3I</b>					
	Performed by	CUSTOME			08/30/21 09:57	
		R				
	pH	7.39	Std. Units		08/30/21 09:57	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92558251002</b>	<b>YGWA-3I</b>					
EPA 6010D	Calcium	24.7	mg/L	1.0	09/01/21 15:04	
EPA 6020B	Barium	0.0039J	mg/L	0.0050	09/09/21 19:55	
EPA 6020B	Lithium	0.026J	mg/L	0.030	09/09/21 19:55	
EPA 6020B	Molybdenum	0.0099J	mg/L	0.010	09/09/21 19:55	
SM 2540C-2011	Total Dissolved Solids	155	mg/L	10.0	08/31/21 16:51	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	09/06/21 04:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	09/06/21 04:03	
EPA 300.0 Rev 2.1 1993	Sulfate	18.2	mg/L	1.0	09/06/21 04:03	
<b>92558254002</b>	<b>YGWA-4I</b>					
	Performed by	CUSTOMER			08/30/21 10:06	
	pH	5.82	Std. Units		08/30/21 10:06	
EPA 6010D	Calcium	7.6	mg/L	1.0	09/15/21 17:43	
EPA 6020B	Barium	0.012	mg/L	0.0050	09/16/21 09:38	
EPA 6020B	Cobalt	0.00042J	mg/L	0.0050	09/16/21 09:38	
EPA 6020B	Lithium	0.0094J	mg/L	0.030	09/16/21 09:38	
SM 2540C-2011	Total Dissolved Solids	93.0	mg/L	10.0	08/31/21 16:26	
EPA 300.0 Rev 2.1 1993	Chloride	4.4	mg/L	1.0	09/06/21 04:35	
EPA 300.0 Rev 2.1 1993	Sulfate	8.5	mg/L	1.0	09/06/21 04:35	
<b>92558254003</b>	<b>YGWA-5I</b>					
	Performed by	CUSTOMER			08/30/21 10:06	
	pH	5.51	Std. Units		08/30/21 10:06	
EPA 6010D	Calcium	2.5	mg/L	1.0	09/15/21 18:13	
EPA 6020B	Barium	0.019	mg/L	0.0050	09/16/21 09:44	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	09/16/21 09:44	
SM 2540C-2011	Total Dissolved Solids	86.0	mg/L	10.0	08/31/21 16:27	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	09/06/21 05:23	
EPA 300.0 Rev 2.1 1993	Sulfate	2.4	mg/L	1.0	09/06/21 05:23	
<b>92558254004</b>	<b>UP-DUP-3</b>					
EPA 6010D	Calcium	2.5	mg/L	1.0	09/15/21 18:17	
EPA 6020B	Barium	0.018	mg/L	0.0050	09/16/21 09:50	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	09/16/21 09:50	
SM 2540C-2011	Total Dissolved Solids	80.0	mg/L	10.0	08/31/21 16:27	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	09/06/21 05:39	
EPA 300.0 Rev 2.1 1993	Sulfate	2.5	mg/L	1.0	09/06/21 05:39	
<b>92558254005</b>	<b>YGWA-5D</b>					
	Performed by	CUSTOMER			08/30/21 10:06	
	pH	7.16	Std. Units		08/30/21 10:06	
EPA 6010D	Calcium	25.2	mg/L	1.0	09/15/21 18:22	
EPA 6020B	Arsenic	0.0016J	mg/L	0.0050	09/16/21 09:55	
EPA 6020B	Barium	0.0092	mg/L	0.0050	09/16/21 09:55	
EPA 6020B	Boron	0.0090J	mg/L	0.040	09/16/21 09:55	
EPA 6020B	Lithium	0.0075J	mg/L	0.030	09/16/21 09:55	
EPA 6020B	Molybdenum	0.0010J	mg/L	0.010	09/16/21 09:55	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92558254005</b>	<b>YGWA-5D</b>					
SM 2540C-2011	Total Dissolved Solids	123	mg/L	10.0	08/31/21 16:50	
EPA 300.0 Rev 2.1 1993	Chloride	3.4	mg/L	1.0	09/06/21 05:55	
EPA 300.0 Rev 2.1 1993	Fluoride	0.061J	mg/L	0.10	09/06/21 05:55	
EPA 300.0 Rev 2.1 1993	Sulfate	6.0	mg/L	1.0	09/06/21 05:55	
<b>92558254006</b>	<b>YGWA-17S</b>					
	Performed by	CUSTOME			08/30/21 10:07	
		R				
	pH	5.27	Std. Units		08/30/21 10:07	
EPA 6010D	Calcium	2.7	mg/L	1.0	09/15/21 18:27	
EPA 6020B	Barium	0.016	mg/L	0.0050	09/16/21 10:36	
EPA 6020B	Beryllium	0.00010J	mg/L	0.00050	09/16/21 10:36	
EPA 6020B	Boron	0.011J	mg/L	0.040	09/16/21 10:36	
SM 2540C-2011	Total Dissolved Solids	93.0	mg/L	10.0	08/31/21 16:52	
EPA 300.0 Rev 2.1 1993	Chloride	8.5	mg/L	1.0	09/06/21 06:11	
EPA 300.0 Rev 2.1 1993	Sulfate	5.3	mg/L	1.0	09/06/21 06:11	
<b>92558254007</b>	<b>YGWA-18S</b>					
	Performed by	CUSTOME			08/30/21 10:07	
		R				
	pH	4.40	Std. Units		08/30/21 10:07	
EPA 6010D	Calcium	0.98J	mg/L	1.0	09/15/21 18:32	
EPA 6020B	Barium	0.015	mg/L	0.0050	09/16/21 10:41	
EPA 6020B	Beryllium	0.000093J	mg/L	0.00050	09/16/21 10:41	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	09/16/21 10:41	
SM 2540C-2011	Total Dissolved Solids	31.0	mg/L	10.0	08/31/21 16:50	
EPA 300.0 Rev 2.1 1993	Chloride	7.3	mg/L	1.0	09/06/21 06:27	
EPA 300.0 Rev 2.1 1993	Sulfate	1.2	mg/L	1.0	09/06/21 06:27	
<b>92558254008</b>	<b>YGWA-18I</b>					
	Performed by	CUSTOME			08/30/21 10:07	
		R				
	pH	5.40	Std. Units		08/30/21 10:07	
EPA 6010D	Calcium	5.1	mg/L	1.0	09/15/21 18:36	
EPA 6020B	Barium	0.020	mg/L	0.0050	09/16/21 10:47	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	09/16/21 10:47	
SM 2540C-2011	Total Dissolved Solids	112	mg/L	10.0	08/31/21 16:52	
EPA 300.0 Rev 2.1 1993	Chloride	7.4	mg/L	1.0	09/06/21 06:43	
EPA 300.0 Rev 2.1 1993	Sulfate	0.59J	mg/L	1.0	09/06/21 06:43	
<b>92558254009</b>	<b>YGWA-20S</b>					
	Performed by	CUSTOME			08/30/21 10:07	
		R				
	pH	5.57	Std. Units		08/30/21 10:07	
EPA 6010D	Calcium	2.4	mg/L	1.0	09/15/21 18:41	
EPA 6020B	Barium	0.013	mg/L	0.0050	09/16/21 10:53	
EPA 6020B	Beryllium	0.000059J	mg/L	0.00050	09/16/21 10:53	
SM 2540C-2011	Total Dissolved Solids	67.0	mg/L	10.0	08/31/21 16:52	
EPA 300.0 Rev 2.1 1993	Chloride	2.8	mg/L	1.0	09/06/21 07:31	M1

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92558254014</b>	<b>YGWA-21I</b>					
	Performed by	CUSTOME			09/03/21 11:11	
		R				
	pH	6.65	Std. Units		09/03/21 11:11	
EPA 6010D	Calcium	9.5	mg/L	1.0	09/15/21 19:15	
EPA 6020B	Barium	0.0099	mg/L	0.0050	09/16/21 11:21	
EPA 6020B	Cobalt	0.0068	mg/L	0.0050	09/16/21 11:21	
EPA 6020B	Lithium	0.0057J	mg/L	0.030	09/16/21 11:21	
SM 2540C-2011	Total Dissolved Solids	137	mg/L	10.0	09/07/21 13:47	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	09/08/21 07:26	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	09/08/21 07:26	
EPA 300.0 Rev 2.1 1993	Sulfate	5.0	mg/L	1.0	09/08/21 07:26	
<b>92559527001</b>	<b>YGWA-40</b>					
	Performed by	CUSTOME			09/03/21 17:47	
		R				
	pH	4.75	Std. Units		09/03/21 17:47	
EPA 6010D	Calcium	5.6	mg/L	1.0	09/13/21 16:20	
EPA 6020B	Barium	0.035	mg/L	0.0050	09/14/21 19:02	
EPA 6020B	Beryllium	0.00024J	mg/L	0.00050	09/14/21 19:02	
EPA 6020B	Boron	0.077	mg/L	0.040	09/14/21 19:02	
EPA 6020B	Magnesium	3.1	mg/L	0.050	09/14/21 19:02	
EPA 6020B	Potassium	2.0	mg/L	0.10	09/14/21 19:02	
EPA 6020B	Sodium	9.1	mg/L	0.10	09/14/21 19:02	
EPA 7470A	Mercury	0.00012J	mg/L	0.00020	09/21/21 10:46	
SM 2540C-2011	Total Dissolved Solids	88.0	mg/L	10.0	09/08/21 14:23	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	13.8	mg/L	5.0	09/13/21 17:45	
SM 2320B-2011	Alkalinity, Total as CaCO3	13.8	mg/L	5.0	09/13/21 17:45	
EPA 300.0 Rev 2.1 1993	Chloride	5.5	mg/L	1.0	09/10/21 09:18	
EPA 300.0 Rev 2.1 1993	Sulfate	21.3	mg/L	1.0	09/10/21 09:18	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: UP-DUP-1		Lab ID: 92557089001		Collected: 08/20/21 00:00		Received: 08/20/21 17:30		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	<b>26.0</b>	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 16:52	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 16:38	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:38	7440-38-2		
Barium	<b>0.033</b>	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 16:38	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 16:38	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 16:38	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 16:38	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:38	7440-47-3		
Cobalt	<b>0.065</b>	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 16:38	7440-48-4		
Copper	<b>0.00087J</b>	mg/L	0.0050	0.00050	1	08/31/21 09:25	08/31/21 16:38	7440-50-8		
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 16:38	7439-92-1		
Lithium	<b>0.0027J</b>	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 16:38	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 16:38	7439-98-7		
Nickel	<b>0.013</b>	mg/L	0.0050	0.00071	1	08/31/21 09:25	08/31/21 16:38	7440-02-0		
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 16:38	7782-49-2		
Silver	ND	mg/L	0.0050	0.00044	1	08/31/21 09:25	08/31/21 16:38	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00018	1	08/31/21 09:25	08/31/21 16:38	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	08/31/21 09:25	08/31/21 16:38	7440-62-2		
Zinc	<b>0.012</b>	mg/L	0.010	0.0070	1	08/31/21 09:25	08/31/21 16:38	7440-66-6		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	08/30/21 12:30	08/31/21 11:40	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	<b>245</b>	mg/L	10.0	10.0	1		08/27/21 14:06			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	<b>5.2</b>	mg/L	1.0	0.60	1		08/31/21 01:54	16887-00-6		
Fluoride	<b>0.079J</b>	mg/L	0.10	0.050	1		08/31/21 01:54	16984-48-8		
Sulfate	<b>120</b>	mg/L	3.0	1.5	3		08/31/21 15:04	14808-79-8		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: GWA-2		Lab ID: 92557089002		Collected: 08/20/21 12:00		Received: 08/20/21 17:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/23/21 17:45		
pH	<b>5.86</b>	Std. Units			1		08/23/21 17:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>26.5</b>	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 16:56	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 16:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:44	7440-38-2	
Barium	<b>0.036</b>	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 16:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 16:44	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 16:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 16:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:44	7440-47-3	
Cobalt	<b>0.074</b>	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 16:44	7440-48-4	
Copper	<b>0.0012J</b>	mg/L	0.0050	0.00050	1	08/31/21 09:25	08/31/21 16:44	7440-50-8	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 16:44	7439-92-1	
Lithium	<b>0.0028J</b>	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 16:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 16:44	7439-98-7	
Nickel	<b>0.014</b>	mg/L	0.0050	0.00071	1	08/31/21 09:25	08/31/21 16:44	7440-02-0	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 16:44	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/31/21 09:25	08/31/21 16:44	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/31/21 09:25	08/31/21 16:44	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	08/31/21 09:25	08/31/21 16:44	7440-62-2	
Zinc	<b>0.014</b>	mg/L	0.010	0.0070	1	08/31/21 09:25	08/31/21 16:44	7440-66-6	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/30/21 12:30	08/31/21 11:43	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>254</b>	mg/L	10.0	10.0	1		08/27/21 14:06		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>5.2</b>	mg/L	1.0	0.60	1		08/31/21 02:08	16887-00-6	
Fluoride	<b>0.060J</b>	mg/L	0.10	0.050	1		08/31/21 02:08	16984-48-8	
Sulfate	<b>121</b>	mg/L	3.0	1.5	3		08/31/21 15:19	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-14S		Lab ID: 92557089003		Collected: 08/19/21 11:00		Received: 08/20/21 17:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/23/21 17:45		
pH	<b>7.32</b>	Std. Units			1		08/23/21 17:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>1.2</b>	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:01	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 16:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:49	7440-38-2	
Barium	<b>0.0077</b>	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 16:49	7440-39-3	
Beryllium	<b>0.00022J</b>	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 16:49	7440-41-7	
Boron	<b>0.018J</b>	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 16:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 16:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 16:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 16:49	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 16:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 16:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 16:49	7782-49-2	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>54.0</b>	mg/L	10.0	10.0	1		08/26/21 19:23		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>5.0</b>	mg/L	1.0	0.60	1		08/31/21 02:24	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/31/21 02:24	16984-48-8	
Sulfate	<b>6.7</b>	mg/L	1.0	0.50	1		08/31/21 02:24	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: UP-DUP-2		Lab ID: 92557089004		Collected: 08/19/21 00:00	Received: 08/20/21 17:30	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Calcium	1.3	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:06	7440-70-2	
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 16:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:55	7440-38-2	
Barium	0.0080	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 16:55	7440-39-3	
Beryllium	0.00020J	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 16:55	7440-41-7	
Boron	0.017J	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 16:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 16:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 16:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 16:55	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 16:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 16:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 16:55	7782-49-2	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	55.0	mg/L	10.0	10.0	1		08/26/21 19:23		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	5.0	mg/L	1.0	0.60	1		08/31/21 02:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/31/21 02:39	16984-48-8	
Sulfate	6.7	mg/L	1.0	0.50	1		08/31/21 02:39	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-1D		Lab ID: 92557089005		Collected: 08/19/21 11:10		Received: 08/20/21 17:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/23/21 17:46		
pH	<b>6.32</b>	Std. Units			1		08/23/21 17:46		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>14.2</b>	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:11	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 17:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:01	7440-38-2	
Barium	<b>0.0065</b>	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 17:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 17:01	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 17:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 17:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:01	7440-47-3	
Cobalt	<b>0.00055J</b>	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 17:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 17:01	7439-92-1	
Lithium	<b>0.013J</b>	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:01	7439-93-2	
Molybdenum	<b>0.0083J</b>	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 17:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 17:01	7782-49-2	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>105</b>	mg/L	10.0	10.0	1		08/26/21 19:23		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.1</b>	mg/L	1.0	0.60	1		08/31/21 03:24	16887-00-6	
Fluoride	<b>0.074J</b>	mg/L	0.10	0.050	1		08/31/21 03:24	16984-48-8	
Sulfate	<b>8.9</b>	mg/L	1.0	0.50	1		08/31/21 03:24	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-11		Lab ID: 92557089006		Collected: 08/19/21 12:49		Received: 08/20/21 17:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/23/21 17:46		
pH	<b>6.38</b>	Std. Units			1		08/23/21 17:46		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>2.0</b>	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:16	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 17:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:07	7440-38-2	
Barium	<b>0.0079</b>	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 17:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 17:07	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 17:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 17:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:07	7440-47-3	
Cobalt	<b>0.0017J</b>	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 17:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 17:07	7439-92-1	
Lithium	<b>0.0023J</b>	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:07	7439-93-2	
Molybdenum	<b>0.0050J</b>	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 17:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 17:07	7782-49-2	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>44.0</b>	mg/L	10.0	10.0	1		08/26/21 19:24		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.3</b>	mg/L	1.0	0.60	1		08/31/21 03:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/31/21 03:39	16984-48-8	
Sulfate	<b>4.9</b>	mg/L	1.0	0.50	1		08/31/21 03:39	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-3D		Lab ID: 92557089007		Collected: 08/19/21 14:45		Received: 08/20/21 17:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/23/21 17:46		
pH	<b>5.34</b>	Std. Units			1		08/23/21 17:46		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>28.1</b>	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:20	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 17:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:38	7440-38-2	
Barium	<b>0.0052</b>	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 17:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 17:38	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 17:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 17:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 17:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 17:38	7439-92-1	
Lithium	<b>0.023J</b>	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:38	7439-93-2	
Molybdenum	<b>0.013</b>	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 17:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 17:38	7782-49-2	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>144</b>	mg/L	10.0	10.0	1		08/26/21 19:24		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.1</b>	mg/L	1.0	0.60	1		08/31/21 03:54	16887-00-6	
Fluoride	<b>0.47</b>	mg/L	0.10	0.050	1		08/31/21 03:54	16984-48-8	
Sulfate	<b>7.5</b>	mg/L	1.0	0.50	1		08/31/21 03:54	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: YATES UPGRADIENT

Pace Project No.: 92557089

**Sample: YGWA-47**      **Lab ID: 92557089008**      Collected: 08/19/21 10:26      Received: 08/20/21 17:30      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/23/21 17:46		
pH	<b>5.50</b>	Std. Units			1		08/23/21 17:46		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>9.6</b>	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 18:00	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 17:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:44	7440-38-2	
Barium	<b>0.029</b>	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 17:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 17:44	7440-41-7	
Boron	<b>0.011J</b>	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 17:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 17:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:44	7440-47-3	
Cobalt	<b>0.00099J</b>	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 17:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 17:44	7439-92-1	
Lithium	<b>0.0038J</b>	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 17:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 17:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/31/21 09:25	08/31/21 17:44	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A      Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/30/21 12:30	08/31/21 12:05	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>134</b>	mg/L	10.0	10.0	1		08/26/21 19:24		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>3.5</b>	mg/L	1.0	0.60	1		08/31/21 04:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/31/21 04:39	16984-48-8	
Sulfate	<b>52.6</b>	mg/L	1.0	0.50	1		08/31/21 04:39	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-301		Lab ID: 92557089009		Collected: 08/19/21 12:20		Received: 08/20/21 17:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		09/07/21 08:26		
Collected Time	<b>5.43</b>				1		09/07/21 08:26		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>1.2</b>	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 18:05	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 17:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:50	7440-38-2	
Barium	<b>0.0071</b>	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 17:50	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 17:50	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 17:50	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 17:50	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:50	7440-47-3	
Cobalt	<b>0.0052</b>	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 17:50	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 17:50	7439-92-1	
Lithium	<b>0.0012J</b>	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 17:50	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 17:50	7782-49-2	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>50.0</b>	mg/L	10.0	10.0	1		08/26/21 19:24		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.6</b>	mg/L	1.0	0.60	1		08/31/21 04:54	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/31/21 04:54	16984-48-8	
Sulfate	<b>1.0</b>	mg/L	1.0	0.50	1		08/31/21 04:54	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-39		Lab ID: 92557720005		Collected: 08/26/21 12:30		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/30/21 09:54		
pH	<b>6.91</b>	Std. Units			1		08/30/21 09:54		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Potassium	<b>6.6</b>	mg/L	0.20	0.15	1	09/09/21 11:30	09/09/21 15:23	7440-09-7	
Sodium	<b>29.6</b>	mg/L	1.0	0.58	1	09/09/21 11:30	09/09/21 15:23	7440-23-5	
Calcium	<b>14.1</b>	mg/L	1.0	0.12	1	09/09/21 11:30	09/09/21 15:23	7440-70-2	
Magnesium	<b>19.1</b>	mg/L	0.050	0.012	1	09/09/21 11:30	09/09/21 15:23	7439-95-4	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 19:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:44	7440-38-2	
Barium	<b>0.038</b>	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 19:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 19:44	7440-41-7	
Boron	<b>0.095</b>	mg/L	0.040	0.0086	1	09/09/21 11:00	09/09/21 19:44	7440-42-8	
Cadmium	<b>0.00049J</b>	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 19:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:44	7440-47-3	
Cobalt	<b>0.0011J</b>	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 19:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 19:44	7439-92-1	
Lithium	<b>0.0082J</b>	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:44	7439-93-2	
Molybdenum	<b>0.0027J</b>	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 19:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 19:44	7782-49-2	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 16:59	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>249</b>	mg/L	10.0	10.0	1		08/31/21 16:26		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>7.2</b>	mg/L	1.0	0.60	1		09/06/21 03:00	16887-00-6	
Fluoride	<b>0.063J</b>	mg/L	0.10	0.050	1		09/06/21 03:00	16984-48-8	
Sulfate	<b>19.2</b>	mg/L	1.0	0.50	1		09/06/21 03:00	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-2I		Lab ID: 92558251001		Collected: 08/27/21 11:33		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/30/21 09:57		
pH	<b>7.14</b>	Std. Units			1		08/30/21 09:57		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>22.6</b>	mg/L	1.0	0.12	1	09/01/21 10:48	09/01/21 14:45	7440-70-2	M1
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 19:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:50	7440-38-2	
Barium	<b>0.0030J</b>	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 19:50	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 19:50	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/09/21 11:00	09/09/21 19:50	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 19:50	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 19:50	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 19:50	7439-92-1	
Lithium	<b>0.0058J</b>	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:50	7439-93-2	
Molybdenum	<b>0.0048J</b>	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 19:50	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 19:50	7782-49-2	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>150</b>	mg/L	10.0	10.0	1		08/31/21 16:51		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>0.99J</b>	mg/L	1.0	0.60	1		09/06/21 03:16	16887-00-6	M1
Fluoride	<b>0.12</b>	mg/L	0.10	0.050	1		09/06/21 03:16	16984-48-8	M1
Sulfate	<b>16.7</b>	mg/L	1.0	0.50	1		09/06/21 03:16	14808-79-8	M1

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-3I		Lab ID: 92558251002		Collected: 08/27/21 09:55		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/30/21 09:57		
pH	<b>7.39</b>	Std. Units			1		08/30/21 09:57		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>24.7</b>	mg/L	1.0	0.12	1	09/01/21 10:48	09/01/21 15:04	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 19:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:55	7440-38-2	
Barium	<b>0.0039J</b>	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 19:55	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 19:55	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/09/21 11:00	09/09/21 19:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 19:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 19:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 19:55	7439-92-1	
Lithium	<b>0.026J</b>	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:55	7439-93-2	
Molybdenum	<b>0.0099J</b>	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 19:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 19:55	7782-49-2	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>155</b>	mg/L	10.0	10.0	1		08/31/21 16:51		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.1</b>	mg/L	1.0	0.60	1		09/06/21 04:03	16887-00-6	
Fluoride	<b>0.12</b>	mg/L	0.10	0.050	1		09/06/21 04:03	16984-48-8	
Sulfate	<b>18.2</b>	mg/L	1.0	0.50	1		09/06/21 04:03	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: UP-FB-2		Lab ID: 92558254001		Collected: 08/26/21 17:10		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	ND	mg/L	1.0	0.12	1	09/14/21 11:36	09/14/21 16:39	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 09:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:32	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 09:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 09:32	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 09:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 09:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:32	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 09:32	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 09:32	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 09:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 09:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 09:32	7782-49-2	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:13	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		08/31/21 16:26		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		09/06/21 04:19	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 04:19	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/06/21 04:19	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-4I		Lab ID: 92558254002		Collected: 08/26/21 11:29		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/30/21 10:06		
pH	<b>5.82</b>	Std. Units			1		08/30/21 10:06		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>7.6</b>	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 17:43	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 09:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:38	7440-38-2	
Barium	<b>0.012</b>	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 09:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 09:38	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 09:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 09:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:38	7440-47-3	
Cobalt	<b>0.00042J</b>	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 09:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 09:38	7439-92-1	
Lithium	<b>0.0094J</b>	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 09:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 09:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 09:38	7782-49-2	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:24	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>93.0</b>	mg/L	10.0	10.0	1		08/31/21 16:26		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>4.4</b>	mg/L	1.0	0.60	1		09/06/21 04:35	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 04:35	16984-48-8	
Sulfate	<b>8.5</b>	mg/L	1.0	0.50	1		09/06/21 04:35	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Sample: YGWA-5I		Lab ID: 92558254003		Collected: 08/26/21 16:28		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/30/21 10:06		
pH	<b>5.51</b>	Std. Units			1		08/30/21 10:06		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>2.5</b>	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:13	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 09:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:44	7440-38-2	
Barium	<b>0.019</b>	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 09:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 09:44	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 09:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 09:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 09:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 09:44	7439-92-1	
Lithium	<b>0.0032J</b>	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 09:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 09:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 09:44	7782-49-2	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:26	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>86.0</b>	mg/L	10.0	10.0	1		08/31/21 16:27		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>4.3</b>	mg/L	1.0	0.60	1		09/06/21 05:23	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 05:23	16984-48-8	
Sulfate	<b>2.4</b>	mg/L	1.0	0.50	1		09/06/21 05:23	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: UP-DUP-3		Lab ID: 92558254004		Collected: 08/26/21 00:00		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	2.5	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:17	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 09:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:50	7440-38-2	
Barium	0.018	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 09:50	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 09:50	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 09:50	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 09:50	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 09:50	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 09:50	7439-92-1	
Lithium	0.0031J	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 09:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 09:50	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 09:50	7782-49-2	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:29	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	80.0	mg/L	10.0	10.0	1		08/31/21 16:27		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	4.3	mg/L	1.0	0.60	1		09/06/21 05:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 05:39	16984-48-8	
Sulfate	2.5	mg/L	1.0	0.50	1		09/06/21 05:39	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-5D		Lab ID: 92558254005		Collected: 08/26/21 13:35		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/30/21 10:06		
pH	<b>7.16</b>	Std. Units			1		08/30/21 10:06		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>25.2</b>	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:22	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 09:55	7440-36-0	
Arsenic	<b>0.0016J</b>	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:55	7440-38-2	
Barium	<b>0.0092</b>	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 09:55	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 09:55	7440-41-7	
Boron	<b>0.0090J</b>	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 09:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 09:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 09:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 09:55	7439-92-1	
Lithium	<b>0.0075J</b>	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 09:55	7439-93-2	
Molybdenum	<b>0.0010J</b>	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 09:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 09:55	7782-49-2	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:37	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>123</b>	mg/L	10.0	10.0	1		08/31/21 16:50		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>3.4</b>	mg/L	1.0	0.60	1		09/06/21 05:55	16887-00-6	
Fluoride	<b>0.061J</b>	mg/L	0.10	0.050	1		09/06/21 05:55	16984-48-8	
Sulfate	<b>6.0</b>	mg/L	1.0	0.50	1		09/06/21 05:55	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Sample: YGWA-17S		Lab ID: 92558254006		Collected: 08/27/21 10:45		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/30/21 10:07		
pH	<b>5.27</b>	Std. Units			1		08/30/21 10:07		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>2.7</b>	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:27	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 10:36	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:36	7440-38-2	
Barium	<b>0.016</b>	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:36	7440-39-3	
Beryllium	<b>0.00010J</b>	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 10:36	7440-41-7	
Boron	<b>0.011J</b>	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 10:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 10:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:36	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 10:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 10:36	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 10:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 10:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 10:36	7782-49-2	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:39	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>93.0</b>	mg/L	10.0	10.0	1		08/31/21 16:52		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>8.5</b>	mg/L	1.0	0.60	1		09/06/21 06:11	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 06:11	16984-48-8	
Sulfate	<b>5.3</b>	mg/L	1.0	0.50	1		09/06/21 06:11	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-18S		Lab ID: 92558254007		Collected: 08/26/21 15:35		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/30/21 10:07		
pH	<b>4.40</b>	Std. Units			1		08/30/21 10:07		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>0.98J</b>	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:32	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 10:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:41	7440-38-2	
Barium	<b>0.015</b>	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:41	7440-39-3	
Beryllium	<b>0.000093J</b>	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 10:41	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 10:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 10:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 10:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 10:41	7439-92-1	
Lithium	<b>0.0019J</b>	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 10:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 10:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 10:41	7782-49-2	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:42	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>31.0</b>	mg/L	10.0	10.0	1		08/31/21 16:50		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>7.3</b>	mg/L	1.0	0.60	1		09/06/21 06:27	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 06:27	16984-48-8	
Sulfate	<b>1.2</b>	mg/L	1.0	0.50	1		09/06/21 06:27	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-181		Lab ID: 92558254008		Collected: 08/27/21 09:35		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/30/21 10:07		
pH	<b>5.40</b>	Std. Units			1		08/30/21 10:07		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>5.1</b>	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:36	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 10:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:47	7440-38-2	
Barium	<b>0.020</b>	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:47	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 10:47	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 10:47	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 10:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 10:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 10:47	7439-92-1	
Lithium	<b>0.0032J</b>	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 10:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 10:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 10:47	7782-49-2	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:45	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>112</b>	mg/L	10.0	10.0	1		08/31/21 16:52		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>7.4</b>	mg/L	1.0	0.60	1		09/06/21 06:43	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 06:43	16984-48-8	
Sulfate	<b>0.59J</b>	mg/L	1.0	0.50	1		09/06/21 06:43	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Sample: YGWA-20S		Lab ID: 92558254009		Collected: 08/27/21 13:10		Received: 08/27/21 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/30/21 10:07		
pH	<b>5.57</b>	Std. Units			1		08/30/21 10:07		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>2.4</b>	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:41	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 10:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:53	7440-38-2	
Barium	<b>0.013</b>	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:53	7440-39-3	
Beryllium	<b>0.000059J</b>	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 10:53	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 10:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 10:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 10:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 10:53	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 10:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 10:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 10:53	7782-49-2	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:47	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>67.0</b>	mg/L	10.0	10.0	1		08/31/21 16:52		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>2.8</b>	mg/L	1.0	0.60	1		09/06/21 07:31	16887-00-6	M1
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 07:31	16984-48-8	M1
Sulfate	ND	mg/L	1.0	0.50	1		09/06/21 07:31	14808-79-8	M1

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-211		Lab ID: 92558254014		Collected: 09/01/21 14:40		Received: 09/02/21 17:02		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		09/03/21 11:11		
pH	<b>6.65</b>	Std. Units			1		09/03/21 11:11		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>9.5</b>	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 19:15	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 11:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:21	7440-38-2	
Barium	<b>0.0099</b>	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 11:21	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 11:21	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 11:21	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 11:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:21	7440-47-3	
Cobalt	<b>0.0068</b>	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 11:21	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 11:21	7439-92-1	
Lithium	<b>0.0057J</b>	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 11:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 11:21	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 11:21	7782-49-2	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 15:06	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>137</b>	mg/L	10.0	10.0	1		09/07/21 13:47		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.8</b>	mg/L	1.0	0.60	1		09/08/21 07:26	16887-00-6	
Fluoride	<b>0.11</b>	mg/L	0.10	0.050	1		09/08/21 07:26	16984-48-8	
Sulfate	<b>5.0</b>	mg/L	1.0	0.50	1		09/08/21 07:26	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Sample: YGWA-40		Lab ID: 92559527001		Collected: 09/03/21 10:20		Received: 09/03/21 17:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		09/03/21 17:47		
pH	<b>4.75</b>	Std. Units			1		09/03/21 17:47		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>5.6</b>	mg/L	1.0	0.12	1	09/11/21 09:00	09/13/21 16:20	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/11/21 09:00	09/14/21 19:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:02	7440-38-2	
Barium	<b>0.035</b>	mg/L	0.0050	0.00067	1	09/11/21 09:00	09/14/21 19:02	7440-39-3	
Beryllium	<b>0.00024J</b>	mg/L	0.00050	0.000054	1	09/11/21 09:00	09/14/21 19:02	7440-41-7	
Boron	<b>0.077</b>	mg/L	0.040	0.0086	1	09/11/21 09:00	09/14/21 19:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/21 09:00	09/14/21 19:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:02	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/11/21 09:00	09/14/21 19:02	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/11/21 09:00	09/14/21 19:02	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/11/21 09:00	09/14/21 19:02	7439-93-2	
Magnesium	<b>3.1</b>	mg/L	0.050	0.0074	1	09/11/21 09:00	09/14/21 19:02	7439-95-4	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/21 09:00	09/14/21 19:02	7439-98-7	
Potassium	<b>2.0</b>	mg/L	0.10	0.047	1	09/11/21 09:00	09/14/21 19:02	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/21 09:00	09/14/21 19:02	7782-49-2	
Sodium	<b>9.1</b>	mg/L	0.10	0.022	1	09/11/21 09:00	09/14/21 19:02	7440-23-5	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	<b>0.00012J</b>	mg/L	0.00020	0.000078	1	09/21/21 07:00	09/21/21 10:46	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>88.0</b>	mg/L	10.0	10.0	1		09/08/21 14:23		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO3)	<b>13.8</b>	mg/L	5.0	5.0	1		09/13/21 17:45		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/21 17:45		
Alkalinity, Total as CaCO3	<b>13.8</b>	mg/L	5.0	5.0	1		09/13/21 17:45		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>5.5</b>	mg/L	1.0	0.60	1		09/10/21 09:18	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/10/21 09:18	16984-48-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Sample: YGWA-40		Lab ID: 92559527001		Collected: 09/03/21 10:20	Received: 09/03/21 17:30	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Sulfate	<b>21.3</b>	mg/L	1.0	0.50	1		09/10/21 09:18	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT

Pace Project No.: 92557089

QC Batch:	644090	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

METHOD BLANK: 3379384 Matrix: Water

Associated Lab Samples: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/31/21 15:03	

LABORATORY CONTROL SAMPLE: 3379385

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3379386 3379387

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555948008 Result	Spike Conc.	Spike Conc.	Result						
Calcium	mg/L	141	1	1	141	141	-23	-77	75-125	0	20 M1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: YATES UPGRADIENT

Pace Project No.: 92557089

QC Batch: 644451

Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A

Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92558251001, 92558251002

METHOD BLANK: 3381031

Matrix: Water

Associated Lab Samples: 92558251001, 92558251002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/01/21 14:13	

LABORATORY CONTROL SAMPLE: 3381032

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3381033 3381034

Parameter	Units	3381033		3381034		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	22.6	1	24.4	24.2	181	153	75-125	1	20	M1

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**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 645799 Analysis Method: EPA 6010D  
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92557720005

METHOD BLANK: 3387400 Matrix: Water  
Associated Lab Samples: 92557720005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/09/21 14:40	
Magnesium	mg/L	ND	0.050	0.012	09/09/21 14:40	
Potassium	mg/L	ND	0.20	0.15	09/09/21 14:40	
Sodium	mg/L	ND	1.0	0.58	09/09/21 14:40	

LABORATORY CONTROL SAMPLE: 3387401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	
Magnesium	mg/L	1	1.1	108	80-120	
Potassium	mg/L	1	1.0	104	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387402 3387403

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92557720001 Result	Spike Conc.	Spike Conc.	Result						
Calcium	mg/L	79.9	1	1	78.2	78.5	-168	-139	75-125	0	20 M1
Magnesium	mg/L	80.9	1	1	79.7	80.4	-116	-50	75-125	1	20 M1
Potassium	mg/L	11.5	1	1	12.3	12.5	73	92	75-125	2	20 M1
Sodium	mg/L	36.4	1	1	36.7	37.2	28	79	75-125	1	20 M1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 646610	Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A	Analysis Description: 6010D ATL
Associated Lab Samples: 92559527001	Laboratory: Pace Analytical Services - Peachtree Corners, GA

METHOD BLANK: 3391819 Matrix: Water  
Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/13/21 14:48	

LABORATORY CONTROL SAMPLE: 3391820

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391821 3391822

Parameter	Units	92558259010		3391821		3391822		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					
Calcium	mg/L	1.4	1	1	1	2.5	2.5	106	109	75-125	1	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 647011	Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A	Analysis Description: 6010D ATL
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92558254001

METHOD BLANK: 3393694 Matrix: Water  
Associated Lab Samples: 92558254001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/14/21 16:29	

LABORATORY CONTROL SAMPLE: 3393695

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3393696 3393697

Parameter	Units	92558254001		3393697		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	ND	1	1	1.1	1.0	108	103	75-125	4	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch:	647336	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

METHOD BLANK: 3395362 Matrix: Water  
Associated Lab Samples: 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/15/21 17:34	

LABORATORY CONTROL SAMPLE: 3395363

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3395364 3395365

Parameter	Units	92558254002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	7.6	1	1	8.6	8.8	93	118	75-125	3	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 644091 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

METHOD BLANK: 3379388 Matrix: Water  
Associated Lab Samples: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	08/31/21 15:02	
Arsenic	mg/L	ND	0.0050	0.0011	08/31/21 15:02	
Barium	mg/L	ND	0.0050	0.00067	08/31/21 15:02	
Beryllium	mg/L	ND	0.00050	0.000054	08/31/21 15:02	
Boron	mg/L	ND	0.040	0.0086	08/31/21 15:02	
Cadmium	mg/L	ND	0.00050	0.00011	08/31/21 15:02	
Chromium	mg/L	ND	0.0050	0.0011	08/31/21 15:02	
Cobalt	mg/L	ND	0.0050	0.00039	08/31/21 15:02	
Copper	mg/L	ND	0.0050	0.00050	08/31/21 15:02	
Lead	mg/L	ND	0.0010	0.00089	08/31/21 15:02	
Lithium	mg/L	ND	0.030	0.00073	08/31/21 15:02	
Molybdenum	mg/L	ND	0.010	0.00074	08/31/21 15:02	
Nickel	mg/L	ND	0.0050	0.00071	08/31/21 15:02	
Selenium	mg/L	ND	0.0050	0.0014	08/31/21 15:02	
Silver	mg/L	ND	0.0050	0.00044	08/31/21 15:02	
Thallium	mg/L	ND	0.0010	0.00018	08/31/21 15:02	
Vanadium	mg/L	ND	0.010	0.0019	08/31/21 15:02	
Zinc	mg/L	ND	0.010	0.0070	08/31/21 15:02	

LABORATORY CONTROL SAMPLE: 3379389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.092	92	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.090	90	80-120	
Beryllium	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Copper	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.10	102	80-120	
Molybdenum	mg/L	0.1	0.092	92	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Silver	mg/L	0.1	0.094	94	80-120	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

LABORATORY CONTROL SAMPLE: 3379389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Thallium	mg/L	0.1	0.10	102	80-120	
Vanadium	mg/L	0.1	0.10	104	80-120	
Zinc	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3379390 3379391

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555948009 Result	Spike Conc.	Spike Conc.	Conc.								
Antimony	mg/L	ND	0.1	0.1	0.091	0.089	91	89	75-125	2	20		
Arsenic	mg/L	0.0014J	0.1	0.1	0.10	0.096	100	95	75-125	5	20		
Barium	mg/L	0.029	0.1	0.1	0.13	0.13	104	101	75-125	3	20		
Beryllium	mg/L	ND	0.1	0.1	0.098	0.094	97	94	75-125	3	20		
Boron	mg/L	0.093	1	1	1.1	1.1	103	97	75-125	5	20		
Cadmium	mg/L	ND	0.1	0.1	0.098	0.095	98	95	75-125	3	20		
Chromium	mg/L	0.0012J	0.1	0.1	0.11	0.10	107	102	75-125	4	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	3	20		
Copper	mg/L	ND	0.1	0.1	0.10	0.097	101	97	75-125	3	20		
Lead	mg/L	ND	0.1	0.1	0.099	0.093	99	92	75-125	7	20		
Lithium	mg/L	ND	0.1	0.1	0.099	0.097	98	96	75-125	2	20		
Molybdenum	mg/L	0.0019J	0.1	0.1	0.097	0.094	95	92	75-125	3	20		
Nickel	mg/L	ND	0.1	0.1	0.10	0.098	103	98	75-125	5	20		
Selenium	mg/L	ND	0.1	0.1	0.098	0.097	98	97	75-125	1	20		
Silver	mg/L	ND	0.1	0.1	0.092	0.089	92	89	75-125	4	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.094	100	94	75-125	6	20		
Vanadium	mg/L	ND	0.1	0.1	0.11	0.10	107	103	75-125	4	20		
Zinc	mg/L	ND	0.1	0.1	0.10	0.10	99	99	75-125	0	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT

Pace Project No.: 92557089

QC Batch:	645800	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92557720005, 92558251001, 92558251002

METHOD BLANK: 3387411 Matrix: Water

Associated Lab Samples: 92557720005, 92558251001, 92558251002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/09/21 16:19	
Arsenic	mg/L	ND	0.0050	0.0011	09/09/21 16:19	
Barium	mg/L	ND	0.0050	0.00067	09/09/21 16:19	
Beryllium	mg/L	ND	0.00050	0.000054	09/09/21 16:19	
Boron	mg/L	ND	0.040	0.0086	09/09/21 16:19	
Cadmium	mg/L	ND	0.00050	0.00011	09/09/21 16:19	
Chromium	mg/L	ND	0.0050	0.0011	09/09/21 16:19	
Cobalt	mg/L	ND	0.0050	0.00039	09/09/21 16:19	
Lead	mg/L	ND	0.0010	0.00089	09/09/21 16:19	
Lithium	mg/L	ND	0.030	0.00073	09/09/21 16:19	
Molybdenum	mg/L	ND	0.010	0.00074	09/09/21 16:19	
Selenium	mg/L	ND	0.0050	0.0014	09/09/21 16:19	

LABORATORY CONTROL SAMPLE: 3387412

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387413 3387414

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		92557720004	Result	Spike Conc.	Spike Conc.							Result
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Barium	mg/L	0.049	0.1	0.1	0.15	0.15	102	102	75-125	0	20	
Beryllium	mg/L	0.00019J	0.1	0.1	0.10	0.095	101	95	75-125	6	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: YATES UPGRADIENT

Pace Project No.: 92557089

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387413 3387414												
Parameter	Units	92557720004		MS	MSD	MS	MSD	MS	MSD	% Rec	Max	
		Result	Conc.	Spike	Spike	Result	Result	% Rec	% Rec	Limits	RPD	RPD
Boron	mg/L	1.3	1	1	1	2.1	2.1	85	78	75-125	3	20
Cadmium	mg/L	ND	0.1	0.1	0.1	0.10	0.10	101	102	75-125	2	20
Chromium	mg/L	ND	0.1	0.1	0.1	0.10	0.10	102	100	75-125	2	20
Cobalt	mg/L	ND	0.1	0.1	0.1	0.10	0.098	101	98	75-125	3	20
Lead	mg/L	ND	0.1	0.1	0.1	0.099	0.099	99	99	75-125	0	20
Lithium	mg/L	0.0026J	0.1	0.1	0.1	0.10	0.097	100	94	75-125	6	20
Molybdenum	mg/L	ND	0.1	0.1	0.1	0.10	0.11	104	106	75-125	2	20
Selenium	mg/L	0.032	0.1	0.1	0.1	0.13	0.13	102	103	75-125	1	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**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 646612	Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A	Analysis Description: 6020 MET
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92559527001

METHOD BLANK: 3391827 Matrix: Water

Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/14/21 17:25	
Arsenic	mg/L	ND	0.0050	0.0011	09/14/21 17:25	
Barium	mg/L	ND	0.0050	0.00067	09/14/21 17:25	
Beryllium	mg/L	ND	0.00050	0.000054	09/14/21 17:25	
Boron	mg/L	ND	0.040	0.0086	09/14/21 17:25	
Cadmium	mg/L	ND	0.00050	0.00011	09/14/21 17:25	
Chromium	mg/L	ND	0.0050	0.0011	09/14/21 17:25	
Cobalt	mg/L	ND	0.0050	0.00039	09/14/21 17:25	
Lead	mg/L	ND	0.0010	0.00089	09/14/21 17:25	
Lithium	mg/L	ND	0.030	0.00073	09/14/21 17:25	
Magnesium	mg/L	ND	0.050	0.0074	09/14/21 17:25	
Molybdenum	mg/L	ND	0.010	0.00074	09/14/21 17:25	
Potassium	mg/L	ND	0.10	0.047	09/14/21 17:25	
Selenium	mg/L	ND	0.0050	0.0014	09/14/21 17:25	
Sodium	mg/L	ND	0.10	0.022	09/14/21 17:25	

LABORATORY CONTROL SAMPLE: 3391828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.099	99	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Chromium	mg/L	0.1	0.094	94	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.099	99	80-120	
Magnesium	mg/L	1	1.0	104	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Potassium	mg/L	1	1.0	100	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Sodium	mg/L	1	0.99	99	80-120	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: YATES UPGRADIENT

Pace Project No.: 92557089

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391829 3391830												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92559417001 Result	Spike Conc.	Spike Conc.	MS Result							
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	100	98	75-125	1	20	
Barium	mg/L	0.028	0.1	0.1	0.13	0.13	98	99	75-125	0	20	
Beryllium	mg/L	0.00016J	0.1	0.1	0.097	0.099	97	98	75-125	2	20	
Boron	mg/L	1.2	1	1	2.3	2.5	92	116	75-125	10	20	
Cadmium	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20	
Lithium	mg/L	0.0014J	0.1	0.1	0.099	0.10	98	102	75-125	4	20	
Magnesium	mg/L	14.1	1	1	14.0	14.9	-15	74	75-125	6	20	M1
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20	
Potassium	mg/L	1.7	1	1	2.6	2.7	88	94	75-125	2	20	
Selenium	mg/L	0.021	0.1	0.1	0.12	0.12	100	101	75-125	1	20	
Sodium	mg/L	10	1	1	10.3	10.8	30	81	75-125	5	20	M1

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**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 647371 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

METHOD BLANK: 3395597 Matrix: Water  
Associated Lab Samples: 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/16/21 09:21	
Arsenic	mg/L	ND	0.0050	0.0011	09/16/21 09:21	
Barium	mg/L	ND	0.0050	0.00067	09/16/21 09:21	
Beryllium	mg/L	ND	0.00050	0.000054	09/16/21 09:21	
Boron	mg/L	ND	0.040	0.0086	09/16/21 09:21	
Cadmium	mg/L	ND	0.00050	0.00011	09/16/21 09:21	
Chromium	mg/L	ND	0.0050	0.0011	09/16/21 09:21	
Cobalt	mg/L	ND	0.0050	0.00039	09/16/21 09:21	
Lead	mg/L	ND	0.0010	0.00089	09/16/21 09:21	
Lithium	mg/L	ND	0.030	0.00073	09/16/21 09:21	
Molybdenum	mg/L	ND	0.010	0.00074	09/16/21 09:21	
Selenium	mg/L	ND	0.0050	0.0014	09/16/21 09:21	

LABORATORY CONTROL SAMPLE: 3395598

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	0.10	102	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3395599 3395600

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		254005	Spike Conc.	Spike Conc.	254005								
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Arsenic	mg/L	0.0016J	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Barium	mg/L	0.0092	0.1	0.1	0.11	0.11	99	99	75-125	1	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Parameter	Units	3395599		3395600		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result								
Beryllium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20		
Boron	mg/L	0.0090J	1	1	0.98	1.0	98	100	75-125	2	20		
Cadmium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20		
Lithium	mg/L	0.0075J	0.1	0.1	0.11	0.11	101	101	75-125	0	20		
Molybdenum	mg/L	0.0010J	0.1	0.1	0.10	0.10	100	101	75-125	0	20		
Selenium	mg/L	ND	0.1	0.1	0.096	0.089	96	89	75-125	8	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**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 643872 Analysis Method: EPA 7470A  
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92557089001, 92557089002, 92557089008

METHOD BLANK: 3378197 Matrix: Water  
Associated Lab Samples: 92557089001, 92557089002, 92557089008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	08/31/21 10:48	

LABORATORY CONTROL SAMPLE: 3378198

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0022	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3378199 3378200

Parameter	Units	92557081001		3378200		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	0.0020	0.0020	80	82	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: YATES UPGRADIENT

Pace Project No.: 92557089

QC Batch: 646057	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92557720005

METHOD BLANK: 3388621 Matrix: Water

Associated Lab Samples: 92557720005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/09/21 16:28	

LABORATORY CONTROL SAMPLE: 3388622

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388623 3388624

Parameter	Units	3388623		3388624		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	0.0025	98	88	75-125	12	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch:	647249	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

METHOD BLANK: 3394978 Matrix: Water  
Associated Lab Samples: 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/15/21 14:08	

LABORATORY CONTROL SAMPLE: 3394979

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394980 3394981

Parameter	Units	92558254001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	95	95	75-125	1	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT

Pace Project No.: 92557089

QC Batch: 648334	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92559527001

METHOD BLANK: 3400299 Matrix: Water

Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/21/21 10:38	

LABORATORY CONTROL SAMPLE: 3400300

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400301 3400302

Parameter	Units	3400301		3400302		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	0.0024	0.0023	92	91	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 643142 Analysis Method: SM 2540C-2011  
QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

METHOD BLANK: 3374773 Matrix: Water  
Associated Lab Samples: 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/26/21 19:22	

LABORATORY CONTROL SAMPLE: 3374774

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	396	99	90-111	

SAMPLE DUPLICATE: 3374775

Parameter	Units	92557073003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	391	407	4	10	

SAMPLE DUPLICATE: 3374776

Parameter	Units	92557089008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	134	144	7	10	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 643454 Analysis Method: SM 2540C-2011  
QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92557089001, 92557089002

METHOD BLANK: 3376456 Matrix: Water  
Associated Lab Samples: 92557089001, 92557089002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/27/21 14:05	

LABORATORY CONTROL SAMPLE: 3376457

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	90-111	

SAMPLE DUPLICATE: 3376458

Parameter	Units	92557088009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	192	203	6	10	

SAMPLE DUPLICATE: 3376459

Parameter	Units	92555948030 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2040	2150	5	10	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 644073 Analysis Method: SM 2540C-2011  
QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92557720005, 92558254001, 92558254002, 92558254003, 92558254004

METHOD BLANK: 3379366 Matrix: Water  
Associated Lab Samples: 92557720005, 92558254001, 92558254002, 92558254003, 92558254004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/31/21 16:23	

LABORATORY CONTROL SAMPLE: 3379367

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	408	102	90-111	

SAMPLE DUPLICATE: 3379368

Parameter	Units	92557720003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	822	870	6	10	

SAMPLE DUPLICATE: 3379369

Parameter	Units	92555948054 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0	ND		10	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 644074 Analysis Method: SM 2540C-2011  
QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92558251001, 92558251002, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009

METHOD BLANK: 3379370 Matrix: Water  
Associated Lab Samples: 92558251001, 92558251002, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/31/21 16:50	

LABORATORY CONTROL SAMPLE: 3379371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	405	101	90-111	

SAMPLE DUPLICATE: 3379372

Parameter	Units	92558254005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	123	128	4	10	

SAMPLE DUPLICATE: 3379373

Parameter	Units	92558251001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	150	151	1	10	

SAMPLE DUPLICATE: 3380417

Parameter	Units	92555945014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	396	414	4	10 H1	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 645434	Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92558254014

METHOD BLANK: 3385639 Matrix: Water  
Associated Lab Samples: 92558254014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/07/21 13:45	

LABORATORY CONTROL SAMPLE: 3385640

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	393	98	90-111	

SAMPLE DUPLICATE: 3385641

Parameter	Units	92558572001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	197	201	2	10	

SAMPLE DUPLICATE: 3385642

Parameter	Units	92558720005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	39.0	54.0	32	10	R1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: YATES UPGRADIENT

Pace Project No.: 92557089

QC Batch: 645665	Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92559527001

METHOD BLANK: 3386951 Matrix: Water

Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/08/21 14:20	

LABORATORY CONTROL SAMPLE: 3386952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	391	98	90-111	

SAMPLE DUPLICATE: 3386953

Parameter	Units	92558259011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	163	174	7	10	

SAMPLE DUPLICATE: 3386954

Parameter	Units	92559417002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	546	557	2	10	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 646359 Analysis Method: SM 2320B-2011  
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
Laboratory: Pace Analytical Services - Asheville  
Associated Lab Samples: 92559527001

METHOD BLANK: 3390347 Matrix: Water  
Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/13/21 12:18	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/13/21 12:18	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/13/21 12:18	

LABORATORY CONTROL SAMPLE: 3390348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.4	103	80-120	

LABORATORY CONTROL SAMPLE: 3390349

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.1	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3390350 3390351

Parameter	Units	3390350		3390351		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Alkalinity, Total as CaCO3	mg/L	92559892005 <5.0	MS Spike Conc. 50	MS Result 51.8	MSD Spike Conc. 50	104	100	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3390352 3390353

Parameter	Units	3390352		3390353		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Alkalinity, Total as CaCO3	mg/L	92559527001 13.8	MS Spike Conc. 50	MS Result 69.9	MSD Spike Conc. 50	112	112	80-120	0	25	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch:	644028	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: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

METHOD BLANK: 3379266 Matrix: Water  
Associated Lab Samples: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/30/21 22:40	
Fluoride	mg/L	ND	0.10	0.050	08/30/21 22:40	
Sulfate	mg/L	ND	1.0	0.50	08/30/21 22:40	

LABORATORY CONTROL SAMPLE: 3379267

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.5	99	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	50.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3379268 3379269

Parameter	Units	92558089003		3379269		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	19300	50	50	4810	17900	-29000	-2800	90-110	115	10 M1, R1
Fluoride	mg/L	6.5J	2.5	2.5	8.5J	8.6J	80	84	90-110		10 M1
Sulfate	mg/L	1340	50	50	1480	1380	263	71	90-110	7	10 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3379270 3379271

Parameter	Units	92557089004		3379271		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	5.0	50	50	56.3	58.9	103	108	90-110	5	10
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	102	107	90-110	4	10
Sulfate	mg/L	6.7	50	50	58.8	61.3	104	109	90-110	4	10

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch:	645268	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: 92557720005, 92558251001, 92558251002, 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008

METHOD BLANK: 3385176 Matrix: Water  
Associated Lab Samples: 92557720005, 92558251001, 92558251002, 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/05/21 23:01	
Fluoride	mg/L	ND	0.10	0.050	09/05/21 23:01	
Sulfate	mg/L	ND	1.0	0.50	09/05/21 23:01	

LABORATORY CONTROL SAMPLE: 3385177

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.2	98	90-110	
Fluoride	mg/L	2.5	2.3	94	90-110	
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385178 3385179

Parameter	Units	92555948053		3385179		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	274	50	50	326	328	105	109	90-110	1	10
Fluoride	mg/L	0.15	2.5	2.5	3.6	3.6	139	139	90-110	0	10 M1
Sulfate	mg/L	285	50	50	344	347	119	124	90-110	1	10 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385180 3385181

Parameter	Units	92558251001		3385181		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	0.99J	50	50	66.4	67.0	131	132	90-110	1	10 M1
Fluoride	mg/L	0.12	2.5	2.5	3.4	3.4	133	132	90-110	0	10 M1
Sulfate	mg/L	16.7	50	50	85.1	85.4	137	137	90-110	0	10 M1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 645269 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: 92558254009

METHOD BLANK: 3385184 Matrix: Water  
Associated Lab Samples: 92558254009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/06/21 06:59	
Fluoride	mg/L	ND	0.10	0.050	09/06/21 06:59	
Sulfate	mg/L	ND	1.0	0.50	09/06/21 06:59	

LABORATORY CONTROL SAMPLE: 3385185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.5	99	90-110	
Fluoride	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	50	51.0	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385186 3385187

Parameter	Units	92558254009		3385186		3385187		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	2.8	2.8	50	50	68.7	69.4	132	133	90-110	1	10 M1	
Fluoride	mg/L	ND	ND	2.5	2.5	3.3	3.3	130	130	90-110	0	10 M1	
Sulfate	mg/L	ND	ND	50	50	69.3	69.9	138	140	90-110	1	10 M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385188 3385189

Parameter	Units	92558560001		3385188		3385189		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	13.8	13.8	50	50	67.3	67.5	107	107	90-110	0	10	
Fluoride	mg/L	0.29	0.29	2.5	2.5	3.0	3.0	110	109	90-110	1	10	
Sulfate	mg/L	27.9	27.9	50	50	82.7	82.7	110	110	90-110	0	10	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 645412 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: 92558254014

METHOD BLANK: 3385548 Matrix: Water  
Associated Lab Samples: 92558254014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/08/21 05:04	
Fluoride	mg/L	ND	0.10	0.050	09/08/21 05:04	
Sulfate	mg/L	ND	1.0	0.50	09/08/21 05:04	

LABORATORY CONTROL SAMPLE: 3385549

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	2.4	94	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385550 3385551

Parameter	Units	92559210006		3385550		3385551		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	2.9	2.9	50	50	57.8	55.9	110	106	90-110	3	10	
Fluoride	mg/L	ND	ND	2.5	2.5	2.8	2.7	109	105	90-110	3	10	
Sulfate	mg/L	ND	ND	50	50	54.9	54.2	108	107	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385552 3385553

Parameter	Units	92559417003		3385552		3385553		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	3.3	3.3	50	50	57.3	56.1	108	106	90-110	2	10	
Fluoride	mg/L	ND	ND	2.5	2.5	2.6	2.6	105	102	90-110	3	10	
Sulfate	mg/L	1.3	1.3	50	50	56.2	55.0	110	107	90-110	2	10	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

QC Batch: 646087 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: 92559527001

METHOD BLANK: 3388785 Matrix: Water  
Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/10/21 03:14	
Fluoride	mg/L	ND	0.10	0.050	09/10/21 03:14	
Sulfate	mg/L	ND	1.0	0.50	09/10/21 03:14	

LABORATORY CONTROL SAMPLE: 3388786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.4	103	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	52.9	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388787 3388788

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560111002 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	5.9	50	50	60.1	60.7	109	110	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	1.2	1.1	47	43	90-110	7	10	M1	
Sulfate	mg/L	ND	50	50	57.6	58.0	114	115	90-110	1	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388789 3388790

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92559452001 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	15.6	50	50	69.0	69.3	107	107	90-110	0	10		
Fluoride	mg/L		2.5	2.5	3.2	3.2	105	105	90-110	0	10		
Sulfate	mg/L		50	50	73.2	73.4	111	111	90-110	0	10	M1	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: YATES UPGRADIENT

Pace Project No.: 92557089

---

### 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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

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.

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES UPGRADIENT  
Pace Project No.: 92557089

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557089002	GWA-2				
92557089003	YGWA-14S				
92557089005	YGWA-1D				
92557089006	YGWA-1I				
92557089007	YGWA-3D				
92557089008	YGWA-47				
92557089009	YGWA-30I				
92557720005	YGWA-39				
92558251001	YGWA-2I				
92558251002	YGWA-3I				
92558254002	YGWA-4I				
92558254003	YGWA-5I				
92558254005	YGWA-5D				
92558254006	YGWA-17S				
92558254007	YGWA-18S				
92558254008	YGWA-18I				
92558254009	YGWA-20S				
92558254014	YGWA-21I				
92559527001	YGWA-40				
92557089001	UP-DUP-1	EPA 3010A	644090	EPA 6010D	644167
92557089002	GWA-2	EPA 3010A	644090	EPA 6010D	644167
92557089003	YGWA-14S	EPA 3010A	644090	EPA 6010D	644167
92557089004	UP-DUP-2	EPA 3010A	644090	EPA 6010D	644167
92557089005	YGWA-1D	EPA 3010A	644090	EPA 6010D	644167
92557089006	YGWA-1I	EPA 3010A	644090	EPA 6010D	644167
92557089007	YGWA-3D	EPA 3010A	644090	EPA 6010D	644167
92557089008	YGWA-47	EPA 3010A	644090	EPA 6010D	644167
92557089009	YGWA-30I	EPA 3010A	644090	EPA 6010D	644167
92557720005	YGWA-39	EPA 3010A	645799	EPA 6010D	646162
92558251001	YGWA-2I	EPA 3010A	644451	EPA 6010D	644531
92558251002	YGWA-3I	EPA 3010A	644451	EPA 6010D	644531
92558254001	UP-FB-2	EPA 3010A	647011	EPA 6010D	647060
92558254002	YGWA-4I	EPA 3010A	647336	EPA 6010D	647380
92558254003	YGWA-5I	EPA 3010A	647336	EPA 6010D	647380
92558254004	UP-DUP-3	EPA 3010A	647336	EPA 6010D	647380
92558254005	YGWA-5D	EPA 3010A	647336	EPA 6010D	647380
92558254006	YGWA-17S	EPA 3010A	647336	EPA 6010D	647380
92558254007	YGWA-18S	EPA 3010A	647336	EPA 6010D	647380
92558254008	YGWA-18I	EPA 3010A	647336	EPA 6010D	647380
92558254009	YGWA-20S	EPA 3010A	647336	EPA 6010D	647380
92558254014	YGWA-21I	EPA 3010A	647336	EPA 6010D	647380
92559527001	YGWA-40	EPA 3010A	646610	EPA 6010D	646635
92557089001	UP-DUP-1	EPA 3005A	644091	EPA 6020B	644223
92557089002	GWA-2	EPA 3005A	644091	EPA 6020B	644223
92557089003	YGWA-14S	EPA 3005A	644091	EPA 6020B	644223

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557089004	UP-DUP-2	EPA 3005A	644091	EPA 6020B	644223
92557089005	YGWA-1D	EPA 3005A	644091	EPA 6020B	644223
92557089006	YGWA-1I	EPA 3005A	644091	EPA 6020B	644223
92557089007	YGWA-3D	EPA 3005A	644091	EPA 6020B	644223
92557089008	YGWA-47	EPA 3005A	644091	EPA 6020B	644223
92557089009	YGWA-30I	EPA 3005A	644091	EPA 6020B	644223
92557720005	YGWA-39	EPA 3005A	645800	EPA 6020B	646175
92558251001	YGWA-2I	EPA 3005A	645800	EPA 6020B	646175
92558251002	YGWA-3I	EPA 3005A	645800	EPA 6020B	646175
92558254001	UP-FB-2	EPA 3005A	647371	EPA 6020B	647475
92558254002	YGWA-4I	EPA 3005A	647371	EPA 6020B	647475
92558254003	YGWA-5I	EPA 3005A	647371	EPA 6020B	647475
92558254004	UP-DUP-3	EPA 3005A	647371	EPA 6020B	647475
92558254005	YGWA-5D	EPA 3005A	647371	EPA 6020B	647475
92558254006	YGWA-17S	EPA 3005A	647371	EPA 6020B	647475
92558254007	YGWA-18S	EPA 3005A	647371	EPA 6020B	647475
92558254008	YGWA-18I	EPA 3005A	647371	EPA 6020B	647475
92558254009	YGWA-20S	EPA 3005A	647371	EPA 6020B	647475
92558254014	YGWA-21I	EPA 3005A	647371	EPA 6020B	647475
92559527001	YGWA-40	EPA 3005A	646612	EPA 6020B	646637
92557089001	UP-DUP-1	EPA 7470A	643872	EPA 7470A	643926
92557089002	GWA-2	EPA 7470A	643872	EPA 7470A	643926
92557089008	YGWA-47	EPA 7470A	643872	EPA 7470A	643926
92557720005	YGWA-39	EPA 7470A	646057	EPA 7470A	646168
92558254001	UP-FB-2	EPA 7470A	647249	EPA 7470A	647342
92558254002	YGWA-4I	EPA 7470A	647249	EPA 7470A	647342
92558254003	YGWA-5I	EPA 7470A	647249	EPA 7470A	647342
92558254004	UP-DUP-3	EPA 7470A	647249	EPA 7470A	647342
92558254005	YGWA-5D	EPA 7470A	647249	EPA 7470A	647342
92558254006	YGWA-17S	EPA 7470A	647249	EPA 7470A	647342
92558254007	YGWA-18S	EPA 7470A	647249	EPA 7470A	647342
92558254008	YGWA-18I	EPA 7470A	647249	EPA 7470A	647342
92558254009	YGWA-20S	EPA 7470A	647249	EPA 7470A	647342
92558254014	YGWA-21I	EPA 7470A	647249	EPA 7470A	647342
92559527001	YGWA-40	EPA 7470A	648334	EPA 7470A	648431
92557089001	UP-DUP-1	SM 2540C-2011	643454		
92557089002	GWA-2	SM 2540C-2011	643454		
92557089003	YGWA-14S	SM 2540C-2011	643142		
92557089004	UP-DUP-2	SM 2540C-2011	643142		
92557089005	YGWA-1D	SM 2540C-2011	643142		
92557089006	YGWA-1I	SM 2540C-2011	643142		
92557089007	YGWA-3D	SM 2540C-2011	643142		
92557089008	YGWA-47	SM 2540C-2011	643142		
92557089009	YGWA-30I	SM 2540C-2011	643142		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES UPGRADIENT

Pace Project No.: 92557089

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557720005	YGWA-39	SM 2540C-2011	644073		
92558251001	YGWA-2I	SM 2540C-2011	644074		
92558251002	YGWA-3I	SM 2540C-2011	644074		
92558254001	UP-FB-2	SM 2540C-2011	644073		
92558254002	YGWA-4I	SM 2540C-2011	644073		
92558254003	YGWA-5I	SM 2540C-2011	644073		
92558254004	UP-DUP-3	SM 2540C-2011	644073		
92558254005	YGWA-5D	SM 2540C-2011	644074		
92558254006	YGWA-17S	SM 2540C-2011	644074		
92558254007	YGWA-18S	SM 2540C-2011	644074		
92558254008	YGWA-18I	SM 2540C-2011	644074		
92558254009	YGWA-20S	SM 2540C-2011	644074		
92558254014	YGWA-21I	SM 2540C-2011	645434		
92559527001	YGWA-40	SM 2540C-2011	645665		
92559527001	YGWA-40	SM 2320B-2011	646359		
92557089001	UP-DUP-1	EPA 300.0 Rev 2.1 1993	644028		
92557089002	GWA-2	EPA 300.0 Rev 2.1 1993	644028		
92557089003	YGWA-14S	EPA 300.0 Rev 2.1 1993	644028		
92557089004	UP-DUP-2	EPA 300.0 Rev 2.1 1993	644028		
92557089005	YGWA-1D	EPA 300.0 Rev 2.1 1993	644028		
92557089006	YGWA-1I	EPA 300.0 Rev 2.1 1993	644028		
92557089007	YGWA-3D	EPA 300.0 Rev 2.1 1993	644028		
92557089008	YGWA-47	EPA 300.0 Rev 2.1 1993	644028		
92557089009	YGWA-30I	EPA 300.0 Rev 2.1 1993	644028		
92557720005	YGWA-39	EPA 300.0 Rev 2.1 1993	645268		
92558251001	YGWA-2I	EPA 300.0 Rev 2.1 1993	645268		
92558251002	YGWA-3I	EPA 300.0 Rev 2.1 1993	645268		
92558254001	UP-FB-2	EPA 300.0 Rev 2.1 1993	645268		
92558254002	YGWA-4I	EPA 300.0 Rev 2.1 1993	645268		
92558254003	YGWA-5I	EPA 300.0 Rev 2.1 1993	645268		
92558254004	UP-DUP-3	EPA 300.0 Rev 2.1 1993	645268		
92558254005	YGWA-5D	EPA 300.0 Rev 2.1 1993	645268		
92558254006	YGWA-17S	EPA 300.0 Rev 2.1 1993	645268		
92558254007	YGWA-18S	EPA 300.0 Rev 2.1 1993	645268		
92558254008	YGWA-18I	EPA 300.0 Rev 2.1 1993	645268		
92558254009	YGWA-20S	EPA 300.0 Rev 2.1 1993	645269		
92558254014	YGWA-21I	EPA 300.0 Rev 2.1 1993	645412		
92559527001	YGWA-40	EPA 300.0 Rev 2.1 1993	646087		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

**Sample Condition Upon Receipt**

Client Name: Gt Power

Project #:

**WO# : 92557089**



Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 8/23/21 CNR

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Thermometer:  IR Gun ID: 083 Type of Ice:  Wet  Blue  None

Yes  No  N/A

Cooler Temp: 2.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.0

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-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	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9.	EB-1 + FB-1 collection time relative listed on COC but containers are on AP2 work order
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_

# 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: Georgia Power  
 Address: Atlanta, GA

Section B  
 Required Project Information:  
 Report To: SCS Contacts  
 Copy To: Arcadis Contacts

Section C  
 Invoice Information:  
 Address: Southern Co  
 Company Name: Southern Co

Regulatory Agency: CCR  
 State Location: GA

Page: 1 of 1

Requested Due Date: 10 Day

Requested Analysis Filtered (Y/N):

Requested Date: 10 Day

Project Name: *USCGRADIS*

Project Number: *10640*

Matrix Code: *51*

Sample Type: *WT G*

Matrix Code (see valid codes to left):

Sample Temp at Collection: *51*

# of Containers: *1*

Preservatives: *None*

Analyses Test:

TDS: 2450C

Anions Suite 3000

App III Metals

App IV Metals

Mercury: 7470A

Radium 226/228: 93158920

App I and II Metals 6020B  
 Ca, Ni, Ag, Tl, V, Z

Residual Chlorine (Y/N):

ITEM #	MATRIX CODE	SAMPLE TYPE	COLLECTED		DATE	TIME	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
			START	END								
1	UP Dup 1	WT G	<i>8/20</i>	<i>1</i>	<i>8/20</i>	<i>1200</i>			<i>[Signature]</i>	<i>8/20</i>	<i>1745</i>	Y N Y
2	GVA-2	WT G					<i>51</i>	<i>V</i>				Y N Y
3		WT G										Y N Y
4		WT G										Y N Y
5		WT G										Y N Y
6		WT G										Y N Y
7		WT G										Y N Y
8		WT G										Y N Y
9		WT G										Y N Y
10		WT G										Y N Y
11		WT G										Y N Y
12		WT G										Y N Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: *Steve Swanson*

SIGNATURE OF SAMPLER: *[Signature]*

DATE Signed: *8/20/11*

TEMP in C

Received on Ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)



Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Page Terms and Conditions found at <https://info.parchlabs.com/instr/pys-standard-terms.pdf>

### CHAIN-OF-CUSTODY / Analytical Request Document

Section A: Client Information  
 Section B: Required Project Information  
 Section C: Invoice Information  
 Section D: Regulatory Agency

Client Information: Agency: Atlanta, GA (Parch) Report To: Blocky Steyer Attention:   
 Address: 2835 Peach Ferry Rd Copy To:  Company Name:   
 City: Atlanta, GA 30329 Project Name: Water Project # UG Page Project Manager: nicole.d@parchlabs.com  
 Contact Due Date:  Fax:  Project #  Pack Profile # 10543 Requested Analysis Filtered (Y/N):   
 Regulatory Agency: GA State/Location: GA

ITEM #	SAMPLE ID One Character per box (A-Z, 0-9, ., -) Sample IDs must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analyses Test	Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	TEMP in C	SAMPLE CONDITIONS		
				START	END			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4						App III/IV Metals	RAD 9315/9320	Received on Ice (Y/N)
1	WT	WT	WT	08/20	070	5	5																		
2	WT	WT	WT	8/17	15:30	5	5																		
3	WT	WT	WT	8/17	15:30	5	5																		
4	WT	WT	WT																						
5	WT	WT	WT																						
6	WT	WT	WT																						
7	WT	WT	WT																						
8	WT	WT	WT																						
9	WT	WT	WT																						
10	WT	WT	WT																						
11	WT	WT	WT																						
12	WT	WT	WT																						

ADDITIONAL COMMENTS:

RELINQUISHED BY / AFFILIATION:  DATE: 8/20 TIME: 17:30

ACCEPTED BY / AFFILIATION:  DATE: 8/21 TIME: 17:30

TEMP in C: 5.0

Received on Ice (Y/N): Y

Custody Sealed Cooler (Y/N): N

Samples Intact (Y/N): Y

SAMPLER NAME AND SIGNATURE: J. H. S. SWANSON

PRINT Name of SAMPLER: J. H. S. SWANSON

SIGNATURE of SAMPLER: [Signature]

DATE Signed: 8/20/12



# CHAIN-OF-CUSTODY / Analytical Request Document

Page: 2 of 4

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/hubfs/pns-standard-terms.pdf>

**Section A**  
**Required Client Information:**  
 Company: Pacelabs (CA Power)  
 Address: 2835 Paces Ferry Rd  
 City: Atlanta, GA 30339  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Email: \_\_\_\_\_  
 Requested Date: \_\_\_\_\_

**Section B**  
**Required Project Information:**  
 Report To: Buck Stever  
 Copy To: \_\_\_\_\_  
 Purchase Order #: \_\_\_\_\_  
 Project Name: \_\_\_\_\_  
 Project #: \_\_\_\_\_

**Section C**  
**Invoice Information:**  
 Attention: \_\_\_\_\_  
 Company Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Pace Queue: \_\_\_\_\_  
 Pace Project Manager: nicole.d@pacelabs.com  
 Pace Profile #: 10240

**Section D**  
 Regulatory Agency: \_\_\_\_\_  
 State / Location: CA

ITEM #	MATRIX CODE (see valid codes to L&N)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analyse Test	Y/N	Requested Analysis Filled (Y/N)	Residual Chlorine (Y/N)			
			START	END			H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS					Cl F, SO4	App BIV Metals	RAD 9215/9320
1	WT	WT	8/19 070	15		5	✓								X	X	X	X			
2	WT	WT	8/19 1530	15		5	✓								X	X	X	X			
3	WT	WT													X	X	X	X			
4	WT	WT													X	X	X	X			
5	WT	WT													X	X	X	X			
6	WT	WT													X	X	X	X			
7	WT	WT													X	X	X	X			
8	WT	WT													X	X	X	X			
9	WT	WT													X	X	X	X			
10	WT	WT													X	X	X	X			
11	WT	WT	8/19 110			4	✓								X	X	X	X			
12	WT	WT	8/19 1220			4	✓								X	X	X	X			

**ADDITIONAL COMMENTS:**

REQUISITIONED BY / AFFILIATION: \_\_\_\_\_ DATE: 8/20/12

ACCEPTED BY / AFFILIATION: \_\_\_\_\_ DATE: 8/21/12

TIME: 1732

TEMP in C: 5.0

SAMPLER NAME AND SIGNATURE: \_\_\_\_\_

PRINT Name of SAMPLER: \_\_\_\_\_

SIGNATURE of SAMPLER: \_\_\_\_\_

DATE Signed: 8/20/12

Received on location (Y/N): \_\_\_\_\_

Custody (Y/N): \_\_\_\_\_

Sealed Cooler (Y/N): \_\_\_\_\_

Samples Intact (Y/N): \_\_\_\_\_

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 3 of 4

### Section A

Required Client Information:

Company: Georgia Power  
Address: Atlanta, GA

Report To: SCS Contacts  
Corp To: Arcadis-Contacts

Requested Date: 10 Day

### Section B

Required Project Information:

Project Name: Miss ABC  
Project Number: 201212201

Purchase Order #: 10840

### Section C

Invoice Information:

Member: Southern Co  
Address: 10840

Page Quote: Kevin Herring/Nicole D'Orso  
Page Project Manager: 10840  
Page Profile #: GA

Regulatory Agency: CCR  
State/Location: GA

ITEM #	MATRIX	CODE	MATR CODE (see valid codes to left)		SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	PRESERVATIVES							ANALYSES TEST						Residual Chlorine (Y/N)	PH					
						START	END						# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HC	NaOH	Na2S2O3	Methanol	Other	Y/N	TDS 2450C	Amper Suite 3000	App III Metals			App IV Metals (No Tl)	Radium 226/228 9316/9320			
1	ADAPT-1		WT	G																												
2	ADAPT-1		WT	G																												
3	ADAPT-1		WT	G																												
4	ADAPT-1		WT	G																												
5	YCHA-1D		WT	G																												
6	YCHA-1E		WT	G																												
7	YCHA-3D		WT	G																												
8	YCHA-3D		WT	G																												
9	YCHA-3D		WT	G																												
10	YCHA-3D		WT	G																												
11	YCHA-3D		WT	G																												
12	YCHA-3D		WT	G																												

RELIQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP in C	R Received on Ice (Y/N)	Cooled, Sealed, Cooler (Y/N)	Samples Intact (Y/N)
<i>[Signature]</i>	8/20/12	1730	<i>[Signature]</i>	8/20/12	1750	5.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE  
PRINT Name of SAMPLER: NORIK CHASE  
SIGNATURE of SAMPLER: *[Signature]*  
DATE Signed: 8/20/12



**CHAIN-OF-CUSTODY / Analytical Request Document**  
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

<b>Section A</b>		<b>Section B</b>		<b>Section C</b>	
<b>Required Client Information:</b>		<b>Required Project Information:</b>		<b>Invoice Information:</b>	
Company: Georgia Power	Address: Atlanta, GA	Report To: SCS Contacts	Copy To: Arcadis Contacts	Client: Southern Co	Company Name:
Project Name:	Requested Due Date: 10 Day	Purchase Order #	Project Name	Address:	Page Order Manager: Kevin Herring/Nicole D'Elia
			(upgradation)	Page Order # 10840	Page Order # 10840
<b>Regulatory Agency:</b>			<b>Requested Analysis Filtered (Y/N)</b>		
CCR					
State/Location: GA					

ITEM #	SAMPLE ID	MATRIX	CODE	MATRIX CODE	SAMPLE TYPE	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES						Analyses Test	Y/N	Residual Chlorine (Y/N)	pH	
						START	END			H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol					Other
						DATE	TIME			DATE	TIME	DATE	TIME	DATE	TIME					DATE
1	YGWA-47	MATRIX	CODE						X	X										
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

**ADDITIONAL COMMENTS:**  
App II Mobile - Euron 8/2/2008 Ca 60103

**RELINQUISHED BY / AFFILIATION:**  
[Signature] Arcadis 9/20 1730

**ACCEPTED BY / AFFILIATION:**  
[Signature] [Name] 10/15 1730

**SAMPLER NAME AND SIGNATURE:**  
PRINT Name of SAMPLER: \_\_\_\_\_  
SIGNATURE of SAMPLER: \_\_\_\_\_

**DATE SIGNED:** \_\_\_\_\_

TEMP $\leq$ C	
Received on ice (Y/N)	Y
Custody Sealed (Y/N)	N
Samples Intact (Y/N)	Y



Document Name:  
**Sample Condition Upon Receipt(SCUR)**  
 Document No.:  
**F-CAR-CS-033-Rev.07**

Document Revised: October 28, 2020  
 Page 1 of 2  
 Issuing Authority:  
 Pace Carolinas Quality Office

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
 Upon Receipt

Client Name:

*GA Power*

Project #:

**WO# : 92557720**

PM: NMG

Due Date: 09/09/21

CLIENT: GA-GA Power

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *8/27/21*  
*COH*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:  IR Gun ID: *083* Type of Ice:  Wet  Blue  None

Cooler Temp: *3.0* Correction Factor: Add/Subtract (°C) *0.0*

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): *3.0*

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  
 Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-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	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <i>W</i>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_

# 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: Georgia Power  
 Address: Atlanta, GA  
 Email To: SCS and Arcadis Contacts  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Requested Due Date: 10 Day

Section B

Required Project Information:

Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Project Name: Yates AHA-R6 (downgradient)  
 Project Number: \_\_\_\_\_  
 Purchase Order #: \_\_\_\_\_

Section C

Invoice Information:

Member: Southern Co.  
 Company Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Page Order: \_\_\_\_\_  
 Pace Project Manager: Kevin Hemming/Nicole D'Oliva  
 Pace Profile #: 10840

Page: \_\_\_\_\_ of \_\_\_\_\_

Regulatory Agency: COR  
 State / Location: GA

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analyses Test	Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	pH:
			START DATE	END DATE			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3					
1	YSMA 39	WT G	8/20/21	12:35		2											pH: 6.91
2		WT G															
3		WT G															
4		WT G															
5		WT G															
6		WT G															
7		WT G															
8		WT G															
9		WT G															
10		WT G															
11		WT G															
12		WT G															

ADDITIONAL COMMENTS: Antons Suite 300.0 (Cl, F, Sulfate)

REINQUISHED BY / AFFILIATION: Arcadis  
 DATE: 8/20/21  
 TIME: 1410

ACCEPTED BY / AFFILIATION: *[Signature]*  
 DATE: 8/26  
 TIME: 1410

APP III METALS: Boron (B), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)

APP IV METALS: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)

SAMPLER NAME AND SIGNATURE: Kate Prokencoc  
 PRINT Name of SAMPLER: Kate Prokencoc  
 SIGNATURE OF SAMPLER: *[Signature]*  
 DATE Signed: 8-26-21

TEMP in C: \_\_\_\_\_

Received on Ice (Y/N): \_\_\_\_\_

Custody Sealed Cooler (Y/N): \_\_\_\_\_

Samples Intact (Y/N): \_\_\_\_\_



Document Name:  
Sample Condition Upon Receipt(SCUR)

Document Revised: October 28, 2020  
Page 1 of 2

Document No.:  
F-CAR-CS-033-Rev.07

Issuing Authority:  
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
Upon Receipt

Client Name:

GA Power

Project #:

WO#: 92558251



Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/initials Person Examining Contents: 8/27/21  
COM

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Thermometer:  IR Gun ID: 083 Type of Ice:  Wet  Blue  None

Yes  No  N/A

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.0

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  
 Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-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	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_



**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

*GA Power*

Project #:

**WO# : 92558254**

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_



Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *8/27/21*  
*COH*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID:

*083*

Type of Ice:

Wet  Blue  None

Cooler Temp:

*3.0*

Correction Factor:  
Add/Subtract (°C)

*0.0*

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

*3.0*

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

Yes  No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-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	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9.	<i>AMA-EB-1 labeled UP-EB-1 but time match 8/26/21 1600</i>
-Includes Date/Time/ID/Analysis Matrix:	<i>W</i>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/nufsf/pas-standard-terms.pdf>.

Section A Requested Client Information: Company: Arcadis (GA Power) Address: 2839 Paces Ferry Rd Suite 900, Atlanta, GA 30339

Section B Required Project Information: Report To: Emily Steever Copy To: Project Name: Yates AMA

Section C Invoice Information: Attention: Company Name: Pace Quote Address: Pace Project Manager: nicole.dolezal@pacelabs.com Pace Profile #: 10840

Regulatory Agency: State / Location: GA

Page: 1 of 1

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	Preservatives								Analyse Test	Y/N	Residual Chlorine (Y/N)	
			START DATE TIME	END DATE TIME				H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS				Cl, F, SO4
1	AMA-EB-1	WT																	
2	AMA-EB-2	WT																	
3	AMA-FB-1	WT																	
4	AMA-FB-2	WT																	
5	UP-EB-1	WT																	
6	UP-EB-1	WT	8/24	17:10		5	X												
7	UP-EB-2	WT																	
8	UP-FB-2	WT																	
9	YGWA-4I	WT	8/26	11:59		5	X												
10	YGWA-5I	WT	8/26	16:28		5	X												
11	UP-DUP-3	WT	8/26	-		5	X												
12	YGWA-5D	WT	8/26	13:55		5	X												

ADDITIONAL COMMENTS	REQUISITIONED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	<i>[Signature]</i>	8/27/21	1640	<i>[Signature]</i>	8/27/21	1640				



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/ubts/pas-standard-terms.pdf>

**Required Client Information:**  
 Company: Arcadis (GA Power)  
 Address: 2539 Paces Ferry Rd  
 Suite 500, Atlanta, GA 30339  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Email: \_\_\_\_\_  
 Requested Due Date: \_\_\_\_\_

**Required Project Information:**  
 Report To: Becky Steever  
 Project Name: Yates AMA  
 Purchase Order #: \_\_\_\_\_  
 Project #: \_\_\_\_\_

**Invoice Information:**  
 Attention: \_\_\_\_\_  
 Company Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Project Manager: nicole.dolan@pacelabs.com  
 Paces Profile #: 10840

**Regulatory Agency:** \_\_\_\_\_  
**State / Location:** GA

ITEM #	MATRIX	CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analytes Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	PH
					START	END			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol				
13	YGWA-17S	WT	WT	WT	8/17	1045		5											
14	YGWA-18S	WT	WT	WT	8/16	1535		5											
15	YGWA-181	WT	WT	WT	8/17	0935		5											
16	YGWA-20S	WT	WT	WT	8/17	1310		5											
17	YGWA-211	WT	WT	WT															
18	YGWC-23S	WT	WT	WT															
19	YGWC-24SA	WT	WT	WT															
20	AMA-DUP 1	WT	WT	WT															
21	YGWC-36A	WT	WT	WT															
22	YGWC-49	WT	WT	WT															
23	AMA-EB-1				8/16	1600		5											
24	AMA-EB-2				8/17	1340		5											

RELINQUISHED BY / AFFILIATION: QA Arcadis DATE: 8/17 TIME: 5

ACCEPTED BY / AFFILIATION: Becky Steever DATE: 8/17/14 TIME: 1640

**SAMPLER NAME AND SIGNATURE:**  
 PRINT Name of SAMPLER: DATE SWANSON  
 SIGNATURE of SAMPLER: [Signature] DATE Signed: 8/12/12

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





Document Name: <b>Sample Condition Upon Receipt(SCUR)</b>	Document Revised: October 28, 2020 Page 1 of 2
Document No.: <b>F-CAR-CS-033-Rev.07</b>	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

GA Power

Project #:

**WO# : 92558254**

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

PM: NMG Due Date: 09/13/21  
CLIENT: GA-GA Power

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 9/21/21 kew

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Yes  No  N/A

Cooler Temp: 3.9 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.0

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-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	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_

# 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: Georgia Power Address: Atlanta, GA  
**Section B** Required Project Information: Report To: SCS Contacts Copy To: ~~SCS Contacts~~ Copy To: Becky Stead  
**Section C** Invoice Information: Attention: Southern Co. Company Name: SCS Contacts

Email To: SCS Contacts Fax:   
 Phone: Project Name: YATES AMA Project Number:   
 Requested Due Date: 10 Day Purchase Order #:   
 Address: Pace Quote:   
 Pace Project Manager: Kevin Herring/Nicole D'Olivo Pace Profile #: 10840  
 Regulatory Agency: CCR State / Location: GA

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		DATE	TIME	DATE	TIME	PRESERVATIVES						Analyses Test	Y/N	Requester Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	PH
			START	END					Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3					
1	UP-EB-1	WT G																	
2	UP-EB-2	WT G																	
3	UP-EB-3	WT G																	
4	UP-EB-4	WT G																	
5	UP-EB-5	WT G																	
6	UP-EB-6	WT G																	
7	UP-EB-7	WT G																	
8	UP-EB-8	WT G																	
9	UP-EB-9	WT G																	
10	UP-EB-10	WT G																	
11	UP-EB-11	WT G																	
12	UP-EB-12	WT G																	

**ADDITIONAL COMMENTS**  
 Anions Suite 300.0 (CLF sulfate)  
 App III Metals: Barium 60208 Ca 60100  
 App IV: Metals 60208: Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)

**RELINQUISHED BY / AFFILIATION**  
 Arcadis  
 9/22/15 15:30  
 9/21/12  
 9/21/12  
 9/21/12

**ACCEPTED BY / AFFILIATION**  
 Arcadis  
 9/22/15 15:30  
 9/21/12  
 9/21/12  
 9/21/12

**SAMPLER NAME AND SIGNATURE**  
 PRINT Name of SAMPLER: JKE SWANSON  
 SIGNATURE of SAMPLER:   
 DATE Signed: 9/22/12

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



Document Name: <b>Sample Condition Upon Receipt(SCUR)</b>	Document Revised: October 28, 2020 Page 1 of 2
Document No.: <b>F-CAR-CS-033-Rev.07</b>	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: ARCADIS - GALOWE

Project: **WO# : 92559527**



Courier:  Commercial  Fed Ex  Pace  UPS  USPS  Client  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 9/3/21  
COJ

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Cooler Temp: 4.9 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 5.0

USDA Regulated Soil (  N/A, water sample)  
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>9/3/21 COJ W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY Field Data Required?  Yes  No

Lot ID of split containers: \_\_\_\_\_

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



www.paceanalytical.com

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 Of 1

## Section A

**Required Client Information:**  
 Company: Arcadis (GA Power)  
 Address: 2839 Paces Ferry Rd  
 Suite 900 Atlanta, GA 30339  
 Email: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Requested Due Date: \_\_\_\_\_

## Section B

**Required Project Information:**  
 Report To: Becky Steever  
 Copy To: \_\_\_\_\_  
 Project Name: Yates R6  
 Purchase Order #: \_\_\_\_\_  
 Origin #: \_\_\_\_\_

## Section C

**Invoice Information:**  
 Attention: \_\_\_\_\_  
 Company Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Pace Project Manager: nicole.dobson@pacelabs.com  
 Pace Profile #: 10840

Regulatory Agency

State / Location  
GA

ITEM #	MATRIX	CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analyzes Test	Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)			
					DATE	TIME	DATE	TIME			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol					Other		
																							TDS	Cl, F, SO4
1	YQWVA-40	WT																						
2	YQWVA-40	WT			9/3/21	1020																		
3	YQWVA-40	WT																						
4	YQWVA-40	WT																						
5	YQWVA-40	WT																						
6	YQWVA-40	WT																						
7	YQWVA-40	WT																						
8	YQWVA-40	WT																						
9	YQWVA-40	WT																						
10	YQWVA-40	WT																						
11	YQWVA-40	WT																						
12	YQWVA-40	WT																						

RECEIVED BY / AFFILIATION: *[Signature]* DATE: 9/3/21 TIME: 1730

ACCEPTED BY / AFFILIATION: *[Signature]* DATE: 9/3/21 TIME: 1735

SAMPLER NAME AND SIGNATURE: \_\_\_\_\_

PRINT Name of SAMPLER: *Matt Croft*

SIGNATURE of SAMPLER: *[Signature]* DATE Signed: 9/3/21

TEMP in C: \_\_\_\_\_

Received on Ice (Y/N): \_\_\_\_\_

Cusody Sealed Cooler (Y/N): \_\_\_\_\_

Samples Intact (Y/N): \_\_\_\_\_

October 01, 2021

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

RE: Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between August 20, 2021 and September 03, 2021. 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,



Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

---

### **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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92557070001	UP-DUP-1	Water	08/20/21 00:00	08/20/21 17:30
92557070002	GWA-2	Water	08/20/21 12:00	08/20/21 17:30
92557070003	YGWA-14S	Water	08/19/21 11:00	08/20/21 17:30
92557070004	UP-DUP-2	Water	08/19/21 00:00	08/20/21 17:30
92557070005	YGWA-1D	Water	08/19/21 11:10	08/20/21 17:30
92557070006	YGWA-1I	Water	08/19/21 12:49	08/20/21 17:30
92557070007	YGWA-3D	Water	08/19/21 14:45	08/20/21 17:30
92557070008	YGWA-47	Water	08/19/21 10:26	08/20/21 17:30
92557070009	YGWA-30I	Water	08/19/21 12:20	08/20/21 17:30
92557719005	YGWA-39	Water	08/26/21 12:30	08/27/21 16:40
92558240001	UP-FB-2	Water	08/26/21 17:10	08/27/21 16:40
92558240002	YGWA-4I	Water	08/26/21 11:29	08/27/21 16:40
92558240003	YGWA-5I	Water	08/26/21 16:28	08/27/21 16:40
92558240004	UP-DUP-3	Water	08/26/21 00:00	08/27/21 16:40
92558240005	YGWA-5D	Water	08/26/21 13:35	08/27/21 16:40
92558240006	YGWA-17S	Water	08/27/21 10:45	08/27/21 16:40
92558240007	YGWA-18S	Water	08/26/21 15:35	08/27/21 16:40
92558240008	YGWA-18I	Water	08/27/21 09:35	08/27/21 16:40
92558240009	YGWA-20S	Water	08/27/21 13:10	08/27/21 16:40
92558240014	YGWA-21I	Water	09/01/21 14:40	09/02/21 17:02
92559523001	YGWA-40	Water	09/03/21 10:20	09/03/21 17:30
92558238001	YGWA-2I	Water	08/27/21 11:33	08/27/21 16:40
92558238002	YGWA-3I	Water	08/27/21 09:55	08/27/21 16:40

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92557070001	UP-DUP-1	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070002	GWA-2	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070003	YGWA-14S	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070004	UP-DUP-2	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070005	YGWA-1D	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070006	YGWA-1I	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070007	YGWA-3D	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070008	YGWA-47	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070009	YGWA-30I	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557719005	YGWA-39	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240001	UP-FB-2	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240002	YGWA-4I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240003	YGWA-5I	EPA 9315	LAL	1	PASI-PA

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92558240004	UP-DUP-3	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
92558240005	YGWA-5D	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
92558240006	YGWA-17S	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
92558240007	YGWA-18S	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
92558240008	YGWA-18I	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
92558240009	YGWA-20S	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
92558240014	YGWA-21I	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
92559523001	YGWA-40	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
92558238001	YGWA-2I	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
92558238002	YGWA-3I	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92557070001</b>	<b>UP-DUP-1</b>					
EPA 9315	Radium-226	0.325 ± 0.195 (0.307) C:88% T:NA	pCi/L		09/20/21 15:28	
EPA 9320	Radium-228	0.333 ± 0.342 (0.704) C:73% T:85%	pCi/L		09/17/21 14:11	
Total Radium Calculation	Total Radium	0.658 ± 0.537 (1.01)	pCi/L		09/21/21 16:29	
<b>92557070002</b>	<b>GWA-2</b>					
EPA 9315	Radium-226	0.0454 ± 0.104 (0.246) C:86% T:NA	pCi/L		09/20/21 15:28	
EPA 9320	Radium-228	0.483 ± 0.364 (0.713) C:74% T:88%	pCi/L		09/17/21 14:11	
Total Radium Calculation	Total Radium	0.528 ± 0.468 (0.959)	pCi/L		09/21/21 16:29	
<b>92557070003</b>	<b>YGWA-14S</b>					
EPA 9315	Radium-226	0.00466 ± 0.157 (0.433) C:93% T:NA	pCi/L		09/20/21 15:28	
EPA 9320	Radium-228	0.781 ± 0.436 (0.776) C:74% T:80%	pCi/L		09/17/21 14:03	
Total Radium Calculation	Total Radium	0.786 ± 0.593 (1.21)	pCi/L		09/21/21 16:29	
<b>92557070004</b>	<b>UP-DUP-2</b>					
EPA 9315	Radium-226	0.111 ± 0.167 (0.360) C:99% T:NA	pCi/L		09/20/21 15:28	
EPA 9320	Radium-228	1.08 ± 0.491 (0.804) C:74% T:78%	pCi/L		09/17/21 14:03	
Total Radium Calculation	Total Radium	1.19 ± 0.658 (1.16)	pCi/L		09/21/21 16:29	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92557070005</b>	<b>YGWA-1D</b>					
EPA 9315	Radium-226	0.276 ± 0.229 (0.401) C:93% T:NA	pCi/L		09/20/21 15:29	
EPA 9320	Radium-228	0.894 ± 0.489 (0.876) C:74% T:84%	pCi/L		09/17/21 14:25	
Total Radium Calculation	Total Radium	1.17 ± 0.718 (1.28)	pCi/L		09/21/21 16:29	
<b>92557070006</b>	<b>YGWA-1I</b>					
EPA 9315	Radium-226	0.0732 ± 0.237 (0.573) C:99% T:NA	pCi/L		09/21/21 08:07	
EPA 9320	Radium-228	-0.218 ± 0.601 (1.45) C:73% T:84%	pCi/L		09/17/21 17:11	
Total Radium Calculation	Total Radium	0.0732 ± 0.838 (2.02)	pCi/L		09/21/21 16:29	
<b>92557070007</b>	<b>YGWA-3D</b>					
EPA 9315	Radium-226	1.67 ± 0.511 (0.447) C:93% T:NA	pCi/L		09/21/21 08:07	
EPA 9320	Radium-228	1.86 ± 0.774 (1.22) C:70% T:83%	pCi/L		09/17/21 17:11	
Total Radium Calculation	Total Radium	3.53 ± 1.29 (1.67)	pCi/L		09/21/21 16:29	
<b>92557070008</b>	<b>YGWA-47</b>					
EPA 9315	Radium-226	0.309 ± 0.197 (0.329) C:88% T:NA	pCi/L		09/21/21 08:07	
EPA 9320	Radium-228	0.757 ± 0.724 (1.50) C:68% T:81%	pCi/L		09/17/21 17:12	
Total Radium Calculation	Total Radium	1.07 ± 0.921 (1.83)	pCi/L		09/21/21 16:29	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92557070009</b>	<b>YGWA-30I</b>					
EPA 9315	Radium-226	0.234 ± 0.232 (0.450)	pCi/L		09/21/21 08:07	
EPA 9320	Radium-228	C:95% T:NA -0.0548 ± 0.544 (1.29)	pCi/L		09/17/21 17:12	
Total Radium Calculation	Total Radium	C:67% T:77% 0.234 ± 0.776 (1.74)	pCi/L		09/21/21 16:29	
<b>92557719005</b>	<b>YGWA-39</b>					
EPA 9315	Radium-226	0.674 ± 0.261 (0.318)	pCi/L		09/21/21 09:36	
EPA 9320	Radium-228	C:90% T:NA -0.0610 ± 0.461 (1.09)	pCi/L		09/17/21 17:18	
Total Radium Calculation	Total Radium	C:74% T:82% 0.674 ± 0.722 (1.41)	pCi/L		09/22/21 16:02	
<b>92558240001</b>	<b>UP-FB-2</b>					
EPA 9315	Radium-226	0.0312 ± 0.148 (0.376)	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	C:98% T:NA 0.327 ± 0.417 (0.886)	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	C:79% T:79% 0.358 ± 0.565 (1.26)	pCi/L		09/24/21 14:36	
<b>92558240002</b>	<b>YGWA-4I</b>					
EPA 9315	Radium-226	0.752 ± 0.313 (0.359)	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	C:94% T:NA 0.419 ± 0.429 (0.888)	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	C:82% T:80% 1.17 ± 0.742 (1.25)	pCi/L		09/24/21 14:36	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92558240003</b>	<b>YGWA-5I</b>					
EPA 9315	Radium-226	0.173 ± 0.181 (0.351) C:91% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.625 ± 0.402 (0.752) C:81% T:80%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.798 ± 0.583 (1.10)	pCi/L		09/24/21 14:36	
<b>92558240004</b>	<b>UP-DUP-3</b>					
EPA 9315	Radium-226	0.101 ± 0.197 (0.455) C:96% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.620 ± 0.425 (0.816) C:81% T:80%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.721 ± 0.622 (1.27)	pCi/L		09/24/21 14:36	
<b>92558240005</b>	<b>YGWA-5D</b>					
EPA 9315	Radium-226	3.80 ± 0.816 (0.373) C:102% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.883 ± 0.429 (0.726) C:80% T:82%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	4.68 ± 1.25 (1.10)	pCi/L		09/24/21 14:36	
<b>92558240006</b>	<b>YGWA-17S</b>					
EPA 9315	Radium-226	0.438 ± 0.263 (0.394) C:86% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.462 ± 0.373 (0.739) C:81% T:81%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.900 ± 0.636 (1.13)	pCi/L		09/24/21 14:36	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92558240007</b>	<b>YGWA-18S</b>					
EPA 9315	Radium-226	0.145 ± 0.161 (0.309) C:95% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.541 ± 0.396 (0.768) C:77% T:84%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.686 ± 0.557 (1.08)	pCi/L		09/24/21 14:36	
<b>92558240008</b>	<b>YGWA-18I</b>					
EPA 9315	Radium-226	0.104 ± 0.171 (0.381) C:97% T:NA	pCi/L		09/22/21 08:45	
EPA 9320	Radium-228	0.657 ± 0.507 (1.01) C:73% T:84%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.761 ± 0.678 (1.39)	pCi/L		09/24/21 14:36	
<b>92558240009</b>	<b>YGWA-20S</b>					
EPA 9315	Radium-226	0.632 ± 0.313 (0.451) C:95% T:NA	pCi/L		09/22/21 08:11	
EPA 9320	Radium-228	0.147 ± 0.402 (0.898) C:74% T:84%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.779 ± 0.715 (1.35)	pCi/L		09/24/21 14:36	
<b>92558240014</b>	<b>YGWA-21I</b>					
EPA 9315	Radium-226	0.934 ± 0.290 (0.223) C:90% T:NA	pCi/L		09/22/21 09:39	
EPA 9320	Radium-228	0.924 ± 0.466 (0.823) C:76% T:81%	pCi/L		09/20/21 11:13	
Total Radium Calculation	Total Radium	1.86 ± 0.756 (1.05)	pCi/L		09/27/21 15:44	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92559523001</b>	<b>YGWA-40</b>					
EPA 9315	Radium-226	0.350 ± 0.172 (0.206) C:91% T:NA	pCi/L		09/22/21 09:39	
EPA 9320	Radium-228	0.621 ± 0.450 (0.877) C:75% T:74%	pCi/L		09/20/21 11:13	
Total Radium Calculation	Total Radium	0.971 ± 0.622 (1.08)	pCi/L		09/24/21 14:38	
<b>92558238001</b>	<b>YGWA-2I</b>					
EPA 9315	Radium-226	0.284 ± 0.258 (0.500) C:96% T:NA	pCi/L		09/22/21 12:05	
EPA 9320	Radium-228	0.125 ± 0.379 (0.851) C:76% T:80%	pCi/L		09/20/21 11:11	
Total Radium Calculation	Total Radium	0.409 ± 0.637 (1.35)	pCi/L		09/24/21 14:37	
<b>92558238002</b>	<b>YGWA-3I</b>					
EPA 9315	Radium-226	1.01 ± 0.368 (0.461) C:97% T:NA	pCi/L		09/22/21 12:05	
EPA 9320	Radium-228	0.328 ± 0.385 (0.811) C:81% T:81%	pCi/L		09/20/21 11:12	
Total Radium Calculation	Total Radium	1.34 ± 0.753 (1.27)	pCi/L		09/24/21 14:37	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: UP-DUP-1</b> <b>Lab ID: 92557070001</b> Collected: 08/20/21 00:00      Received: 08/20/21 17:30      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.325 ± 0.195 (0.307)</b> <b>C:88% T:NA</b>	pCi/L	09/20/21 15:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.333 ± 0.342 (0.704)</b> <b>C:73% T:85%</b>	pCi/L	09/17/21 14:11	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.658 ± 0.537 (1.01)</b>	pCi/L	09/21/21 16:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: GWA-2**      **Lab ID: 92557070002**      Collected: 08/20/21 12:00      Received: 08/20/21 17:30      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	<b>0.0454 ± 0.104 (0.246)</b> <b>C:86% T:NA</b>	pCi/L	09/20/21 15:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.483 ± 0.364 (0.713)</b> <b>C:74% T:88%</b>	pCi/L	09/17/21 14:11	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.528 ± 0.468 (0.959)</b>	pCi/L	09/21/21 16:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWA-14S</b> <b>Lab ID: 92557070003</b> Collected: 08/19/21 11:00      Received: 08/20/21 17:30      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.00466 ± 0.157 (0.433)</b> <b>C:93% T:NA</b>	pCi/L	09/20/21 15:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.781 ± 0.436 (0.776)</b> <b>C:74% T:80%</b>	pCi/L	09/17/21 14:03	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.786 ± 0.593 (1.21)</b>	pCi/L	09/21/21 16:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: UP-DUP-2**      **Lab ID: 92557070004**      Collected: 08/19/21 00:00      Received: 08/20/21 17:30      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	<b>0.111 ± 0.167 (0.360)</b> <b>C:99% T:NA</b>	pCi/L	09/20/21 15:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>1.08 ± 0.491 (0.804)</b> <b>C:74% T:78%</b>	pCi/L	09/17/21 14:03	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.19 ± 0.658 (1.16)</b>	pCi/L	09/21/21 16:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWA-1D</b> <b>Lab ID: 92557070005</b> Collected: 08/19/21 11:10      Received: 08/20/21 17:30      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.276 ± 0.229 (0.401)</b> <b>C:93% T:NA</b>	pCi/L	09/20/21 15:29	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.894 ± 0.489 (0.876)</b> <b>C:74% T:84%</b>	pCi/L	09/17/21 14:25	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.17 ± 0.718 (1.28)</b>	pCi/L	09/21/21 16:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-11**      **Lab ID: 92557070006**      Collected: 08/19/21 12:49      Received: 08/20/21 17:30      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	<b>0.0732 ± 0.237 (0.573)</b> <b>C:99% T:NA</b>	pCi/L	09/21/21 08:07	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>-0.218 ± 0.601 (1.45)</b> <b>C:73% T:84%</b>	pCi/L	09/17/21 17:11	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.0732 ± 0.838 (2.02)</b>	pCi/L	09/21/21 16:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-3D**      **Lab ID: 92557070007**      Collected: 08/19/21 14:45      Received: 08/20/21 17:30      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	<b>1.67 ± 0.511 (0.447)</b> <b>C:93% T:NA</b>	pCi/L	09/21/21 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.86 ± 0.774 (1.22)</b> <b>C:70% T:83%</b>	pCi/L	09/17/21 17:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>3.53 ± 1.29 (1.67)</b>	pCi/L	09/21/21 16:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-47**      **Lab ID: 92557070008**      Collected: 08/19/21 10:26      Received: 08/20/21 17:30      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	<b>0.309 ± 0.197 (0.329)</b> <b>C:88% T:NA</b>	pCi/L	09/21/21 08:07	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.757 ± 0.724 (1.50)</b> <b>C:68% T:81%</b>	pCi/L	09/17/21 17:12	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.07 ± 0.921 (1.83)</b>	pCi/L	09/21/21 16:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWA-301</b> <b>Lab ID: 92557070009</b> Collected: 08/19/21 12:20      Received: 08/20/21 17:30      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.234 ± 0.232 (0.450)</b> <b>C:95% T:NA</b>	pCi/L	09/21/21 08:07	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>-0.0548 ± 0.544 (1.29)</b> <b>C:67% T:77%</b>	pCi/L	09/17/21 17:12	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.234 ± 0.776 (1.74)</b>	pCi/L	09/21/21 16:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-39**      **Lab ID: 92557719005**      Collected: 08/26/21 12:30      Received: 08/27/21 16:40      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	<b>0.674 ± 0.261 (0.318)</b> <b>C:90% T:NA</b>	pCi/L	09/21/21 09:36	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>-0.0610 ± 0.461 (1.09)</b> <b>C:74% T:82%</b>	pCi/L	09/17/21 17:18	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.674 ± 0.722 (1.41)</b>	pCi/L	09/22/21 16:02	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: UP-FB-2**      **Lab ID: 92558240001**      Collected: 08/26/21 17:10      Received: 08/27/21 16:40      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	<b>0.0312 ± 0.148 (0.376)</b> <b>C:98% T:NA</b>	pCi/L	09/22/21 08:47	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.327 ± 0.417 (0.886)</b> <b>C:79% T:79%</b>	pCi/L	09/20/21 14:36	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.358 ± 0.565 (1.26)</b>	pCi/L	09/24/21 14:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-4I**      **Lab ID: 92558240002**      Collected: 08/26/21 11:29      Received: 08/27/21 16:40      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	<b>0.752 ± 0.313 (0.359)</b> <b>C:94% T:NA</b>	pCi/L	09/22/21 08:47	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.419 ± 0.429 (0.888)</b> <b>C:82% T:80%</b>	pCi/L	09/20/21 14:36	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.17 ± 0.742 (1.25)</b>	pCi/L	09/24/21 14:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-5I**      **Lab ID: 92558240003**      Collected: 08/26/21 16:28      Received: 08/27/21 16:40      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	<b>0.173 ± 0.181 (0.351)</b> <b>C:91% T:NA</b>	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.625 ± 0.402 (0.752)</b> <b>C:81% T:80%</b>	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.798 ± 0.583 (1.10)</b>	pCi/L	09/24/21 14:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: UP-DUP-3**      **Lab ID: 92558240004**      Collected: 08/26/21 00:00      Received: 08/27/21 16:40      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	<b>0.101 ± 0.197 (0.455)</b> <b>C:96% T:NA</b>	pCi/L	09/22/21 08:47	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.620 ± 0.425 (0.816)</b> <b>C:81% T:80%</b>	pCi/L	09/20/21 14:36	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.721 ± 0.622 (1.27)</b>	pCi/L	09/24/21 14:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWA-5D</b> <b>Lab ID: 92558240005</b> Collected: 08/26/21 13:35      Received: 08/27/21 16:40      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>3.80 ± 0.816 (0.373)</b> <b>C:102% T:NA</b>	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.883 ± 0.429 (0.726)</b> <b>C:80% T:82%</b>	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>4.68 ± 1.25 (1.10)</b>	pCi/L	09/24/21 14:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWA-17S</b> <b>Lab ID: 92558240006</b> Collected: 08/27/21 10:45      Received: 08/27/21 16:40      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.438 ± 0.263 (0.394)</b> <b>C:86% T:NA</b>	pCi/L	09/22/21 08:47	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.462 ± 0.373 (0.739)</b> <b>C:81% T:81%</b>	pCi/L	09/20/21 14:36	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.900 ± 0.636 (1.13)</b>	pCi/L	09/24/21 14:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-18S**      **Lab ID: 92558240007**      Collected: 08/26/21 15:35      Received: 08/27/21 16:40      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	<b>0.145 ± 0.161 (0.309)</b> <b>C:95% T:NA</b>	pCi/L	09/22/21 08:47	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.541 ± 0.396 (0.768)</b> <b>C:77% T:84%</b>	pCi/L	09/20/21 14:36	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.686 ± 0.557 (1.08)</b>	pCi/L	09/24/21 14:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-181**      **Lab ID: 92558240008**      Collected: 08/27/21 09:35      Received: 08/27/21 16:40      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	<b>0.104 ± 0.171 (0.381)</b> <b>C:97% T:NA</b>	pCi/L	09/22/21 08:45	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.657 ± 0.507 (1.01)</b> <b>C:73% T:84%</b>	pCi/L	09/20/21 14:36	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.761 ± 0.678 (1.39)</b>	pCi/L	09/24/21 14:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-20S**      **Lab ID: 92558240009**      Collected: 08/27/21 13:10      Received: 08/27/21 16:40      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	<b>0.632 ± 0.313 (0.451)</b> <b>C:95% T:NA</b>	pCi/L	09/22/21 08:11	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.147 ± 0.402 (0.898)</b> <b>C:74% T:84%</b>	pCi/L	09/20/21 14:36	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.779 ± 0.715 (1.35)</b>	pCi/L	09/24/21 14:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-211**      **Lab ID: 92558240014**      Collected: 09/01/21 14:40      Received: 09/02/21 17:02      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	<b>0.934 ± 0.290 (0.223)</b> <b>C:90% T:NA</b>	pCi/L	09/22/21 09:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.924 ± 0.466 (0.823)</b> <b>C:76% T:81%</b>	pCi/L	09/20/21 11:13	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.86 ± 0.756 (1.05)</b>	pCi/L	09/27/21 15:44	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-40**      **Lab ID: 92559523001**      Collected: 09/03/21 10:20      Received: 09/03/21 17:30      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	<b>0.350 ± 0.172 (0.206)</b> <b>C:91% T:NA</b>	pCi/L	09/22/21 09:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.621 ± 0.450 (0.877)</b> <b>C:75% T:74%</b>	pCi/L	09/20/21 11:13	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.971 ± 0.622 (1.08)</b>	pCi/L	09/24/21 14:38	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWA-2I</b> <b>Lab ID: 92558238001</b> Collected: 08/27/21 11:33      Received: 08/27/21 16:40      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.284 ± 0.258 (0.500)</b> <b>C:96% T:NA</b>	pCi/L	09/22/21 12:05	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.125 ± 0.379 (0.851)</b> <b>C:76% T:80%</b>	pCi/L	09/20/21 11:11	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.409 ± 0.637 (1.35)</b>	pCi/L	09/24/21 14:37	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

**Sample: YGWA-3I**      **Lab ID: 92558238002**      Collected: 08/27/21 09:55      Received: 08/27/21 16:40      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	<b>1.01 ± 0.368 (0.461)</b> <b>C:97% T:NA</b>	pCi/L	09/22/21 12:05	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.328 ± 0.385 (0.811)</b> <b>C:81% T:81%</b>	pCi/L	09/20/21 11:12	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.34 ± 0.753 (1.27)</b>	pCi/L	09/24/21 14:37	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

QC Batch: 463915

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92558238001, 92558238002, 92558240014, 92559523001

METHOD BLANK: 2239836

Matrix: Water

Associated Lab Samples: 92558238001, 92558238002, 92558240014, 92559523001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0847 ± 0.121 (0.363) C:95% T:NA	pCi/L	09/22/21 09:35	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

---

QC Batch:	463401	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92557070001, 92557070002, 92557070003, 92557070004, 92557070005, 92557070006, 92557070007, 92557070008, 92557070009, 92557719005

---

METHOD BLANK: 2237310 Matrix: Water

Associated Lab Samples: 92557070001, 92557070002, 92557070003, 92557070004, 92557070005, 92557070006, 92557070007, 92557070008, 92557070009, 92557719005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0856 ± 0.0647 (0.268) C:96% T:NA	pCi/L	09/20/21 15:28	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

QC Batch: 463405

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92558240001, 92558240002, 92558240003, 92558240004, 92558240005, 92558240006, 92558240007, 92558240008, 92558240009

METHOD BLANK: 2237315

Matrix: Water

Associated Lab Samples: 92558240001, 92558240002, 92558240003, 92558240004, 92558240005, 92558240006, 92558240007, 92558240008, 92558240009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0923 ± 0.177 (0.406) C:93% T:NA	pCi/L	09/22/21 08:46	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL - RADIOCHEMISTRY**

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

QC Batch: 463403	Analysis Method: EPA 9320
QC Batch Method: EPA 9320	Analysis Description: 9320 Radium 228
	Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558240001, 92558240002, 92558240003, 92558240004, 92558240005, 92558240006, 92558240007, 92558240008, 92558240009	

METHOD BLANK: 2237313	Matrix: Water
Associated Lab Samples: 92558240001, 92558240002, 92558240003, 92558240004, 92558240005, 92558240006, 92558240007, 92558240008, 92558240009	

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.433 ± 0.419 (0.858) C:81% T:72%	pCi/L	09/20/21 14:35	

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**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL - RADIOCHEMISTRY**

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

QC Batch: 463914

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92558238001, 92558238002, 92558240014, 92559523001

METHOD BLANK: 2239835

Matrix: Water

Associated Lab Samples: 92558238001, 92558238002, 92558240014, 92559523001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.493 ± 0.373 (0.728) C:78% T:74%	pCi/L	09/20/21 11:12	

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**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

QC Batch: 463398

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92557070001, 92557070002, 92557070003, 92557070004, 92557070005, 92557070006, 92557070007, 92557070008, 92557070009, 92557719005

METHOD BLANK: 2237303

Matrix: Water

Associated Lab Samples: 92557070001, 92557070002, 92557070003, 92557070004, 92557070005, 92557070006, 92557070007, 92557070008, 92557070009, 92557719005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.384 ± 0.355 (0.721) C:77% T:80%	pCi/L	09/17/21 14:10	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

---

### 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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES UPGRADIENT RADS

Pace Project No.: 92557070

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557070001	UP-DUP-1	EPA 9315	463401		
92557070002	GWA-2	EPA 9315	463401		
92557070003	YGWA-14S	EPA 9315	463401		
92557070004	UP-DUP-2	EPA 9315	463401		
92557070005	YGWA-1D	EPA 9315	463401		
92557070006	YGWA-1I	EPA 9315	463401		
92557070007	YGWA-3D	EPA 9315	463401		
92557070008	YGWA-47	EPA 9315	463401		
92557070009	YGWA-30I	EPA 9315	463401		
92557719005	YGWA-39	EPA 9315	463401		
92558238001	YGWA-2I	EPA 9315	463915		
92558238002	YGWA-3I	EPA 9315	463915		
92558240001	UP-FB-2	EPA 9315	463405		
92558240002	YGWA-4I	EPA 9315	463405		
92558240003	YGWA-5I	EPA 9315	463405		
92558240004	UP-DUP-3	EPA 9315	463405		
92558240005	YGWA-5D	EPA 9315	463405		
92558240006	YGWA-17S	EPA 9315	463405		
92558240007	YGWA-18S	EPA 9315	463405		
92558240008	YGWA-18I	EPA 9315	463405		
92558240009	YGWA-20S	EPA 9315	463405		
92558240014	YGWA-21I	EPA 9315	463915		
92559523001	YGWA-40	EPA 9315	463915		
92557070001	UP-DUP-1	EPA 9320	463398		
92557070002	GWA-2	EPA 9320	463398		
92557070003	YGWA-14S	EPA 9320	463398		
92557070004	UP-DUP-2	EPA 9320	463398		
92557070005	YGWA-1D	EPA 9320	463398		
92557070006	YGWA-1I	EPA 9320	463398		
92557070007	YGWA-3D	EPA 9320	463398		
92557070008	YGWA-47	EPA 9320	463398		
92557070009	YGWA-30I	EPA 9320	463398		
92557719005	YGWA-39	EPA 9320	463398		
92558238001	YGWA-2I	EPA 9320	463914		
92558238002	YGWA-3I	EPA 9320	463914		
92558240001	UP-FB-2	EPA 9320	463403		
92558240002	YGWA-4I	EPA 9320	463403		
92558240003	YGWA-5I	EPA 9320	463403		
92558240004	UP-DUP-3	EPA 9320	463403		
92558240005	YGWA-5D	EPA 9320	463403		
92558240006	YGWA-17S	EPA 9320	463403		
92558240007	YGWA-18S	EPA 9320	463403		
92558240008	YGWA-18I	EPA 9320	463403		
92558240009	YGWA-20S	EPA 9320	463403		
92558240014	YGWA-21I	EPA 9320	463914		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES UPGRADIENT RADS  
Pace Project No.: 92557070

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92559523001	YGWA-40	EPA 9320	463914		
92557070001	UP-DUP-1	Total Radium Calculation	464972		
92557070002	GWA-2	Total Radium Calculation	464972		
92557070003	YGWA-14S	Total Radium Calculation	464972		
92557070004	UP-DUP-2	Total Radium Calculation	464972		
92557070005	YGWA-1D	Total Radium Calculation	464972		
92557070006	YGWA-11	Total Radium Calculation	464973		
92557070007	YGWA-3D	Total Radium Calculation	464973		
92557070008	YGWA-47	Total Radium Calculation	464973		
92557070009	YGWA-30I	Total Radium Calculation	464973		
92557719005	YGWA-39	Total Radium Calculation	465155		
92558238001	YGWA-2I	Total Radium Calculation	465555		
92558238002	YGWA-3I	Total Radium Calculation	465555		
92558240001	UP-FB-2	Total Radium Calculation	465554		
92558240002	YGWA-4I	Total Radium Calculation	465554		
92558240003	YGWA-5I	Total Radium Calculation	465554		
92558240004	UP-DUP-3	Total Radium Calculation	465554		
92558240005	YGWA-5D	Total Radium Calculation	465554		
92558240006	YGWA-17S	Total Radium Calculation	465554		
92558240007	YGWA-18S	Total Radium Calculation	465554		
92558240008	YGWA-18I	Total Radium Calculation	465554		
92558240009	YGWA-20S	Total Radium Calculation	465554		
92558240014	YGWA-21I	Total Radium Calculation	465783		
92559523001	YGWA-40	Total Radium Calculation	465559		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

**Sample Condition Upon Receipt**

Client Name: Gf Power

Project #:

**WO# : 92557089**



Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 8/23/21 CNR

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 083 Type of Ice:  Wet  Blue  None

Cooler Temp: 2.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.0

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-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	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9. <u>EB-1 + FB-1 collection time relative listed on COC but containers are on AP2 work order</u>
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



## 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: Georgia Power  
 Address: Atlanta, GA

Section B  
 Required Project Information:  
 Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Project Name: *US-CORP/B&B*  
 Requested Due Date: 10 Day

Section C  
 Invoice Information:  
 Address: Southern Co  
 Company Name  
 Page Queue  
 Kevin Herring/Nicole D'Olio  
 Requested Analysis Filtered (Y/N)  
 GA

Page: 1 of 1  
*[Signature]*

ITEM #	MATRIX	SAMPLE ID		COLLECTED		PRESERVATIVES								ANALYSES TEST						SAMPLER NAME AND SIGNATURE																	
		One Character per box (A-Z, 0-9, /, .)	Sample IDs must be unique	START DATE	START TIME	END DATE	END TIME	UNPRESERVED	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS: 2450C	Anions Suite 303 D	App III Metals	App IV Metals	Mercury: 7470A	Radium 226/228: 93159920	App I and II Metals 6020B Ca, Ni, Ag, Tl, V, Z	Residual Chlorine (Y/N)	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)										
1	UP Dup 1	SAMPLE ID		DATE	TIME	DATE	TIME	UNPRESERVED	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS: 2450C	Anions Suite 303 D	App III Metals	App IV Metals	Mercury: 7470A	Radium 226/228: 93159920	App I and II Metals 6020B Ca, Ni, Ag, Tl, V, Z	Residual Chlorine (Y/N)	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)										
2	GWA 2			01/20	1200			5.1								x	x	x	x	x	x	x															
3																																					
4																																					
5																																					
6																																					
7																																					
8																																					
9																																					
10																																					
11																																					
12																																					

RELINQUISHED BY / AFFILIATION: *[Signature]*  
 DATE: 01/20  
 TIME: 1200

ACCEPTED BY / AFFILIATION: *[Signature]*  
 DATE: 01/20  
 TIME: 1745

SAMPLER NAME AND SIGNATURE:  
 PRINT Name of SAMPLER: *[Signature]*  
 SIGNATURE of SAMPLER: *[Signature]*  
 DATE Signed: 01/20/12  
 TEMP in C:   
 Received on Ice (Y/N):   
 Custody Sealed Cooler (Y/N):   
 Samples Intact (Y/N):

## CHAIN-OF-CUSTODY / Analytical Request Document

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

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Page Terms and Conditions found at <https://info.parcslabs.com/instru/jvs-standard-terms.pdf>

Page: **2** of **4**

ITEM #	SAMPLE ID <small>One Character per box (A-Z, 0-9, ., -)</small> <small>Sample IDs must be unique</small>	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION		Preservatives				Analyses Test				Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)	SAMPLE CONDITIONS										
				START	END	DATE	TIME	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	Asp III/IV Metals	RAD 9315/9320		TEMP in C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)							
1			WT			8/20	070	5								X	X	X	X												
2			WT													X	X	X	X												
3	MT-2-FB-1		WT	8/17	15:30	05		5								X	X	X	X												
4			WT													X	X	X	X												
5			WT													X	X	X	X												
6			WT													X	X	X	X												
7			WT													X	X	X	X												
8			WT													X	X	X	X												
9	YQWA-3D		WT													X	X	X	X												
10	YQWA-1A5		WT													X	X	X	X												
11	UP-DUP-2		WT	8/17				4								X	X	X	X												
12	TDM-22		WT													X	X	X	X												
ADDITIONAL COMMENTS																															
RELINQUISHED BY / AFFILIATION												DATE				TIME				ACCEPTED BY / AFFILIATION				DATE				TIME			
<i>[Signature]</i>												8/20				17:30				<i>[Signature]</i>				8/21				17:30			
RECEIVED BY / AFFILIATION												DATE				TIME				SAMPLER NAME AND SIGNATURE				DATE SIGNED				TEMP IN C			
<i>[Signature]</i>												8/20				17:30				<i>[Signature]</i>				8/20				17:30			
SAMPLER NAME AND SIGNATURE																															
PRINT NAME OF SAMPLER:												SIGNATURE OF SAMPLER:												DATE SIGNED:				TEMP IN C:			
JAMES SWANSON												<i>[Signature]</i>												8/20/22				5.0			



Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/hub/submit-standards/terms.pdf>

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 2 of 4

**Section A**  
**Required Client Information:**  
 Company: Pacelabs (CA Power)  
 Address: 2835 Paces Ferry Rd  
 City: Atlanta, GA 30339  
 Phone: [ ] Fax: [ ]  
 Registered Date: [ ]

**Section B**  
**Required Project Information:**  
 Report To: Buck Stever  
 Copy To: [ ]  
 Project Name: [ ]  
 Project #: [ ]

**Section C**  
**Invoice Information:**  
 Attention: [ ]  
 Company Name: [ ]  
 Address: [ ]  
 Pace Quote: [ ]  
 Pace Project Manager: nicole.d@pacelabs.com  
 Pace Profile #: 10240

**Section D**  
 Regulatory Agency: [ ]  
 State/Location: CA

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		DATE		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analyse Test	Requested Analysis Filled (Y/N)	Residual Chlorine (Y/N)
			START	END	TIME	TIME						
			DATE	TIME	DATE	TIME						
1	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		
2	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		
3	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		
4	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		
5	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		
6	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		
7	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		
8	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		
9	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		
10	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		
11	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		
12	WT	WT	8/17	15:30	8/19	12:20	5			X X X X X X X X		

**ADDITIONAL COMMENTS**  
 JS YGWA-30I

**RELINQUISHED BY / AFFILIATION**  
 [Signature] [Name]

**DATE** [8/19] **TIME** [12:20]

**ACCEPTED BY / AFFILIATION**  
 [Signature] [Name]

**DATE** [8/21] **TIME** [17:52]

**SAMPLER NAME AND SIGNATURE**  
 PRINT Name of SAMPLER: [Name]  
 SIGNATURE of SAMPLER: [Signature]

**DATE Signed** [8/20/12]

**TEMP in C** 5.0

**Received on Ice (Y/N)** Y

**Sealed in Coolers (Y/N)** N

**Samples Intact (Y/N)** Y

**PH: 5.43**

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: **3** of **9**

**Section A** Required Client Information: **Section B** Required Project Information: **Section C** Invoice Information:

Company: Georgia Power Address: Atlanta, GA		Report To: SCS Contacts Copy To: Arcadis-Contacts		Member: Southern Co	
Email To: SCS and Arcadis Contacts		Purchase Order #: <b>1185-ABD</b>		Page Quote	
Phone: <b>404-875-7400</b>		Project Name: <b>SPURDASCO</b>		Page Project Manager: <b>Kevin Herring/Nicole D'Orso</b>	
Requested Due Date: <b>10 Day</b>		Project Number: <b>10840</b>		Page Profile # <b>10840</b>	
		Requested Analysis Filtered (Y/N)		Regulatory Agency: <b>CCR</b>	
				State/Location: <b>GA</b>	

ITEM #	SAMPLE ID (A-Z, 0-9, -) Samples must be unique	MATRIX Droplet Water Water Waste Water Product Sludge Oil Mud Air Other Tissue	CODE DW WT WW P SL OL WAF AR OT TS	COLLECTED				SAMPLE TEMP AT COLLECTION	PRESERVATIVES							Analyses Test	Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	PH	SAMPLE CONDITIONS																
				MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME		DATE	TIME	Unpreserved	H2SO4	HNO3	HCl	NaOH							Na2S2O3	Methanol	Other													
1	<del>Y6WA-1D</del>																																				
2	<del>Y6WA-1E</del>																																				
3	<del>Y6WA-1F</del>																																				
4	<del>Y6WA-1G</del>																																				
5	<del>Y6WA-1H</del>																																				
6	<del>Y6WA-1I</del>																																				
7	<del>Y6WA-1J</del>																																				
8	<del>Y6WA-1K</del>																																				
9	<del>Y6WA-1L</del>																																				
10	<del>Y6WA-1M</del>																																				
11	<del>Y6WA-1N</del>																																				
12	<del>Y6WA-1O</del>																																				

SAMPLER NAME AND SIGNATURE		DATE SIGNED		TEMP in C	R Received on Ice (Y/N)	Cooled/Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER	SIGNATURE of SAMPLER	DATE	TIME				
Mark Chesel		8/20/12					





Document Name:  
**Sample Condition Upon Receipt (SCUR)**  
 Document No.:  
**F-CAR-CS-033-Rev.07**

Document Revised: October 28, 2020  
 Page 1 of 2  
 Issuing Authority:  
 Pace Carolinas Quality Office

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
Upon Receipt

Client Name:

*GA Power*

Project #:

**WO# : 92557720**

PM: NMG

Due Date: 09/09/21

CLIENT: GA-GA Power

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *8/27/21*  
*COH*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID:

*083*

Type of Ice:

Wet

Blue

None

Cooler Temp:

*3.0*

Correction Factor:  
Add/Subtract (°C)

*0.0*

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

*3.0*

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		6.
-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		7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		9.
-Includes Date/Time/ID/Analysis Matrix:	<i>W</i>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_

# 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: Georgia Power  
 Address: Atlanta, GA  
 Email To: SCS and Arcadis Contacts  
 Phone: \_\_\_\_\_  
 Requested Due Date: 10 Day

**Section B**

**Requested Project Information:**

Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Project Name: Yates AWA-R6 (downgradient)  
 Project Number: \_\_\_\_\_

**Section C**

**Invoice Information:**

Client: Southern Co.  
 Address: \_\_\_\_\_  
 Page Order: \_\_\_\_\_  
 Pace Project Manager: Kevin Hemming/Nicole D'Oliva  
 Pace Profile #: 10840

Page: \_\_\_\_\_ of \_\_\_\_\_

Regulatory Agency: COR

State / Location: GA

ITEM #	MATRIX	CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analyses Test	Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	pH:		
					START DATE	END DATE			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol						Other	
1																						
2	YSWA 39	WT G			8/26/21	12:35		2													pH: 6.91	
3		WT G																				pH:
4		WT G																				
5		WT G																				
6		WT G																				
7		WT G																				
8		WT G																				
9		WT G																				
10		WT G																				
11		WT G																				
12		WT G																				

**REINQUISHED BY / AFFILIATION:** \_\_\_\_\_  
**DATE:** 8/26/21  
**TIME:** 14:10

**ACCEPTED BY / AFFILIATION:** \_\_\_\_\_  
**DATE:** 8/26/21  
**TIME:** 14:10

**SAMPLER NAME AND SIGNATURE:** Kate Prokencic  
**PRINT Name of SAMPLER:** Kate Prokencic  
**SIGNATURE OF SAMPLER:** \_\_\_\_\_  
**DATE Signed:** 8-26-21

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



Document Name:  
Sample Condition Upon Receipt(SCUR)

Document Revised: October 28, 2020  
Page 1 of 2

Document No.:  
F-CAR-CS-033-Rev.07

Issuing Authority:  
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
Upon Receipt

Client Name:

GA Power

Project #:

**WO# : 92558251**



Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/initials Person Examining Contents: 8/27/21  
COM

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Thermometer:  IR Gun ID: 083 Type of Ice:  Wet  Blue  None

Yes  No  N/A

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.0

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  
 Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-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	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



# 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: Georgia Power  
Address: Atlanta, GA  
Email To: SCS and Arcadis Contacts  
Phone: \_\_\_\_\_  
Requested Due Date: 10 Day

### Section B

#### Required Project Information:

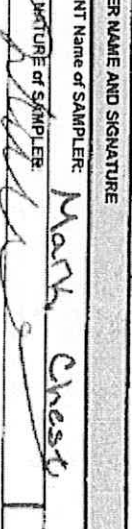
Report To: SCS Contacts  
Copy To: Arcadis Contacts  
Purchase Order #: \_\_\_\_\_  
Project Name: Yates AP-2 (upgradient)  
Project Number: \_\_\_\_\_

### Section C

#### Invoice Information:

Attention: Southern Co.  
Company Name  
Address  
Pace Quote  
Pace Project Manager: Kevin Herring/Nicole D'Osio  
Pace Profile #: 10840

Page : 1 of

ITEM #	MATRIX	CODE	COLLECTED	START		END		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analyses Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)		
				DATE	TIME	DATE	TIME												
YGWA-21	One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	DW WT WW P SL OL WP AR QT TS																	
YGWA-31				8/27	14:33									8/27	14:30				
<b>SAMPLER NAME AND SIGNATURE</b>																			
PRINT Name of SAMPLER: Mark Chest																			
SIGNATURE of SAMPLER: 																			
DATE Signed: _____																			
Amions Suite 300.0 (CI F, Suite)				8/27	14:40									8/27	14:30				
App III Metals: Boron 80208, Ca 80100																			
App IV Metals: Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)																			



Document Name:  
**Sample Condition Upon Receipt(SCUR)**  
 Document No.:  
**F-CAR-CS-033-Rev.07**

Document Revised: October 28, 2020  
 Page 1 of 2  
 Issuing Authority:  
 Pace Carolinas Quality Office

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
Upon Receipt

Client Name:

*GA Power*

Project #:

**WO# : 92558254**

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_



Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *8/27/21*  
*COH*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Thermometer:  IR Gun ID: *083* Type of Ice:  Wet  Blue  None

Yes  No  N/A

Cooler Temp: *3.0* Correction Factor: Add/Subtract (°C) *0.0*

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): *3.0*

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  
 Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-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	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9.	<i>AMA-EB-1 labeled UP-EB-1 but time match 8/26/21 1600</i>
-Includes Date/Time/ID/Analysis Matrix:	<i>W</i>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



**CHAIN-OF-CUSTODY / Analytical Request Document**

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

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/ufsr/pas-standard-terms.pdf>.

**Section A** Required Client Information:  
 Company: Arcadis (GA Power)  
 Address: 2839 Paces Ferry Rd  
 Suite 900, Atlanta, GA 30339  
 Email:  
 Phone:  
 Requested Due Date:

**Section B** Required Project Information:  
 Report To: Brady Steever  
 Copy To:  
 Project Name: Yates AMA  
 Project Order #: 10840  
 Project #: 10840  
 Requested Analysis Filtered (Y/N):

**Section C** Invoice Information:  
 Attention:  
 Company Name:  
 Address:  
 Pace Quote:  
 Pace Project Manager: nicole.dolezal@pacelabs.com  
 Pace Profile #: 10840  
 Regulatory Agency:  
 State / Location: GA

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analyse Test	Y/N	Residual Chlorine (Y/N)									
			START DATE	END DATE			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol				Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity			
1	AMA-EB-1	WT													X	X	X								
2	AMA-EB-2	WT													X	X	X								
3	AMA-FB-1	WT													X	X	X								
4	AMA-FB-2	WT													X	X	X								
5	UP-EB-1	WT													X	X	X								
6	UP-FB-1	WT	8/24/17	10											X	X	X								
7	UP-EB-2	WT													X	X	X								
8	UP-FB-2	WT													X	X	X								
9	YGWA-4I	WT	8/24/17	11:59											X	X	X								
10	YGWA-5I	WT	8/24/17	16:28											X	X	X								
11	UP-DUP-3	WT	8/24/17	-											X	X	X								
12	YGWA-5D	WT	8/24/17	13:55											X	X	X								

ADDITIONAL COMMENTS

REQUISITIONED BY / AFFILIATION: *Michelle Pass*

ACCEPTED BY / AFFILIATION: *Chandra Fike*

DATE: 8/27/17

TIME: 1640

DATE: 8/27/17

TIME: 1640

TEMP in C

Received on Ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE: *Michelle Pass*

PRINT Name of SAMPLER: *Michelle Pass*

SIGNATURE OF SAMPLER: *Michelle Pass*

DATE Signed: 8/27/17

SAMPLE CONDITIONS: *7.1g SU*

*5.82*

*5.51 SU*



Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/ndts/pas-standard-terms.pdf>

# 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: Arcadis (GA Power) Address: 2539 Paces Ferry Rd Suite 500, Atlanta, GA 30339

Section B Required Project Information: Report To: Becky Steever Project Name: Yates AMA

Section C Invoice Information: Attention: Company Name: Address: Port Quote: Pace Project Manager: nicole.dolan@pacelabs.com, Pace Profile #: 10840

Requested Analysis Filtered (Y/N) State / Location: GA

ITEM #	MATRIX	CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analyses Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	PH
					START	END			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other				
13	YGWA-17S	WT	WT	WT	8/17	1045		5												
14	YGWA-18S	WT	WT	WT	8/16	1535		5												
15	YGWA-181	WT	WT	WT	8/17	0935		5												
16	YGWA-20S	WT	WT	WT	8/17	1310		5												
17	YGWA-211	WT	WT	WT																
18	YGWC-23S	WT	WT	WT																
19	YGWC-24SA	WT	WT	WT																
20	AMA-DUP 1	WT	WT	WT																
21	YGWC-36A	WT	WT	WT																
22	YGWC-49	WT	WT	WT																
23	AMA-EB-1				8/16	1600		5												
24	AMA-EB-2				8/17	1340		5												

ADDITIONAL COMMENTS: Relinquished by Affiliation: JTB Arcadis 8/17

ACCEPTED BY / AFFILIATION: Nicole Dolan 8/17/14 16:40

SAMPLER NAME AND SIGNATURE: PRINT Name of SAMPLER: Kate Swanson SIGNATURE of SAMPLER: DATE Signed: 8/12/12

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



Document Name: <b>Sample Condition Upon Receipt(SCUR)</b>	Document Revised: October 28, 2020 Page 1 of 2
Document No.: <b>F-CAR-CS-033-Rev.07</b>	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

GA Power

Project #:

**WO# : 92558254**

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

PM: NMG Due Date: 09/13/21  
CLIENT: GA-GA Power

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 9/21/21 kevl

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Yes  No  N/A

Cooler Temp: 3.9 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.0

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-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	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_

# 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: Georgia Power  
 Address: Atlanta, GA

**Section B** Required Project Information:  
 Report To: SCS Contacts  
 Copy To: SCS Contacts  
 Project Name: YATES AMA  
 Project Number: [Blank]

**Section C** Invoice Information:  
 Attention: Southern Co.  
 Company Name: [Blank]

Address: [Blank]  
 Pace Queue: [Blank]  
 Pace Project Manager: Kevin Herring/Nicole D'Oleo  
 Pace Profile #: 10840

Regulatory Agency: CCR  
 State / Location: GA

Page:  Of

ITEM #	MATRIX	CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS							Analyses Test		Residual Chlorine (Y/N)															
					START	END						Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y		N														
1	DRIP-TEST 12	WT G																																		
2	DRIP-TEST 12	WT G																																		
3	DRIP-TEST 12	WT G																																		
4	DRIP-TEST 12	WT G																																		
5	DRIP-TEST 12	WT G																																		
6	DRIP-TEST 12	WT G																																		
7	DRIP-TEST 12	WT G																																		
8	DRIP-TEST 12	WT G																																		
9	DRIP-TEST 12	WT G																																		
10	DRIP-TEST 12	WT G																																		
11	DRIP-TEST 12	WT G																																		
12	DRIP-TEST 12	WT G																																		

Additional Comments: [Blank]

Relinquished By / Affiliation: [Blank] DATE: [Blank] TIME: [Blank]

Accepted By / Affiliation: [Blank] DATE: [Blank] TIME: [Blank]

Temp in C: [Blank]

Received on Ice (Y/N): [Blank]

Custody Sealed: [Blank]

Cooler: [Blank]

Number of Samples: [Blank]

Sampler Name and Signature: [Blank]

Print Name of Sampler: [Blank]

Signature of Sampler: [Blank]

Date Signed: [Blank]



Document Name: <b>Sample Condition Upon Receipt(SCUR)</b>	Document Revised: October 28, 2020 Page 1 of 2
Document No.: <b>F-CAR-CS-033-Rev.07</b>	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: ARCADIS - GALOWE

Project: **WO# : 92559527**

Courier:  Commercial  Fed Ex  UPS  USPS  Client  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 9/3/21  
COJ

Packing Material:  Bubble Wrap  Bubble Bags  None  Other  
Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Biological Tissue Frozen?  Yes  No  N/A

Cooler Temp: 4.9 Correction Factor: Add/Subtract (°C) 10.1  
Cooler Temp Corrected (°C): 5.0

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (  N/A, water sample)  
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		6.
-Pace Containers Used?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		8.
Sample Labels Match COC?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		9.
-Includes Date/Time/ID/Analysis Matrix:	<u>9/3/21 COJ W</u>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY Field Data Required?  Yes  No

Lot ID of split containers: \_\_\_\_\_

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_  
Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



# CHAIN-OF-CUSTODY / Analytical Request Document

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

www.paceanalytical.com

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

**Section A** Required Client Information: Company: Arcadis (GA Power) Address: 2839 Paces Ferry Rd Suite 900 Atlanta, GA 30339

**Section B** Required Project Information: Report To: Becky Steever Copy To: Project Name: Yates R6 Purchase Order #: Project #

**Section C** Invoice Information: Attention: Company Name: Address: Pace Quote: Pace Project Manager: nicole.dolce@pacelabs.com Pace Profile #: 10840

**Regulatory Agency** State / Location: GA

Page : 1 Of 1

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analyzes Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)
			START	END						
1	ACQUA-40	WT								
2	ACQUA-40	WT	9/12/20							Y
3	ACQUA-40	WT								
4	ACQUA-40	WT								
5	ACQUA-40	WT								
6	ACQUA-40	WT								
7	ACQUA-40	WT								
8	ACQUA-40	WT								
9	ACQUA-40	WT								
10	ACQUA-40	WT								
11	ACQUA-40	WT								
12	ACQUA-40	WT								

ADDITIONAL COMMENTS	REQUISITIONED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Michelle Pass	9/13/21	1730	Michelle Pass	9/13/21	1735	4.9 Y

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Matt Crost

SIGNATURE of SAMPLER: [Signature] DATE Signed: 9/13/21

TEMP in C

Received on Ice (Y/N)

Cusody Sealed Cooler (Y/N)

Samples Intact (Y/N)



# Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228  
Analyst: JC2  
Date: 9/15/2021  
Worklist: 62588  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2237303
MB concentration:	0.384
MB 2 Sigma CSU:	0.355
MB MDC:	0.721
MB Numerical Performance Indicator:	2.12
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCSD (Y or NJ)?	Y
Count Date:	9/17/2021	LCSD62588	9/17/2021
Spike I.D.:	21-029		21-029
Decay Corrected Spike Concentration (pCi/mL):	38.186		38.186
Volume Used (mL):	0.10		0.10
Aliquot Volume (L, g, F):	0.815		0.803
Target Conc. (pCi/L, g, F):	4.667		4.757
Uncertainty (Calculated):	0.230		4.993
Result (pCi/L, g, F):	5.454		1.116
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.22		0.41
Numerical Performance Indicator:	116.37%		104.96%
Percent Recovery:	N/A		N/A
Status vs Numerical Indicator:	Pass		Pass
Upper % Recovery Limits:	135%		135%
Lower % Recovery Limits:	60%		60%

Duplicate Sample Assessment		Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	LCSD62588	Sample I.D.:	Sample I.D.
Duplicate Sample I.D.:	LCSD62588	Sample MS I.D.:	Sample MS I.D.
Sample Result (pCi/L, g, F):	5.454	Sample MSD I.D.:	Sample MSD I.D.
Sample Duplicate Result (pCi/L, g, F):	1.212	Sample Matrix Spike Result:	Sample Matrix Spike Result
Sample Duplicate Result (pCi/L, g, F):	4.993	Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.116	Duplicate Numerical Performance Indicator:	Duplicate Numerical Performance Indicator
Are sample and/or duplicate results below RL?	NO	(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	MS/MSD Duplicate Status vs Numerical Indicator:
Duplicate Numerical Performance Indicator:	0.549	MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs RPD:
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.31%	% RPD Limit:	% RPD Limit:
Duplicate Status vs RPD:	Pass		
Duplicate Status vs RPD:	36%		

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

Comments:

*g/da*

*Chlorine*

# Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226  
Analyst: CLA  
Date: 9/13/2021  
Worklist: 62589  
Matrix: DW



Method Blank Assessment	
MB Sample ID	2237310
MB concentration:	-0.086
M/B Counting Uncertainty:	0.064
MB MDC:	0.268
MB Numerical Performance Indicator:	-2.64
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCS (Y or N)?	
	LCS62589	LCS62589
Count Date:	9/21/2021	9/21/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.034	24.034
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.510
Target Conc. (pCi/L, g, F):	4.754	4.716
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.107	4.962
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.566	0.566
Numerical Performance Indicator:	1.17	0.85
Percent Recovery:	107.43%	105.21%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment	LCS (Y or N)?	
	LCS62589	LCS62589
Sample I.D.:	92557070001	92557070001
Duplicate Sample I.D.:	92557070001DUP	92557070001DUP
Sample Result (pCi/L, g, F):	5.107	0.325
Sample Result Counting Uncertainty (pCi/L, g, F):	0.586	0.189
Sample Duplicate Result (pCi/L, g, F):	4.962	0.574
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.566	0.208
Are sample and/or duplicate results below RL?	NO	See Below #
Duplicate Numerical Performance Indicator:	0.349	1.735
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.08%	55.31%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Pass	Fail**
% RPD Limit:	25%	25%

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

Comments:

\*\*\*Batch must be re-prepped due to unacceptable precision\*\*\*

Handwritten: N/A, 9/12/21

Handwritten: 10/12/21

Handwritten: 9/21/21

Georgia Power Co. – Plant Yates

# Data Review Report

Metals, Radium, and General Chemistry Analyses

SDGs #92557049 and 92557073

Analyses Performed By:

Pace Analytical Services – Asheville, North Carolina

Pace Analytical Services – Peachtree Corners, Georgia

Pace Analytical Services – Greensburg, Pennsylvania

Report #43278R

Review Level: Tier II

Project: 30053437.00004

## Summary

This Data Review Report summarizes the review of Sample Delivery Groups (SDGs) #92557049 and 92557073 for samples collected in association with the Georgia Power Company – Plant Yates. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the chain of custody form and a table summarizing the data validation qualifiers. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
					RAD	MET	GEN CHEM
YGWC-52	92557049001 92557073001	Water	8/20/2021		X	X	X
YGWC-44	92557049002 92557073002	Water	8/19/2021		X	X	X
YGWC-45	92557049003 92557073003	Water	8/19/2021		X	X	X
AP-1-EB-1	92557049004 92557073004	Water	8/19/2021		X	X	X
AP-1-FB-1	92557049005 92557073005	Water	8/19/2021		X	X	X
YGWC-46A	92557049006 92557073006	Water	8/27/2021		X	X	X
AP-1-DUP-1	92557049007 92557073007	Water	8/27/2021	YGWC-46A	X	X	X

**Notes:**

1. Metals and total dissolved solids (TDS) analysis performed by Pace Analytical Services – Peachtree Corners, Georgia.
2. Anions (chloride, fluoride, and sulfate) analysis performed by Pace Analytical Services – Asheville, North Carolina.
3. Radium analysis performed by Pace Analytical Services – Greensburg, Pennsylvania.
4. pH analysis performed as a field measurement.

## Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

**Note:**

QA = quality assurance

## Inorganic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010D, 6020B, 7470A, 9315, and 9320; Standard Method (SM) SM4500-H+ B and SM2540C; and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
  - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
  - E The reported value is estimated due to the presence of interference.
  - N Spiked sample recovery is not within control limits.
  - \* Duplicate analysis is not within control limits.
- Validation Qualifiers
  - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
  - UB Analyte considered non-detect at the listed value due to associated blank contamination.
  - R The sample results are rejected.

Two facts should be noted by all data users. First, the “R” flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. “R” values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if

## Data Review Report

it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

## Metals Analyses

### 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010D/6020B	Water	180 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.

**Note:**

s.u. = standard units

All samples were analyzed within the specified holding times.

### 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Metals were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

### 3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

#### 3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

The MS/MSD analysis performed using sample YGWC-52 in association with SW-846 7470A analysis exhibited recoveries within the control limits.

MS/MSD analysis was not performed using a sample from this SDG in association with SW-846 6010D and SW-846 6020B analysis.



### 3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis in association with SW-846 7470A. The MS/MSD recoveries exhibited acceptable RPDs.

Laboratory duplicate or MS/MSD analysis was not performed using a sample from this SDG in association with SW-846 6010D and SW-846 6020B analysis.

### 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-46A / AP-1-DUP-1	Calcium	108	107	0.9%
	Barium	0.043	0.046	6.7%
	Boron	1.9	1.9	0.0%
	Arsenic	0.0022 J	0.0022 J	AC
	Cobalt	0.00056 J	0.00060 J	
	Lithium	0.014 J	0.014 J	
	Molybdenum	0.0022 J	0.0023 J	

**Note:**

AC = Acceptable

The differences in the results between the parent sample YGWC-46A and field duplicate sample AP-1-DUP-1 were acceptable.

### 5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

## **6. System Performance and Overall Assessment**

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

## Data Validation Checklist for Metals

METALS: SW-846 6010D/6020B/7470A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
<b>Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES)</b> <b>Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)</b> <b>Atomic Absorption – Manual Cold Vapor (CV)</b>					
<b>Tier II Validation</b>					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Laboratory Duplicate (RPD)	X				X
Field Duplicate (RPD)		X		X	

**Notes:**

%R     Percent recovery

RPD     Relative percent difference

## General Chemistry Analyses

### 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Total Dissolved Solids (TDS) by SM2540C	Water	7 days from collection to analysis	Cool to <6°C
Chloride, Fluoride, and Sulfate by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

### 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

### 3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

#### 3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

MS/MSD analysis was not performed using a sample from this SDG in association with anions analysis.

### 3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

The laboratory duplicate analysis performed using sample YGWC-45 in association with TDS analysis exhibited an RPD within the control limit.

Laboratory duplicate or MS/MSD analysis was not performed using a sample from this SDG in association with anions analysis.

### 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-46A / AP-1-DUP-1	TDS	810	810	0.0%
	Chloride	29.3	29.2	0.3%
	Fluoride	0.13	0.12	AC
	Sulfate	423	427	0.9%

**Note:**

AC = Acceptable

The differences in the results between the parent sample YGWC-46A and field duplicate sample AP-1-DUP-1 were acceptable.

### 5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

### 6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

## Data Validation Checklist for General Chemistry

General Chemistry: SM4500-H+ B, SM2540C, USEPA 300.0	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
<b>Miscellaneous Instrumentation</b>					
<b>Tier II Validation</b>					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Laboratory Duplicate (RPD)		X		X	
Field Duplicate (RPD)		X		X	

**Notes:**

%R     Percent recovery

RPD     Relative percent difference

# Radiological Analyses

## 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

**Note:**

s.u. = standard units

All samples were analyzed within the specified holding times.

## 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and field/rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field/rinse blanks measure contamination of samples during field operations.

Blank results should be verified to be accurately reported and that tolerance limits ( $\pm 2$  sigma or standard deviation) were not exceeded; and blank results verified to be less than the reporting limit (RL) of 1 pCi/L.

For blanks to be considered not applicable, verify net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria. If either of these criteria is true, the blank is considered not suspect of contamination (or non-detect).

1. Is the blank result less than the uncertainty and less than the minimum detectable concentration (MDC)?
2. Does the blank have an uncertainty greater than the result (or indistinguishable from background) or does the blank result fall between its uncertainty and its MDC?

If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used in determining the effect of possible blank contamination on the sample results:

$$\text{Normalized absolute difference}_{\text{MethodBlank}} = \frac{| \text{Sample} - \text{Blank} |}{\sqrt{(U_{\text{Sample}})^2 + (U_{\text{Blank}})^2}}$$

Where:

$U_{\text{Sample}}$  = uncertainty of the sample

$U_{\text{Blank}}$  = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

**Note:**

\* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

Radium-228, Radium-226, and total Radium were detected in the QA blanks, however, the activities were measured as less than the uncertainty and MDC or between the uncertainty and MDC as described above. Hence, the blank results are considered non-detect and no qualification of the results was required.

### 3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

#### 3.1 MS Analysis

MS samples are not typically analyzed for gamma spectral content due to the inability of the laboratory to homogenize spike material with the sample.

If performed, the spike analysis must exhibit a percent recovery within the control limits of 70% to 130%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits.

In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of  $< \pm 3$  sigma for either.

The numerical performance indicator for a matrix spike sample is calculated by:

$$Z_{MS} = \frac{x - x_0 - c}{\sqrt{u^2(x) + u^2(x_0) + u^2(c)}}$$

Where:

x = measured concentration of the spiked sample.

$x_0$  = measured concentration of the unspiked sample.

c = spike concentration added.

$u^2(x)$ ,  $u^2(x_0)$ ,  $u^2(c)$  = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

MS analysis was not performed using a sample from this SDG.



## 3.2 Laboratory Duplicate Analysis

Duplicate analyses are indicators of laboratory precision based on each sample matrix. For replicate analysis results to be considered in agreement the duplicate error ratio (DER) must be less than 2.13. In the event the DER is outside of the limit of 2.13, a numerical indicator to make assessments is calculated, with a limit of  $\pm 3$  sigma or standard deviation.

The numerical performance indicator for laboratory duplicates is calculated by:

$$Z_{Dup} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

Where:

$x_1, x_2$  = two measured activity concentrations.

$u^2(x_1), u^2(x_2)$  = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

Laboratory duplicate analysis was not performed using a sample from this SDG.

## 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. There are no specific review criteria for radiological field replicate analyses comparability. The degree of agreement between these replicates is to be used in conjunction with all of the remaining quality control results as an aid in the decision as to the overall quality of the data. Data are not to be qualified due to field replicates alone. To determine the level of agreement between the replicates, the following guidelines have been established:

For all analyses in soil matrices, data should be considered in agreement if results are within a factor of four of each other. Data between a factor of four and five of each other should be considered as a minor discrepancy and data greater than a factor of five should be considered a major discrepancy.

The field duplicate sample results are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-46A / AP-1-DUP-1	Radium-226	0.968 $\pm$ 0.297	0.822 $\pm$ 0.266	AC
	Radium-228	0.866 $\pm$ 0.441	0.684 $\pm$ 0.420	
	Total Radium	1.83 $\pm$ 0.738	1.51 $\pm$ 0.686	

**Note:**

AC = Acceptable

The differences in the results between the parent sample YGWC-46A and field duplicate sample AP-1-DUP-1 were acceptable.

## 5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to 110% is applied to each sample spiked with either a carrier and/or a tracer.

The tracer and carrier analyses exhibited recoveries within the control limits.

## 6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 60% to 135%. In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma.

The numerical performance indicator for a laboratory control sample is calculated by:

$$Z_{LCS} = \frac{x - c}{\sqrt{u^2(x) + u^2(c)}}$$

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

$u^2(x)$  = combined standard uncertainty of the result squared.

$u^2(c)$  = combined standard uncertainty of the LCS value squared.

LCS performance is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

## 7. Isotope Identification

For sample results to be considered "non-detect", evaluate data based on the following two criteria. If either one of these criteria is true, the sample result is considered "non-detect".

1. Sample result is less than the uncertainty and less than the MDC/MDA; or
2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- YGWC-52, YGWC-44, AP-1-EB-1, and AP-1-FB-1 – Radium-226, Radium-228, and total Radium
- YGWC-45 and AP-1-DUP-1 – Radium-228

## **8. System Performance and Overall Assessment**

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

## Data Validation Checklist for Radiologicals

Radiologicals: SW-846 9315/9320	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
<b>Miscellaneous Instrumentation</b>					
<b>Tier II Validation</b>					
Holding Times		X		X	
Activity, +/- uncertainty, MDC/MDA		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Carrier (Surrogate) %R		X		X	
Tracer (Surrogate) %R		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Laboratory Duplicate (RPD)	X				X
Field Duplicate (RPD)		X		X	

**Notes:**

%R     Percent recovery

RPD     Relative percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

---

DATE: November 19, 2021

---

PEER REVIEW: Dennis Capria

DATE: November 22, 2021

---

## **Chain of Custody / Data Qualifier Summary Table**



# 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: Georgia Power  
 Address: Atlanta, GA  
 Email To: SCS and Arcadis Contacts  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Requested Due Date: 10 Day

**Section B**

**Required Project Information:**

Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Purchase Order #: \_\_\_\_\_  
 Project Name: Yates AP-1  
 Project Number: \_\_\_\_\_

**Section C**

**Invoice Information:**

Attention: Southern Co.  
 Company Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Pace Quote: \_\_\_\_\_  
 Pace Project Manager: Kevin Herring/Nicole D'Oleo  
 Pace Profile #: 10840

Page: \_\_\_\_\_ Of \_\_\_\_\_

**Regulatory Agency:** CCR  
**State / Location:** GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Y/N	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)										
				START		END				Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other		Analyses Test	TDS: 2450C	Anions Suite 300.0	App III Metals (B & Ca)	App. IV Metals	Mercury: 7470A	Radium 228/226: 9315/9320														
				DATE	TIME	DATE	TIME																																
1																																							
2																																							
3																																							
4	YGWC-46A		WT G	8/27/21	13:21				5	X	X																												
5	AP-1-DUP-1		WT G	8/27/21					5	X	X																												
6																																							
7																																							
8																																							
9																																							
10																																							
11																																							
12																																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
	NAME	AFFILIATION	DATE	TIME	DATE	TIME	NAME	AFFILIATION	DATE	TIME	DATE	TIME	TEMP	RECEIVED ON ICE
Anions Suite 300.0 (Cl, F, Sulfate)	<i>[Signature]</i>	Arcadis	8/27/21	1440			<i>[Signature]</i>		8/27	1440				
App III Metals: Boron 6020B, Ca 6010D	<i>[Signature]</i>		8/27	1640			<i>[Signature]</i>		8/27/21	1640				
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Thallium (Tl)														

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: *Mark Chase*

SIGNATURE of SAMPLER: \_\_\_\_\_ DATE Signed: \_\_\_\_\_

TEMP in C \_\_\_\_\_

Received on Ice (Y/N) \_\_\_\_\_

Custody Sealed (Y/N) \_\_\_\_\_

Cooler (Y/N) \_\_\_\_\_

Samples Intact (Y/N) \_\_\_\_\_



SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92557049						No qualifiers assigned	
92557073						No qualifiers assigned	

Georgia Power Co. – Plant Yates

# Data Review Report

Metals, Radium, and General Chemistry Analyses

SDGs #92557070 and 92557089

Analyses Performed By:

Pace Analytical Services – Asheville, North Carolina

Pace Analytical Services – Peachtree Corners, Georgia

Pace Analytical Services – Greensburg, Pennsylvania

Report #43277R

Review Level: Tier II

Project: 30052922.00004

## Summary

This Data Review Report summarizes the review of Sample Delivery Groups (SDGs) #92557070 and 92557089 for samples collected in association with the Georgia Power Company – Plant Yates. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the chain of custody form and a table summarizing the data validation qualifiers. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
					RAD	MET	GEN CHEM
UP-DUP-1	92557070001 92557089001	Water	8/20/2021	GWA-2	X	X	X
GWA-2	92557070002 92557089002	Water	8/20/2021		X	X	X
YGWA-14S	92557070003 92557089003	Water	8/19/2021		X	X	X
UP-DUP-2	92557070004 92557089004	Water	8/19/2021	YGWA-14S	X	X	X
YGWA-1D	92557070005 92557089005	Water	8/19/2021		X	X	X
YGWA-1I	92557070006 92557089006	Water	8/19/2021		X	X	X
YGWA-3D	92557070007 92557089007	Water	8/19/2021		X	X	X
YGWA-47	92557070008 92557089008	Water	8/19/2021		X	X	X
YGWA-30I	92557070009 92557089009	Water	8/19/2021		X	X	X
YGWA-39	92557719005 92557720005	Water	8/26/2021		X	X	X
UP-FB-2	92558240001 92558254001	Water	8/26/2021		X	X	X
YGWA-4I	92558240002 92558254002	Water	8/26/2021		X	X	X

Data Review Report

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
					RAD	MET	GEN CHEM
YGWA-5I	92558240003 92558254003	Water	8/26/2021		X	X	X
UP-DUP-3	92558240004 92558254004	Water	8/26/2021	YGWA-5I	X	X	X
YGWA-5D	92558240005 92558254005	Water	8/26/2021		X	X	X
YGWA-17S	92558240006 92558254006	Water	8/27/2021		X	X	X
YGWA-18S	92558240007 92558254007	Water	8/26/2021		X	X	X
YGWA-18I	92558240008 92558254008	Water	8/27/2021		X	X	X
YGWA-20S	92558240009 92558254009	Water	8/27/2021		X	X	X
YGWA-21I	92558240014 92558254014	Water	9/1/2021		X	X	X
YGWA-40	92559523001 92559527001	Water	9/3/2021		X	X	X
YGWA-2I	92558238001 92558251001	Water	8/27/2021		X	X	X
YGWA-3I	92558238002 92558251002	Water	8/27/2021		X	X	X

**Notes:**

1. Metals and total dissolved solids (TDS) analysis performed by Pace Analytical Services – Peachtree Corners, Georgia.
2. Anions (chloride, fluoride, and sulfate) and alkalinity analysis performed by Pace Analytical Services – Asheville, North Carolina.
3. Radium analysis performed by Pace Analytical Services – Greensburg, Pennsylvania.
4. pH analysis performed as a field measurement.

## Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

**Note:**

QA = quality assurance

## Inorganic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010D, 6020B, 7470A, 9315, and 9320; Standard Method (SM) SM4500-H+ B, SM2540C, and SM2320B; and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
  - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
  - E The reported value is estimated due to the presence of interference.
  - N Spiked sample recovery is not within control limits.
  - \* Duplicate analysis is not within control limits.
- Validation Qualifiers
  - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
  - UB Analyte considered non-detect at the listed value due to associated blank contamination.
  - R The sample results are rejected.

Two facts should be noted by all data users. First, the “R” flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. “R” values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if

## Data Review Report

it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

# Metals Analyses

## 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010D/6020B	Water	180 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.

**Note:**

s.u. = standard units

All samples were analyzed within the specified holding times.

## 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Metals were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

## 3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

### 3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

The MS/MSD analysis performed using sample YGWA-2I in association with SW-846 6010D analysis. The concentration of calcium in the unspiked sample was greater than four-times the amount of spike added; hence the recoveries were not evaluated, and no qualification of the results was required.



The MS/MSD analysis performed using sample YGWA-4I in association with SW-846 6010D analysis exhibited recoveries within the control limits.

The MS/MSD analysis performed using sample YGWA-5D in association with SW-846 6020B analysis exhibited recoveries within the control limits.

The MS/MSD analysis performed using sample UP-FB-2 in association with SW-846 6010D and SW-846 7470A analysis exhibited recoveries within the control limits.

### 3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPDs.

## 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWA-2 / UP-DUP-1	Calcium	26.5	26.0	1.9%
	Barium	0.036	0.033	8.7%
	Cobalt	0.074	0.065	12.9%
	Copper	0.0012 J	0.00087 J	AC
	Lithium	0.0028 J	0.0027 J	
	Nickel	0.014	0.013	
	Zinc	0.014	0.012	
YGWA-14S / UP-DUP-2	Calcium	1.2	1.3	AC
	Barium	0.0077	0.0080	
	Beryllium	0.00022 J	0.00020 J	
	Boron	0.018 J	0.017 J	

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWA-5I / UP-DUP-3	Calcium	2.5	2.5	AC
	Barium	0.019	0.018	
	Lithium	0.0032 J	0.0031 J	

**Note:**

AC = Acceptable

The differences in the results between the parent sample GWA-2 and field duplicate sample UP-DUP-1 were acceptable.

The differences in the results between the parent sample YGWA-14S and field duplicate sample UP-DUP-2 were acceptable.

The differences in the results between the parent sample YGWI-5I and field duplicate sample UP-DUP-3 were acceptable.

## 5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

## 6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

## Data Validation Checklist for Metals

METALS: SW-846 6010D/6020B/7470A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
<b>Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES)</b> <b>Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)</b> <b>Atomic Absorption – Manual Cold Vapor (CV)</b>					
<b>Tier II Validation</b>					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Laboratory Duplicate (RPD)	X				X
Field Duplicate (RPD)		X		X	

**Notes:**

%R     Percent recovery

RPD     Relative percent difference

## General Chemistry Analyses

### 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Total Dissolved Solids (TDS) by SM2540C	Water	7 days from collection to analysis	Cool to <6°C
Alkalinity by SM2320B	Water	14 days from collection to analysis	Cool to <6°C
Chloride, Fluoride, and Sulfate by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

### 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

### 3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

#### 3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis performed using sample YGWA-40 in association with alkalinity analysis exhibited recoveries within the control limits.

The MS/MSD analysis performed using sample UP-DUP-2 in association with anions analysis exhibited recoveries within the control limits.

The MS/MSD analysis performed on sample locations YGWA-2A and YGWA-2S in association with anions analysis exhibited recoveries outside of the acceptance limits as presented in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
YGWA-2A	Chloride	> 125%	> 125%
	Fluoride		
	Sulfate		
YGWA-20S	Chloride	> 125%	> 125%
	Fluoride		
	Sulfate		

The criteria used to evaluate MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery <30%	Non-detect	R
	Detect	J
MS/MSD percent recovery >125%	Non-detect	No Action
	Detect	J

### 3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

The laboratory duplicate analysis performed using samples YGWA-47, YGWA-5D, and YGWA-2I in association with TDS analysis exhibited an RPD within the control limit.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis in association with alkalinity and anions. The MS/MSD recoveries exhibited acceptable RPDs.

## 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWA-2 / UP-DUP-1	TDS	254	245	3.6%
	Chloride	5.2	5.2	0.0%
	Fluoride	0.060 J	0.079 J	AC
	Sulfate	121	120	0.8%
YGWA-14S / UP-DUP-2	TDS	54.0	55.0	1.8%
	Chloride	5.0	5.0	AC
	Sulfate	6.7	6.7	0.0%
YGWA-5I / UP-DUP-3	TDS	86.0	80.0	7.2%
	Chloride	4.3	4.3	AC
	Sulfate	2.4	2.5	

**Note:**

AC = Acceptable

The differences in the results between the parent sample GWA-2 and field duplicate sample UP-DUP-1 were acceptable.

The differences in the results between the parent sample YGWA-14S and field duplicate sample UP-DUP-2 were acceptable.

The differences in the results between the parent sample YGWI-5I and field duplicate sample UP-DUP-3 were acceptable.

## 5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

## **6. System Performance and Overall Assessment**

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

## Data Validation Checklist for General Chemistry

General Chemistry: SM4500-H+ B, SM2540C, SM2320B, USEPA 300.0	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
<b>Miscellaneous Instrumentation</b>					
<b>Tier II Validation</b>					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision (RPD)		X		X	
Laboratory Duplicate (RPD)		X		X	
Field Duplicate (RPD)		X		X	

**Notes:**

%R     Percent recovery

RPD     Relative percent difference



## Radiological Analyses

### 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

**Note:**

s.u. = standard units

All samples were analyzed within the specified holding times.

### 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and field/rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field/rinse blanks measure contamination of samples during field operations.

Blank results should be verified to be accurately reported and that tolerance limits ( $\pm 2$  sigma or standard deviation) were not exceeded; and blank results verified to be less than the reporting limit (RL) of 1 pCi/L.

For blanks to be considered not applicable, verify net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria. If either of these criteria is true, the blank is considered not suspect of contamination (or non-detect).

1. Is the blank result less than the uncertainty and less than the minimum detectable concentration (MDC)?
2. Does the blank have an uncertainty greater than the result (or indistinguishable from background) or does the blank result fall between its uncertainty and its MDC?

If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used in determining the effect of possible blank contamination on the sample results:

$$\text{Normalized absolute difference}_{\text{MethodBlank}} = \frac{| \text{Sample} - \text{Blank} |}{\sqrt{(U_{\text{Sample}})^2 + (U_{\text{Blank}})^2}}$$

Where:

$U_{\text{Sample}}$  = uncertainty of the sample

$U_{\text{Blank}}$  = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

**Note:**

\* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

Radium-228, Radium-226, and total Radium were detected in the QA blanks, however, the activities were measured as less than the uncertainty and MDC or between the uncertainty and MDC as described above. Hence, the blank results are considered non-detect and no qualification of the results was required.

### 3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

#### 3.1 MS Analysis

MS samples are not typically analyzed for gamma spectral content due to the inability of the laboratory to homogenize spike material with the sample.

If performed, the spike analysis must exhibit a percent recovery within the control limits of 70% to 130%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits.

In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of <math>\pm 3</math> sigma for either.

The numerical performance indicator for a matrix spike sample is calculated by:

$$Z_{MS} = \frac{x - x_0 - c}{\sqrt{u^2(x) + u^2(x_0) + u^2(c)}}$$

Where:

x = measured concentration of the spiked sample.

x<sub>0</sub> = measured concentration of the unspiked sample.

c = spike concentration added.

u<sup>2</sup>(x), u<sup>2</sup>(x<sub>0</sub>), u<sup>2</sup>(c) = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

MS analysis was not performed using a sample from this SDG.

### 3.2 Laboratory Duplicate Analysis

Duplicate analyses are indicators of laboratory precision based on each sample matrix. For replicate analysis results to be considered in agreement the duplicate error ratio (DER) must be less than 2.13. In the event the DER is outside of the limit of 2.13, a numerical indicator to make assessments is calculated, with a limit of  $\pm 3$  sigma or standard deviation.

The numerical performance indicator for laboratory duplicates is calculated by:

$$Z_{Dup} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

Where:

$x_1, x_2$  = two measured activity concentrations.

$u^2(x_1), u^2(x_2)$  = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

Laboratory duplicate analysis was performed using sample UP-DUP-1 in association with SW-846 9315 analysis. Since the activities were less than the MDC in the parent sample and laboratory duplicate sample, the evaluation of the laboratory duplicate samples is not applicable.

### 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. There are no specific review criteria for radiological field replicate analyses comparability. The degree of agreement between these replicates is to be used in conjunction with all of the remaining quality control results as an aid in the decision as to the overall quality of the data. Data are not to be qualified due to field replicates alone. To determine the level of agreement between the replicates, the following guidelines have been established:

For all analyses in soil matrices, data should be considered in agreement if results are within a factor of four of each other. Data between a factor of four and five of each other should be considered as a minor discrepancy and data greater than a factor of five should be considered a major discrepancy.

The field duplicate sample results are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWA-2 / UP-DUP-1	Radium-226	0.0454 $\pm$ 0.104	0.325 $\pm$ 0.195	AC
	Radium-228	0.483 $\pm$ 0.364	0.333 $\pm$ 0.342	
	Total Radium	0.528 $\pm$ 0.468	0.658 $\pm$ 0.537	
YGWA-14S / UP-DUP-2	Radium-226	0.00466 $\pm$ 0.157	0.111 $\pm$ 0.167	AC
	Radium-228	0.781 $\pm$ 0.436	1.08 $\pm$ 0.491	

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Total Radium	0.786 ± 0.593	1.19 ± 0.658	
YGWI-5I / UP-DUP-3	Radium-226	0.173 ± 0.181	0.101 ± 0.197	AC
	Radium-228	0.625 ± 0.402	0.620 ± 0.425	
	Total Radium	0.798 ± 0.583	0.721 ± 0.622	

**Note:**

AC = Acceptable

The differences in the results between the parent sample GWA-2 and field duplicate sample UP-DUP-1 were acceptable.

The differences in the results between the parent sample YGWA-14S and field duplicate sample UP-DUP-2 were acceptable.

The differences in the results between the parent sample YGWI-5I and field duplicate sample UP-DUP-3 were acceptable.

## 5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to 110% is applied to each sample spiked with either a carrier and/or a tracer.

The tracer and carrier analyses exhibited recoveries within the control limits.

## 6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 60% to 135%. In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma.

The numerical performance indicator for a laboratory control sample is calculated

by:

$$Z_{LCS} = \frac{x - c}{\sqrt{u^2(x) + u^2(c)}}$$

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

$u^2(x)$  = combined standard uncertainty of the result squared.

$u^2(c)$  = combined standard uncertainty of the LCS value squared.

LCS performance is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

## 7. Isotope Identification

For sample results to be considered “non-detect”, evaluate data based on the following two criteria. If either one of these criteria is true, the sample result is considered “non-detect”.

1. Sample result is less than the uncertainty and less than the MDC/MDA; or
2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- GWA-2, YGWA-1I, YGWA-47, YGWA-30I, UP-FB-2, YGWA-5I, UP-DUP-3, YGWA-18S, YGWA-18I, and YGWA-2I – Radium-226, Radium-228, and total Radium
- YGWA-14S and YGWA-1D – Radium-226 and total Radium
- UP-DUP-1, YGWA-39, YGWA-4I, YGWA-17S, YGWA-20S, and YGWA-40 – Radium-228 and total Radium
- UP-DUP-2 – Radium-226
- YGWA-3I – Radium-228

## 8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

## Data Validation Checklist for Radiologicals

Radiologicals: SW-846 9315/9320	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
<b>Miscellaneous Instrumentation</b>					
<b>Tier II Validation</b>					
Holding Times		X		X	
Activity, +/- uncertainty, MDC/MDA		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Carrier (Surrogate) %R		X		X	
Tracer (Surrogate) %R		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Laboratory Duplicate (RPD)		X		X	
Field Duplicate (RPD)		X		X	

**Notes:**

%R     Percent recovery

RPD     Relative percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

---

DATE: November 23, 2021

---

PEER REVIEW: Dennis Capria

DATE: December 2, 2021

---

## **Chain of Custody / Data Qualifier Summary Table**



## CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information:	<b>Section B</b> Required Project Information:	<b>Section C</b> Invoice Information:	Page: <u>1</u> of <u>4</u>
Company: Georgia Power	Report To: SCS Contacts	Attention: Southern Co.	
Address: Atlanta, GA	Copy To: Arcadis Contacts	Company Name:	
		Address:	Regulatory Agency: CCR
Email To: SCS and Arcadis Contacts	Purchase Order #: <b>UPGRADEN</b>	Place Quote:	State / Location: GA
Phone:   Fax:	Project Name: <u>Water System Pond (Morgantown)</u>	Place Project Manager: Kevin Herring/Nicole D'Oléo	
Requested Due Date: 10 Day	Project Number:	Place Profile #: 10840	

ITEM #	SAMPLE ID <small>One Character per box (A-Z, 0-9 / , -) Sample IDs must be unique</small>	MATRIX CODE <small>Drinking Water: DW Water: WT Waste Water: WW Product: P Soil/Solid: SL Oil: OL Wipe: WPR Air: LR Other: OT Tissue: TS</small>	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (S=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analytes Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)									
					START		END				Unpreserved	H2SO4	HNO3	HCl	HNOH	H2S2O3				Methanol	Other	TDS: 2450C	Arsenic Suite: 30310	App III Metals	App IV Metals	Mercury: 7470A	Barium: 20720B_01158820B	App II Lang II Metals: 6020B <small>Ca, H, Ag, Ti, V, Z</small>
					DATE	TIME	DATE	TIME																				
1	UP-DUP-1	WT	G		8/20		1																			pH: <b>5.36</b>		
2	GWA-2	WT	G		8/20	1200			5 ✓																	pH: <b>5.36</b>		
3		WT	G																									
4		WT	G																									
5		WT	G																									
6		WT	G																									
7		WT	G																									
8		WT	G																									
9		WT	G																									
10		WT	G																									
11		WT	G																									
12		WT	G																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Arsenic Suite 30310 (Cl F Sulfate)	<i>[Signature]</i> Arcadis	8/20	1730	<i>[Signature]</i> / <i>[Signature]</i>	8/20/21	1745	5.0	Y	N	Y
App II Metals: Boron 6020B, Ca 6010D										
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Thallium (Tl)										

SAMPLER NAME AND SIGNATURE		TEMP in C	Received on	Ice	Cooler (Y/N)	Custody Sealed	Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<i>[Signature]</i>							
SIGNATURE of SAMPLER:	<i>[Signature]</i>							
DATE Signed:	8/20/21							



### CHAIN-OF-CUSTODY / Analytical Request Document

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

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>.

Page: 2 of 4

<b>Section A</b> Required Client Information: Company: Arcadis (GA Power) Address: 2835 Pacas Ferry Rd City: Atlanta, GA 30339 Phone: _____ Fax: _____ Requested Due Date: _____	<b>Section B</b> Required Project Information: Report To: Becky Steever Copy To: _____ Purchase Order #: _____ Project Name: <u>Yatesville UG</u> Project #: _____	<b>Section C</b> Invoice Information: Attention: _____ Company Name: _____ Address: _____ Pace Quote #: _____ Pace Project Manager: nicole.doleg@pacelabs.com Pace Profile #: 10840	Regulatory Agency: _____ State / Location: GA
--	--	--	--

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9, .) Sample IDs must be unique	MATRIX CODE (See valid codes below)	SAMPLE TYPE (G-CRAB, C-COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Y/N	Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)				
				START		END				Unpreserved	H2SO4	HNO3	HCl	NiOH	Na2S2O3	Methanol	Other		Analyses Test	TDS	Cl, F, SD4	App. Heavy Metals		RAD 9015/9920			
				DATE	TIME	DATE	TIME																				
1	<del>AP-2-EB-1</del>	WT		8/20	1070	JS		5	✓	✓								X	X	X	X						
2	<del>AP-2-EB-2</del>	WT																X	X	X	X						
3	<del>AP-2-FB-1</del>	WT		8/17	1530	JS		5	✓	✓								X	X	X	X						
4	<del>AR-2-L-1</del>	WT																X	X	X	X						
5	<del>YGWA-11</del>	WT																X	X	X	X						
6	<del>YGWA-10</del>	WT																X	X	X	X						
7	<del>YGWA-20</del>	WT																X	X	X	X						
8	<del>YGWA-30</del>	WT																X	X	X	X						
9	<del>YGWA-30</del>	WT																X	X	X	X						
10	YGWA-145	WT		8/19	732	1100		4	✓	✓								X	X	X	X					Ph: 7.32	
11	UP-DUP-2	WT		8/19	-			4	✓	✓								X	X	X	X						
12	<del>YGWA-20</del>	WT																X	X	X	X						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	<i>[Signature]</i>	8/20	1730	<i>[Signature]</i>	8/21/11	1730	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: <u>Jakes Swanson</u> SIGNATURE of SAMPLER: <i>[Signature]</i>		DATE Signed: <u>8/20/12</u>	TEMP in C Received on: _____ Y/N Custody: _____ Sealed: _____ Cooler: _____ Y/N Samples intact: _____ Y/N
---	--	-----------------------------	---







# CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A Required Client Information:</b> Company: Georgia Power Address: Atlanta, GA Email To: SCS and Arcadis Contacts Phone: _____ Fax: _____ Requested Due Date: 10 Day	<b>Section B Required Project Information:</b> Report To: SCS Contacts Copy To: Arcadis Contacts Purchase Order #: _____ Project Name: Yates AP-2 (upgradient) Project Number: _____	<b>Section C Invoice Information:</b> Attention: Southern Co. Company Name: _____ Address: _____ Pace Quote: _____ Pace Project Manager: Kevin Herring/Nicole D'Oleo Pace Profile #: 10840
Page: <span style="border: 1px solid black; display: inline-block; width: 30px; height: 15px; vertical-align: middle;"></span> of <span style="border: 1px solid black; display: inline-block; width: 30px; height: 15px; vertical-align: middle;"></span>		
		Regulatory Agency: <b>CCR</b> State / Location: <b>GA</b>

ITEM #	MATRIX CODE (see valid codes to left) SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION # OF CONTAINERS	Preservatives							Analytes Test Y/N	Requested Analysis Filtered (Y/N)					Residual Chlorine (Y/N)	
		START		END			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol		Other	TDS: 2450C	Anions Suite 300.0	App III Metals	App IV Metals (No TI)		Radium 226/228: 0315/9320
		DATE	TIME	DATE	TIME																
YGWA-2I	WT G	8/27/11	1133			X	X							X	X	X	X	X	PH: 7.14		
YGWA-3I	WT G	8/27/11	0755			X	X							X	X	X	X	X	PH: 7.59		

	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	8/27/11	1440	[Signature] / Arcadis	8/27/11	1440	
App III Metals: Boron 6020B, Ca 6010D	8/27/11	1640	[Signature] / Arcadis	8/27/11	1640	
App IV. Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)						

SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: Mark Chest SIGNATURE of SAMPLER: [Signature]		DATE Signed: _____	TEMP in C: _____ Received on ice (Y/N): _____ Custody Sealed Cooler (Y/N): _____ Samples intact (Y/N): _____
--	--	--------------------	---



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>.

Page : 1 Of 1

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: Arcadis (GA Power)		Report To: Becky Steever		Attention:	
Address: 2839 Paces Ferry Rd		Copy To:		Company Name:	
Suite 900, Atlanta, GA 30339		Purchase Order #:		Address:	
Email:		Project Name: Yates AMA		Pace Quote:	
Phone: / Fax:		Project #:		Pace Project Manager: nicole.d'oleo@pacelabs.com	
Requested Due Date:		Project #:		Pace Profile #: 10840	
				<b>Regulatory Agency</b>	
				<b>State / Location</b>	
				<b>GA</b>	

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	Preservatives										Analytes Test	Requested Analysis Filtered (Y/N)					Residual Chlorine (Y/N)		
				START		END			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4		App III/IV Metals	RAD 93159320	Alkalinity					
				DATE	TIME	DATE	TIME																				
1	AMA-EB-1	WT																									
2	AMA-EB-2	WT																									
3	AMA-FB-1	WT																									
4	AMA-FB-2	WT																									
5	UP-EB-1	WT																									
6	UP-FB-1	WT		8/24	1710			5	X	X																	
7	UP-EB-2	WT																									
8	UP-FB-2	WT																									
9	YGWA-4I	WT		8/26/24	1129			5	X	X																	5.82
10	YGWA-SI	WT		8/26/24	1628			5	X	X																	5.51 SU
11	UP-DUP-3	WT		8/26/24	-			5	X	X																	
12	YGWA-SD	WT		8/26/24	1355			5	X	X																	7.16 SU
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS																	
		Mark Chest / ACS		8/27/24	1640	Chad Hale / ACS		8/27/24	1640																		

<b>SAMPLER NAME AND SIGNATURE</b>			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Mark Chest						
SIGNATURE of SAMPLER: [Signature]		DATE Signed: 8/27/24				



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page : 2 Of 2	
Company: Arcadis (GA Power)		Report To: Becky Steever		Attention:		Regulatory Agency:	
Address: 2839 Paces Ferry Rd		Copy To:		Company Name:		State / Location:	
Suite 900, Atlanta, GA 30339		Purchase Order #:		Address:		GA	
Email:		Project Name: Yates AMA		Pace Quote:		State / Location:	
Phone: Fax:		Project #:		Pace Project Manager: nicole.d'olier@pacelabs.com		GA	
Requested Due Date:				Pace Profile #: 10840			

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -) Sample IDs must be unique	MATRIX Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Other Tissue	CODE DW WT WW P SL CL WP AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)						
						START		END				Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test	TDS				Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity		
						DATE	TIME	DATE	TIME																					
13	YGWA-17S	WT				8/27	1045				5	✓	✓																	Ph: 5.27
14	<del>YGWA-18S</del> JS YGWA-18S	WT				8/26	1535				5	✓	✓																	Ph: 4.40
15	YGWA-18I	WT				8/27	0935				5	✓	✓																	Ph: 5.40
16	YGWA-20S	WT				8/27	1310				5	✓	✓																	Ph: 5.37
17	YGWA-21I	WT																												
18	YGWC-23S	WT																												
19	YGWC-24SA	WT																												
20	AMA-DUP 1	WT																												
21	YGWC-36A	WT																												
22	YGWC-49	WT																												
23	AMA-EB-1					8/26	1600				5																			
24	AMA-EB-2					8/27	1340				5																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	JS / Arcadis	8/27		Chadwick / Pace	8/27	1640	

SAMPLER NAME AND SIGNATURE		TEMP in C	Received on	Ice (Y/N)	Custody Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:							
SIGNATURE of SAMPLER:							
DATE Signed:							



# CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information:	<b>Section B</b> Required Project Information:	<b>Section C</b> Invoice Information:
Company: Georgia Power	Report To: SCS Contacts <i>becky stevier</i>	Attention: Southern Co.
Address: Atlanta, GA	Copy To: <del>SCS Contacts</del>	Company Name:
Email To: SCS Contacts	Purchase Order #:	Address:
Phone: Fax:	Project Name: Yates AMA <del>ARCADIS</del>	Price Quote:
Requested Due Date: 10 Day	Project Number: <i>1</i>	Price Project Manager: Kevin Herring/Nicole D'Oleo
		Price Profile #: 10840

Page :	Of
--------	----

Regulatory Agency	
CCR	
State / Location	GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9, . -) Sample Ids must be unique	MATRIX	CODE	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Y/N	Requested Analysis Filtered (Y/N)								Residual Chlorine (Y/N)		
		Drinking Water	DW	START		END				Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other		Analytes Test	TDS: 2450C	Amions Sulte 300.0	App III Metals	App. IV Metals (No Ti)	Radium 226/228: 0315:0320	Alkalinity	Cations (Na, K, Mg, Ca)			
		Water	WT	DATE	TIME	DATE	TIME																						
1	0P-FB-T 07	WT	G												X	X	X	X	X										
2	0P-FB-T 08	WT	G												X	X	X	X	X										
3	0P-FB-2 09	WT	G												X	X	X	X	X										
4	0P-FB-2 10	WT	G												X	X	X	X	X										
6	YGWA-1 09	WT	G												X	X	X	X	X										
6	YGWA-1 09	WT	G												X	X	X	X	X										pH:
7	LIP-DUP-3 09	WT	G												X	X	X	X	X										pH:
8	YGWA-10 09	WT	G												X	X	X	X	X										pH:
9	YGWA-17S 09	WT	G												X	X	X	X	X										pH:
10	YGWA-18S 09 AMA-DUP-1	WT	G	9/1	-				5	✓	✓				X	X	X	X	X										pH:
11	YGWA-18S 09 YGWA-17SA	WT	G	9/1	1025				5	✓	✓				X	X	X	X	X										pH: 5.22
12	YGWA-20S 09 YGWA-21E	WT	G	9/1	1440				5	✓	✓				X	X	X	X	X										pH: 6.65

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (ClF, sulfate)	<i>[Signature]</i> /Arcadis	9/2/21	1530	<i>[Signature]</i> /Arcadis	9/2/21	1530	
App III Metals: Boron 6020B Ca 60100	<i>[Signature]</i>	9/2/21	1702	<i>[Signature]</i> /K. Herring	9/2/21	1702	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE		TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler/Insulated Container	Samples Verified
PRINT Name of SAMPLER: Jake Swanson					
SIGNATURE of SAMPLER: <i>[Signature]</i>	DATE Signed: 9/2/21				



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

**Section A**

**Required Client Information:**  
 Company: Arcadis (GA Power)  
 Address: 2839 Paces Ferry Rd  
 Suite 900, Atlanta, GA 30339  
 Email:  
 Phone: Fax:  
 Requested Due Date:

**Section B**

**Required Project Information:**  
 Report To: Becky Steever  
 Copy To:  
 Purchase Order #:  
 Project Name: Yates R6  
 Project #:

**Section C**

**Invoice Information:**  
 Attention:  
 Company Name:  
 Address:  
 Pace Quote:  
 Pace Project Manager: nicole.dolec@pacelabs.com  
 Pace Profile #: 10840

Regulatory Agency:  
 State / Location:  
 GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				# OF CONTAINERS	Preservatives								Y/N	Requested Analysis Filtered (Y/N)						Residual Chlorine (Y/N)		
				START		END			SAMPLE TEMP AT COLLECTION	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol		Other	Analyses Test	TDS	Cl F SO4	App III/IV Metals	III/IV + Cations		RAD 9315/9320	Alkalinity
				DATE	TIME	DATE	TIME																			
1	<del>YGWA-50</del>	WT															X	X	X	X	X					
2	YGWA-40	WT		9/3/21	1020												X	X	X	X	X				475	
3	<del>YGWA-38</del>	WT															X	X	X	X	X					
4	<del>YGWA-41</del>	WT															X	X	X	X	X					
5	<del>AWR-DUP-2</del>	WT															X	X		X						
6	<del>YGWA-42</del>	WT															X	X	X	X	X					
7	<del>YGWA-48</del>	WT															X	X	X	X	X					
8	<del>AP-1-EB-1</del>	WT																X								
9	<del>AP-1-FB-1</del>	WT																X								
10	<del>YGWA-47</del>	WT																X								
11	<del>YGWA-52</del>	WT																X								
12	<del>YGWA-44</del>	WT																X								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	<i>[Signature]</i> A&S	9/3/21	1730	<i>[Signature]</i> M/POC	9/3/21	1735	4.9	4	N	Y

**SAMPLER NAME AND SIGNATURE**  
 PRINT Name of SAMPLER: *Maje Chest*  
 SIGNATURE of SAMPLER: *[Signature]* DATE Signed: 9/3/21

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

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92557070	No qualifiers assigned						
92557089	YGWA-2I	EPA 300.0	Chloride	0.99	mg/L	J	MS %R > UCL, MSD %R >UCL
			Fluoride	0.12	mg/L	J	MS %R > UCL, MSD %R >UCL
			Sulfate	16.7	mg/L	J	MS %R > UCL, MSD %R >UCL
	YGWA-20S	EPA 300.0	Chloride	2.8	mg/L	J	MS %R > UCL, MSD %R >UCL

**Abbreviations:**

%R = percent recovery  
mg/L = milligrams per liter  
MS = matrix spike  
MSD = matrix spike duplicate  
UCL = upper control limit

**Qualifiers:**

J = estimated result

# **February 2022 Event**

March 11, 2022

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

RE: Project: YATES AP-1 RAD  
Pace Project No.: 92587680

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on February 10, 2022. 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,



Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR  
Anna Bottum, ERM  
Andrea Brazell, ERM  
Lauren Coker, Georgia Pwer  
Geoffrey Gay, ARCADIS - Atlanta  
Kristen Jurinko  
Kelley Sharpe, ARCADIS - Atlanta  
Alex Simpson, Arcadis  
Lacy Smith, ERM  
Samantha Thomas  
Caitlin Tillema, ERM  
Christine Weaver, ERM  
Albert Zumbuhl, Arcadis



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: YATES AP-1 RAD  
Pace Project No.: 92587680

---

### **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 #: 460198  
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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: YATES AP-1 RAD  
Pace Project No.: 92587680

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92587680001	YGWC-52	Water	02/09/22 11:14	02/10/22 17:00
92587680002	YGWC-44	Water	02/09/22 12:48	02/10/22 17:00
92587680003	YGWC-45	Water	02/09/22 14:40	02/10/22 17:00
92587680004	YGWC-46A	Water	02/09/22 16:13	02/10/22 17:00
92587680005	AP-1-DUP-1	Water	02/09/22 00:00	02/10/22 17:00
92587680006	AP-1-EB-1	Water	02/09/22 17:20	02/10/22 17:00
92587680007	AP-1-FB-1	Water	02/09/22 11:42	02/10/22 17:00

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES AP-1 RAD  
Pace Project No.: 92587680

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92587680001	YGWC-52	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587680002	YGWC-44	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587680003	YGWC-45	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587680004	YGWC-46A	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587680005	AP-1-DUP-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587680006	AP-1-EB-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587680007	AP-1-FB-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: YATES AP-1 RAD  
Pace Project No.: 92587680

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92587680001</b>	<b>YGWC-52</b>					
EPA 9315	Radium-226	0.0283 ± 0.0739 (0.180) C:93% T:NA	pCi/L		03/08/22 08:22	
EPA 9320	Radium-228	0.898 ± 0.378 (0.609) C:88% T:92%	pCi/L		03/07/22 15:12	
Total Radium Calculation	Total Radium	0.926 ± 0.452 (0.789)	pCi/L		03/10/22 17:16	
<b>92587680002</b>	<b>YGWC-44</b>					
EPA 9315	Radium-226	0.118 ± 0.0976 (0.167) C:101% T:NA	pCi/L		03/08/22 08:22	
EPA 9320	Radium-228	0.214 ± 0.279 (0.595) C:96% T:90%	pCi/L		03/07/22 15:12	
Total Radium Calculation	Total Radium	0.332 ± 0.377 (0.762)	pCi/L		03/10/22 17:16	
<b>92587680003</b>	<b>YGWC-45</b>					
EPA 9315	Radium-226	0.560 ± 0.198 (0.189) C:101% T:NA	pCi/L		03/08/22 08:22	
EPA 9320	Radium-228	0.553 ± 0.341 (0.643) C:92% T:91%	pCi/L		03/07/22 15:12	
Total Radium Calculation	Total Radium	1.11 ± 0.539 (0.832)	pCi/L		03/10/22 17:16	
<b>92587680004</b>	<b>YGWC-46A</b>					
EPA 9315	Radium-226	0.588 ± 0.192 (0.151) C:105% T:NA	pCi/L		03/08/22 08:23	
EPA 9320	Radium-228	1.15 ± 0.413 (0.596) C:94% T:88%	pCi/L		03/07/22 15:13	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES AP-1 RAD  
Pace Project No.: 92587680

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92587680004</b>	<b>YGWC-46A</b>					
Total Radium Calculation	Total Radium	1.74 ± 0.605 (0.747)	pCi/L		03/10/22 17:16	
<b>92587680005</b>	<b>AP-1-DUP-1</b>					
EPA 9315	Radium-226	0.628 ± 0.203 (0.158) C:103% T:NA	pCi/L		03/08/22 08:23	
EPA 9320	Radium-228	0.739 ± 0.356 (0.610) C:88% T:90%	pCi/L		03/07/22 15:13	
Total Radium Calculation	Total Radium	1.37 ± 0.559 (0.768)	pCi/L		03/10/22 17:16	
<b>92587680006</b>	<b>AP-1-EB-1</b>					
EPA 9315	Radium-226	0.0640 ± 0.0781 (0.156) C:99% T:NA	pCi/L		03/08/22 08:23	
EPA 9320	Radium-228	-0.121 ± 0.297 (0.719) C:84% T:86%	pCi/L		03/07/22 15:13	
Total Radium Calculation	Total Radium	0.0640 ± 0.375 (0.875)	pCi/L		03/10/22 17:16	
<b>92587680007</b>	<b>AP-1-FB-1</b>					
EPA 9315	Radium-226	0.0723 ± 0.109 (0.241) C:92% T:NA	pCi/L		03/08/22 08:23	
EPA 9320	Radium-228	0.224 ± 0.351 (0.761) C:82% T:90%	pCi/L		03/07/22 15:13	
Total Radium Calculation	Total Radium	0.296 ± 0.460 (1.00)	pCi/L		03/10/22 17:16	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 RAD

Pace Project No.: 92587680

**Sample: YGWC-52**      **Lab ID: 92587680001**      Collected: 02/09/22 11:14      Received: 02/10/22 17:00      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	<b>0.0283 ± 0.0739 (0.180)</b> <b>C:93% T:NA</b>	pCi/L	03/08/22 08:22	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.898 ± 0.378 (0.609)</b> <b>C:88% T:92%</b>	pCi/L	03/07/22 15:12	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.926 ± 0.452 (0.789)</b>	pCi/L	03/10/22 17:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 RAD

Pace Project No.: 92587680

**Sample: YGWC-44**      **Lab ID: 92587680002**      Collected: 02/09/22 12:48      Received: 02/10/22 17:00      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	<b>0.118 ± 0.0976 (0.167)</b> <b>C:101% T:NA</b>	pCi/L	03/08/22 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.214 ± 0.279 (0.595)</b> <b>C:96% T:90%</b>	pCi/L	03/07/22 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.332 ± 0.377 (0.762)</b>	pCi/L	03/10/22 17:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 RAD

Pace Project No.: 92587680

**Sample: YGWC-45**      **Lab ID: 92587680003**      Collected: 02/09/22 14:40      Received: 02/10/22 17:00      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	<b>0.560 ± 0.198 (0.189)</b> <b>C:101% T:NA</b>	pCi/L	03/08/22 08:22	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.553 ± 0.341 (0.643)</b> <b>C:92% T:91%</b>	pCi/L	03/07/22 15:12	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.11 ± 0.539 (0.832)</b>	pCi/L	03/10/22 17:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 RAD

Pace Project No.: 92587680

**Sample: YGWC-46A**      **Lab ID: 92587680004**      Collected: 02/09/22 16:13      Received: 02/10/22 17:00      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	<b>0.588 ± 0.192 (0.151)</b> <b>C:105% T:NA</b>	pCi/L	03/08/22 08:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.15 ± 0.413 (0.596)</b> <b>C:94% T:88%</b>	pCi/L	03/07/22 15:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.74 ± 0.605 (0.747)</b>	pCi/L	03/10/22 17:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 RAD

Pace Project No.: 92587680

**Sample:** AP-1-DUP-1      **Lab ID:** 92587680005      Collected: 02/09/22 00:00      Received: 02/10/22 17:00      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	<b>0.628 ± 0.203 (0.158)</b> <b>C:103% T:NA</b>	pCi/L	03/08/22 08:23	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.739 ± 0.356 (0.610)</b> <b>C:88% T:90%</b>	pCi/L	03/07/22 15:13	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.37 ± 0.559 (0.768)</b>	pCi/L	03/10/22 17:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 RAD

Pace Project No.: 92587680

**Sample: AP-1-EB-1**      **Lab ID: 92587680006**      Collected: 02/09/22 17:20      Received: 02/10/22 17:00      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	<b>0.0640 ± 0.0781 (0.156)</b> <b>C:99% T:NA</b>	pCi/L	03/08/22 08:23	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>-0.121 ± 0.297 (0.719)</b> <b>C:84% T:86%</b>	pCi/L	03/07/22 15:13	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.0640 ± 0.375 (0.875)</b>	pCi/L	03/10/22 17:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP-1 RAD

Pace Project No.: 92587680

**Sample: AP-1-FB-1**      **Lab ID: 92587680007**      Collected: 02/09/22 11:42      Received: 02/10/22 17:00      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	<b>0.0723 ± 0.109 (0.241)</b> <b>C:92% T:NA</b>	pCi/L	03/08/22 08:23	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.224 ± 0.351 (0.761)</b> <b>C:82% T:90%</b>	pCi/L	03/07/22 15:13	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.296 ± 0.460 (1.00)</b>	pCi/L	03/10/22 17:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP-1 RAD

Pace Project No.: 92587680

QC Batch: 486611

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92587680001, 92587680002, 92587680003, 92587680004, 92587680005, 92587680006, 92587680007

METHOD BLANK: 2353259

Matrix: Water

Associated Lab Samples: 92587680001, 92587680002, 92587680003, 92587680004, 92587680005, 92587680006, 92587680007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0325 ± 0.0552 (0.191) C:101% T:NA	pCi/L	03/08/22 08:21	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP-1 RAD

Pace Project No.: 92587680

QC Batch: 486656

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92587680001, 92587680002, 92587680003, 92587680004, 92587680005, 92587680006, 92587680007

METHOD BLANK: 2353491

Matrix: Water

Associated Lab Samples: 92587680001, 92587680002, 92587680003, 92587680004, 92587680005, 92587680006, 92587680007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.534 ± 0.356 (0.681) C:77% T:89%	pCi/L	03/07/22 11:50	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: YATES AP-1 RAD

Pace Project No.: 92587680

---

### 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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AP-1 RAD  
Pace Project No.: 92587680

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92587680001	YGWC-52	EPA 9315	486611		
92587680002	YGWC-44	EPA 9315	486611		
92587680003	YGWC-45	EPA 9315	486611		
92587680004	YGWC-46A	EPA 9315	486611		
92587680005	AP-1-DUP-1	EPA 9315	486611		
92587680006	AP-1-EB-1	EPA 9315	486611		
92587680007	AP-1-FB-1	EPA 9315	486611		
92587680001	YGWC-52	EPA 9320	486656		
92587680002	YGWC-44	EPA 9320	486656		
92587680003	YGWC-45	EPA 9320	486656		
92587680004	YGWC-46A	EPA 9320	486656		
92587680005	AP-1-DUP-1	EPA 9320	486656		
92587680006	AP-1-EB-1	EPA 9320	486656		
92587680007	AP-1-FB-1	EPA 9320	486656		
92587680001	YGWC-52	Total Radium Calculation	489606		
92587680002	YGWC-44	Total Radium Calculation	489606		
92587680003	YGWC-45	Total Radium Calculation	489606		
92587680004	YGWC-46A	Total Radium Calculation	489606		
92587680005	AP-1-DUP-1	Total Radium Calculation	489606		
92587680006	AP-1-EB-1	Total Radium Calculation	489606		
92587680007	AP-1-FB-1	Total Radium Calculation	489606		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: G.A. Power

Project #:

**WO#: 92587680**



Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 2/10/22  
CPW

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 214 Type of Ice:  Wet  Blue  None

Cooler Temp: 3.4 Correction Factor: Add/Subtract (°C) 401

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.5

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  
 Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-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	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_

**\*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 bottles**

Project #

**WO# : 92587680**

PM: NMG

Due Date: 03/03/22

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	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) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-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)	AG3A(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 Unpreserved (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (3 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 (NH3)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

**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 (i.e. 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**

Required Client Information:

Company: GA Power  
 Address: Atlanta, GA  
 Email To:  
 Phone:  
 Requested Due Date:

**Section B**

Required Project Information:

Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Purchase Order #:  
 Project Name: Plant Yates AP-1  
 Project Number:

**Section C**

Invoice Information:

Attention: Southern Co.  
 Company Name:  
 Address:  
 Pace Quote:  
 Pace Project Manager: Nicole D'Onofrio  
 Pace Profile #: 10840

Regulatory Agency  
 Georgia

State / Location

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / - ) Sample IDs must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analyses Test	Requester Analytical Filtered (Y/N)	Residual Chlorine (Y/N)	pH:	
				START DATE	END DATE								
1	YGWC-52	WT G	G	2/21/12	11/4	-	5	2	3	X	X	X	pH: 5.99
2	YGWC-44	WT G	G	2/21/12	1249	-	5	2	3	X	X	X	pH: 5.73
3	YGWC-45	WT G	G	2/21/12	1440	-	5	2	3	X	X	X	pH: 6.15
4	YGWC-46A	WT G	G	2/21/12	1613	-	5	2	3	X	X	X	pH: 6.91
5	AP-1-DUP-1	WT G	G	2/6/12	-	-	5	2	3	X	X	X	
6	AP-1-EB-1	WT G	G	2/4/12	1720	-	5	2	3	X	X	X	
7	AP-1-FB-1	WT G	G	2/9/12	211142	-	5	2	3	X	X	X	
8		WT G	G				5	2	3	X	X	X	
9		WT G	G				5	2	3	X	X	X	
10		WT G	G				5	2	3	X	X	X	
11		WT G	G				5	2	3	X	X	X	
12		WT G	G				5	2	3	X	X	X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION		ACCEPTED BY / AFFILIATION		SAMPLE CONDITIONS	
	DATE	SIGNATURE	DATE	SIGNATURE	TEMP in C	Received on ice (Y/N)
Ammons Sulfide 300.0 (Cl, F, Sulfate)	2/10/12	[Signature]	2/10/12	[Signature]		
App III Metals: Boron 6020B, Ca 6010D	2/10/12	[Signature]	2/10/12	[Signature]		
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)	2/10/12	[Signature]	2/10/12	[Signature]		
7090A: Mercury (Hg)	2/10/12	[Signature]	2/10/12	[Signature]		

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: [Signature]

SIGNATURE of SAMPLER: [Signature]

DATE Signed: 2/10/12



February 23, 2022

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

RE: Project: YATES AP-1  
Pace Project No.: 92587687

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on February 10, 2022. 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,



Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR  
Anna Bottum, ERM  
Andrea Brazell, ERM  
Lauren Coker, Georgia Pwer  
Geoffrey Gay, ARCADIS - Atlanta  
Kristen Jurinko  
Kelley Sharpe, ARCADIS - Atlanta  
Alex Simpson, Arcadis  
Lacy Smith, ERM  
Samantha Thomas  
Caitlin Tillema, ERM

Christine Weaver, ERM  
Albert Zumbuhl, Arcadis



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: YATES AP-1  
Pace Project No.: 92587687

---

### **Pace Analytical Services Charlotte**

South Carolina Laboratory ID: 99006  
9800 Kinsey Ave. Ste 100, Huntersville, NC 28078  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12  
South Carolina Laboratory ID: 99006

South Carolina Certification #: 99006001  
South Carolina Drinking Water Cert. #: 99006003  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Louisiana DoH Drinking Water #: LA029  
Virginia/VELAP Certification #: 460221

---

### **Pace Analytical Services Asheville**

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
North Carolina Drinking Water Certification #: 37712  
North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030  
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

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

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: YATES AP-1  
Pace Project No.: 92587687

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92587687001	YGWC-52	Water	02/09/22 11:14	02/10/22 17:00
92587687002	YGWC-44	Water	02/09/22 12:48	02/10/22 17:00
92587687003	YGWC-45	Water	02/09/22 14:40	02/10/22 17:00
92587687004	YGWC-46A	Water	02/09/22 16:13	02/10/22 17:00
92587687005	AP-1-DUP-1	Water	02/09/22 00:00	02/10/22 17:00
92587687006	AP-1-EB-1	Water	02/09/22 17:20	02/10/22 17:00
92587687007	AP-1-FB-1	Water	02/09/22 11:42	02/10/22 17:00

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES AP-1  
Pace Project No.: 92587687

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92587687001	YGWC-52	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92587687002	YGWC-44	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92587687003	YGWC-45	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92587687004	YGWC-46A	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92587687005	AP-1-DUP-1	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92587687006	AP-1-EB-1	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92587687007	AP-1-FB-1	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville  
PASI-C = Pace Analytical Services - Charlotte

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES AP-1  
Pace Project No.: 92587687

---

<b>Lab ID</b>	<b>Sample ID</b>	<b>Method</b>	<b>Analysts</b>	<b>Analytes Reported</b>
---------------	------------------	---------------	-----------------	--------------------------

---

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES AP-1

Pace Project No.: 92587687

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92587687001</b>	<b>YGWC-52</b>					
	Performed by	CUSTOMER			02/11/22 10:16	
	pH	5.99	Std. Units		02/11/22 10:16	
EPA 6010D	Calcium	42.2	mg/L	1.0	02/22/22 19:57	
EPA 6020B	Barium	0.018	mg/L	0.0050	02/22/22 21:36	
EPA 6020B	Boron	0.0089J	mg/L	0.040	02/22/22 21:36	
EPA 6020B	Chromium	0.0012J	mg/L	0.0050	02/22/22 21:36	
EPA 6020B	Cobalt	0.0015J	mg/L	0.0050	02/22/22 21:36	
EPA 6020B	Lithium	0.0042J	mg/L	0.030	02/22/22 21:36	
SM 2540C-2015	Total Dissolved Solids	278	mg/L	10.0	02/16/22 13:53	
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	02/17/22 04:42	
EPA 300.0 Rev 2.1 1993	Sulfate	119	mg/L	3.0	02/17/22 18:56	
<b>92587687002</b>	<b>YGWC-44</b>					
	Performed by	CUSTOMER			02/11/22 10:16	
	pH	5.73	Std. Units		02/11/22 10:16	
EPA 6010D	Calcium	30.8	mg/L	1.0	02/22/22 20:01	
EPA 6020B	Barium	0.083	mg/L	0.0050	02/22/22 21:42	
EPA 6020B	Boron	0.58	mg/L	0.040	02/22/22 21:42	
EPA 6020B	Cobalt	0.0027J	mg/L	0.0050	02/22/22 21:42	
EPA 6020B	Lithium	0.014J	mg/L	0.030	02/22/22 21:42	
SM 2540C-2015	Total Dissolved Solids	311	mg/L	10.0	02/16/22 13:53	
EPA 300.0 Rev 2.1 1993	Chloride	13.5	mg/L	1.0	02/17/22 04:57	
EPA 300.0 Rev 2.1 1993	Sulfate	121	mg/L	3.0	02/17/22 19:12	
<b>92587687003</b>	<b>YGWC-45</b>					
	Performed by	CUSTOMER			02/11/22 10:16	
	pH	6.15	Std. Units		02/11/22 10:16	
EPA 6010D	Calcium	49.3	mg/L	1.0	02/22/22 20:06	
EPA 6020B	Barium	0.053	mg/L	0.0050	02/22/22 21:48	
EPA 6020B	Boron	0.34	mg/L	0.040	02/22/22 21:48	
EPA 6020B	Cobalt	0.00051J	mg/L	0.0050	02/22/22 21:48	
EPA 6020B	Lithium	0.012J	mg/L	0.030	02/22/22 21:48	
EPA 6020B	Molybdenum	0.0012J	mg/L	0.010	02/22/22 21:48	
SM 2540C-2015	Total Dissolved Solids	400	mg/L	10.0	02/16/22 13:53	
EPA 300.0 Rev 2.1 1993	Chloride	4.9	mg/L	1.0	02/17/22 05:12	
EPA 300.0 Rev 2.1 1993	Fluoride	0.063J	mg/L	0.10	02/17/22 05:12	
EPA 300.0 Rev 2.1 1993	Sulfate	164	mg/L	3.0	02/17/22 19:27	
<b>92587687004</b>	<b>YGWC-46A</b>					
	Performed by	CUSTOMER			02/11/22 10:17	
	pH	6.98	Std. Units		02/11/22 10:17	
EPA 6010D	Calcium	109	mg/L	1.0	02/22/22 20:11	
EPA 6020B	Barium	0.042	mg/L	0.0050	02/22/22 21:54	
EPA 6020B	Boron	2.1	mg/L	0.040	02/22/22 21:54	
EPA 6020B	Cobalt	0.00060J	mg/L	0.0050	02/22/22 21:54	
EPA 6020B	Lithium	0.014J	mg/L	0.030	02/22/22 21:54	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES AP-1

Pace Project No.: 92587687

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92587687004</b>	<b>YGWC-46A</b>					
EPA 6020B	Molybdenum	0.0021J	mg/L	0.010	02/22/22 21:54	
SM 2540C-2015	Total Dissolved Solids	846	mg/L	20.0	02/16/22 13:53	
EPA 300.0 Rev 2.1 1993	Chloride	28.2	mg/L	1.0	02/17/22 05:57	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	02/17/22 05:57	
EPA 300.0 Rev 2.1 1993	Sulfate	415	mg/L	9.0	02/17/22 19:42	
<b>92587687005</b>	<b>AP-1-DUP-1</b>					
EPA 6010D	Calcium	109	mg/L	1.0	02/22/22 20:25	
EPA 6020B	Barium	0.042	mg/L	0.0050	02/22/22 22:00	
EPA 6020B	Boron	2.0	mg/L	0.040	02/22/22 22:00	
EPA 6020B	Cobalt	0.00061J	mg/L	0.0050	02/22/22 22:00	
EPA 6020B	Lithium	0.013J	mg/L	0.030	02/22/22 22:00	
EPA 6020B	Molybdenum	0.0022J	mg/L	0.010	02/22/22 22:00	
SM 2540C-2015	Total Dissolved Solids	826	mg/L	20.0	02/16/22 13:53	
EPA 300.0 Rev 2.1 1993	Chloride	28.2	mg/L	1.0	02/17/22 06:12	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	02/17/22 06:12	
EPA 300.0 Rev 2.1 1993	Sulfate	417	mg/L	9.0	02/17/22 19:57	
<b>92587687006</b>	<b>AP-1-EB-1</b>					
SM 2540C-2015	Total Dissolved Solids	12.0	mg/L	10.0	02/16/22 13:53	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1  
Pace Project No.: 92587687

Sample: YGWC-52		Lab ID: 92587687001		Collected: 02/09/22 11:14		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:16		
pH	<b>5.99</b>	Std. Units			1		02/11/22 10:16		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>42.2</b>	mg/L	1.0	0.12	1	02/22/22 10:31	02/22/22 19:57	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/22/22 11:07	02/22/22 21:36	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 21:36	7440-38-2	
Barium	<b>0.018</b>	mg/L	0.0050	0.00067	1	02/22/22 11:07	02/22/22 21:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/22/22 11:07	02/22/22 21:36	7440-41-7	
Boron	<b>0.0089J</b>	mg/L	0.040	0.0086	1	02/22/22 11:07	02/22/22 21:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/22/22 11:07	02/22/22 21:36	7440-43-9	
Chromium	<b>0.0012J</b>	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 21:36	7440-47-3	
Cobalt	<b>0.0015J</b>	mg/L	0.0050	0.00039	1	02/22/22 11:07	02/22/22 21:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/22/22 11:07	02/22/22 21:36	7439-92-1	
Lithium	<b>0.0042J</b>	mg/L	0.030	0.00073	1	02/22/22 11:07	02/22/22 21:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/22/22 11:07	02/22/22 21:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/22/22 11:07	02/22/22 21:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/22/22 11:07	02/22/22 21:36	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:22	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>278</b>	mg/L	10.0	10.0	1		02/16/22 13:53		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>3.2</b>	mg/L	1.0	0.60	1		02/17/22 04:42	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/17/22 04:42	16984-48-8	
Sulfate	<b>119</b>	mg/L	3.0	1.5	3		02/17/22 18:56	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: YATES AP-1  
Pace Project No.: 92587687

Sample: YGWC-44		Lab ID: 92587687002		Collected: 02/09/22 12:48		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:16		
pH	<b>5.73</b>	Std. Units			1		02/11/22 10:16		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>30.8</b>	mg/L	1.0	0.12	1	02/22/22 10:31	02/22/22 20:01	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/22/22 11:07	02/22/22 21:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 21:42	7440-38-2	
Barium	<b>0.083</b>	mg/L	0.0050	0.00067	1	02/22/22 11:07	02/22/22 21:42	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/22/22 11:07	02/22/22 21:42	7440-41-7	
Boron	<b>0.58</b>	mg/L	0.040	0.0086	1	02/22/22 11:07	02/22/22 21:42	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/22/22 11:07	02/22/22 21:42	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 21:42	7440-47-3	
Cobalt	<b>0.0027J</b>	mg/L	0.0050	0.00039	1	02/22/22 11:07	02/22/22 21:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/22/22 11:07	02/22/22 21:42	7439-92-1	
Lithium	<b>0.014J</b>	mg/L	0.030	0.00073	1	02/22/22 11:07	02/22/22 21:42	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/22/22 11:07	02/22/22 21:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/22/22 11:07	02/22/22 21:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/22/22 11:07	02/22/22 21:42	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:25	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>311</b>	mg/L	10.0	10.0	1		02/16/22 13:53		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>13.5</b>	mg/L	1.0	0.60	1		02/17/22 04:57	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/17/22 04:57	16984-48-8	
Sulfate	<b>121</b>	mg/L	3.0	1.5	3		02/17/22 19:12	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1  
Pace Project No.: 92587687

Sample: YGWC-45		Lab ID: 92587687003		Collected: 02/09/22 14:40		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:16		
pH	<b>6.15</b>	Std. Units			1		02/11/22 10:16		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>49.3</b>	mg/L	1.0	0.12	1	02/22/22 10:31	02/22/22 20:06	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/22/22 11:07	02/22/22 21:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 21:48	7440-38-2	
Barium	<b>0.053</b>	mg/L	0.0050	0.00067	1	02/22/22 11:07	02/22/22 21:48	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/22/22 11:07	02/22/22 21:48	7440-41-7	
Boron	<b>0.34</b>	mg/L	0.040	0.0086	1	02/22/22 11:07	02/22/22 21:48	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/22/22 11:07	02/22/22 21:48	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 21:48	7440-47-3	
Cobalt	<b>0.00051J</b>	mg/L	0.0050	0.00039	1	02/22/22 11:07	02/22/22 21:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/22/22 11:07	02/22/22 21:48	7439-92-1	
Lithium	<b>0.012J</b>	mg/L	0.030	0.00073	1	02/22/22 11:07	02/22/22 21:48	7439-93-2	
Molybdenum	<b>0.0012J</b>	mg/L	0.010	0.00074	1	02/22/22 11:07	02/22/22 21:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/22/22 11:07	02/22/22 21:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/22/22 11:07	02/22/22 21:48	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:27	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>400</b>	mg/L	10.0	10.0	1		02/16/22 13:53		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>4.9</b>	mg/L	1.0	0.60	1		02/17/22 05:12	16887-00-6	
Fluoride	<b>0.063J</b>	mg/L	0.10	0.050	1		02/17/22 05:12	16984-48-8	
Sulfate	<b>164</b>	mg/L	3.0	1.5	3		02/17/22 19:27	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1  
Pace Project No.: 92587687

Sample: YGWC-46A		Lab ID: 92587687004		Collected: 02/09/22 16:13		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:17		
pH	<b>6.98</b>	Std. Units			1		02/11/22 10:17		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>109</b>	mg/L	1.0	0.12	1	02/22/22 10:31	02/22/22 20:11	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/22/22 11:07	02/22/22 21:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 21:54	7440-38-2	
Barium	<b>0.042</b>	mg/L	0.0050	0.00067	1	02/22/22 11:07	02/22/22 21:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/22/22 11:07	02/22/22 21:54	7440-41-7	
Boron	<b>2.1</b>	mg/L	0.040	0.0086	1	02/22/22 11:07	02/22/22 21:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/22/22 11:07	02/22/22 21:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 21:54	7440-47-3	
Cobalt	<b>0.00060J</b>	mg/L	0.0050	0.00039	1	02/22/22 11:07	02/22/22 21:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/22/22 11:07	02/22/22 21:54	7439-92-1	
Lithium	<b>0.014J</b>	mg/L	0.030	0.00073	1	02/22/22 11:07	02/22/22 21:54	7439-93-2	
Molybdenum	<b>0.0021J</b>	mg/L	0.010	0.00074	1	02/22/22 11:07	02/22/22 21:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/22/22 11:07	02/22/22 21:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/22/22 11:07	02/22/22 21:54	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:35	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>846</b>	mg/L	20.0	20.0	1		02/16/22 13:53		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>28.2</b>	mg/L	1.0	0.60	1		02/17/22 05:57	16887-00-6	
Fluoride	<b>0.12</b>	mg/L	0.10	0.050	1		02/17/22 05:57	16984-48-8	
Sulfate	<b>415</b>	mg/L	9.0	4.5	9		02/17/22 19:42	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1  
Pace Project No.: 92587687

Sample: AP-1-DUP-1		Lab ID: 92587687005		Collected: 02/09/22 00:00		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>109</b>	mg/L	1.0	0.12	1	02/22/22 10:31	02/22/22 20:25	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/22/22 11:07	02/22/22 22:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 22:00	7440-38-2	
Barium	<b>0.042</b>	mg/L	0.0050	0.00067	1	02/22/22 11:07	02/22/22 22:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/22/22 11:07	02/22/22 22:00	7440-41-7	
Boron	<b>2.0</b>	mg/L	0.040	0.0086	1	02/22/22 11:07	02/22/22 22:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/22/22 11:07	02/22/22 22:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 22:00	7440-47-3	
Cobalt	<b>0.00061J</b>	mg/L	0.0050	0.00039	1	02/22/22 11:07	02/22/22 22:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/22/22 11:07	02/22/22 22:00	7439-92-1	
Lithium	<b>0.013J</b>	mg/L	0.030	0.00073	1	02/22/22 11:07	02/22/22 22:00	7439-93-2	
Molybdenum	<b>0.0022J</b>	mg/L	0.010	0.00074	1	02/22/22 11:07	02/22/22 22:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/22/22 11:07	02/22/22 22:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/22/22 11:07	02/22/22 22:00	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:38	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>826</b>	mg/L	20.0	20.0	1		02/16/22 13:53		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>28.2</b>	mg/L	1.0	0.60	1		02/17/22 06:12	16887-00-6	
Fluoride	<b>0.11</b>	mg/L	0.10	0.050	1		02/17/22 06:12	16984-48-8	
Sulfate	<b>417</b>	mg/L	9.0	4.5	9		02/17/22 19:57	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1  
Pace Project No.: 92587687

Sample: AP-1-EB-1		Lab ID: 92587687006		Collected: 02/09/22 17:20		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	ND	mg/L	1.0	0.12	1	02/22/22 10:31	02/22/22 20:30	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/22/22 11:07	02/22/22 22:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 22:12	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/22/22 11:07	02/22/22 22:12	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/22/22 11:07	02/22/22 22:12	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/22/22 11:07	02/22/22 22:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/22/22 11:07	02/22/22 22:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 22:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/22/22 11:07	02/22/22 22:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/22/22 11:07	02/22/22 22:12	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/22/22 11:07	02/22/22 22:12	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/22/22 11:07	02/22/22 22:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/22/22 11:07	02/22/22 22:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/22/22 11:07	02/22/22 22:12	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:40	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>12.0</b>	mg/L	10.0	10.0	1		02/16/22 13:53		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		02/17/22 06:27	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/17/22 06:27	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/17/22 06:27	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES AP-1  
Pace Project No.: 92587687

Sample: AP-1-FB-1		Lab ID: 92587687007		Collected: 02/09/22 11:42		Received: 02/10/22 17:00		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/22/22 10:31	02/22/22 20:35	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/22/22 11:07	02/22/22 22:30	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 22:30	7440-38-2		
Barium	ND	mg/L	0.0050	0.00067	1	02/22/22 11:07	02/22/22 22:30	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	02/22/22 11:07	02/22/22 22:30	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	02/22/22 11:07	02/22/22 22:30	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	02/22/22 11:07	02/22/22 22:30	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	02/22/22 11:07	02/22/22 22:30	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	02/22/22 11:07	02/22/22 22:30	7440-48-4		
Lead	ND	mg/L	0.0010	0.00089	1	02/22/22 11:07	02/22/22 22:30	7439-92-1		
Lithium	ND	mg/L	0.030	0.00073	1	02/22/22 11:07	02/22/22 22:30	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	02/22/22 11:07	02/22/22 22:30	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	02/22/22 11:07	02/22/22 22:30	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	02/22/22 11:07	02/22/22 22:30	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:43	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		02/16/22 13:54			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/17/22 07:12	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		02/17/22 07:12	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		02/17/22 07:12	14808-79-8		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1  
Pace Project No.: 92587687

QC Batch: 679925 Analysis Method: EPA 6010D  
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92587687001, 92587687002, 92587687003, 92587687004, 92587687005, 92587687006, 92587687007

METHOD BLANK: 3557373 Matrix: Water  
Associated Lab Samples: 92587687001, 92587687002, 92587687003, 92587687004, 92587687005, 92587687006, 92587687007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/22/22 18:23	

LABORATORY CONTROL SAMPLE: 3557374

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: 3557375 3557376

Parameter	Units	3557375		3557376		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92587096002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Calcium	mg/L	166	1	1	163	161	-387	-567	75-125	1	20 M1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1  
Pace Project No.: 92587687

QC Batch: 679927 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92587687001, 92587687002, 92587687003, 92587687004, 92587687005, 92587687006, 92587687007

METHOD BLANK: 3557382 Matrix: Water  
Associated Lab Samples: 92587687001, 92587687002, 92587687003, 92587687004, 92587687005, 92587687006, 92587687007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/22/22 20:07	
Arsenic	mg/L	0.0012J	0.0050	0.0011	02/22/22 20:07	
Barium	mg/L	ND	0.0050	0.00067	02/22/22 20:07	
Beryllium	mg/L	ND	0.00050	0.000054	02/22/22 20:07	
Boron	mg/L	ND	0.040	0.0086	02/22/22 20:07	
Cadmium	mg/L	ND	0.00050	0.00011	02/22/22 20:07	
Chromium	mg/L	ND	0.0050	0.0011	02/22/22 20:07	
Cobalt	mg/L	ND	0.0050	0.00039	02/22/22 20:07	
Lead	mg/L	ND	0.0010	0.00089	02/22/22 20:07	
Lithium	mg/L	ND	0.030	0.00073	02/22/22 20:07	
Molybdenum	mg/L	ND	0.010	0.00074	02/22/22 20:07	
Selenium	mg/L	ND	0.0050	0.0014	02/22/22 20:07	
Thallium	mg/L	ND	0.0010	0.00018	02/22/22 20:07	

LABORATORY CONTROL SAMPLE: 3557383

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	109	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	104	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3557384 3557385

Parameter	Units	92587096003 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	106	107	75-125	1	20	
Arsenic	mg/L	0.0015J	0.1	0.1	0.097	0.099	96	98	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: YATES AP-1

Pace Project No.: 92587687

Parameter	Units	3557384		3557385		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92587096003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Barium	mg/L	0.013	0.1	0.1	0.11	0.11	98	97	75-125	0	20	
Beryllium	mg/L	0.0010	0.1	0.1	0.096	0.099	95	98	75-125	3	20	
Boron	mg/L	ND	1	1	0.99	1.0	98	99	75-125	1	20	
Cadmium	mg/L	0.00018J	0.1	0.1	0.099	0.10	99	101	75-125	2	20	
Chromium	mg/L	0.0011J	0.1	0.1	0.099	0.10	98	99	75-125	0	20	
Cobalt	mg/L	0.0074	0.1	0.1	0.10	0.11	94	99	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.091	0.093	91	92	75-125	1	20	
Lithium	mg/L	0.00094J	0.1	0.1	0.099	0.10	98	99	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Selenium	mg/L	0.0091	0.1	0.1	0.10	0.11	95	98	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.091	0.092	91	92	75-125	1	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1  
Pace Project No.: 92587687

QC Batch: 678756 Analysis Method: EPA 7470A  
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92587687001, 92587687002, 92587687003, 92587687004, 92587687005, 92587687006, 92587687007

METHOD BLANK: 3551942 Matrix: Water  
Associated Lab Samples: 92587687001, 92587687002, 92587687003, 92587687004, 92587687005, 92587687006, 92587687007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/18/22 13:04	

LABORATORY CONTROL SAMPLE: 3551943

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3551944 3551945

Parameter	Units	3551944		3551945		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	92588161001 ND	0.0025	0.0025	0.0022	0.0022	88	87	75-125	1	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1  
Pace Project No.: 92587687

QC Batch: 678705 Analysis Method: SM 2540C-2015  
QC Batch Method: SM 2540C-2015 Analysis Description: 2540C Total Dissolved Solids  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92587687001, 92587687002, 92587687003, 92587687004, 92587687005, 92587687006, 92587687007

METHOD BLANK: 3551645 Matrix: Water  
Associated Lab Samples: 92587687001, 92587687002, 92587687003, 92587687004, 92587687005, 92587687006, 92587687007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/16/22 13:52	

LABORATORY CONTROL SAMPLE: 3551646

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	377	94	80-120	

SAMPLE DUPLICATE: 3551647

Parameter	Units	92587096008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		25	

SAMPLE DUPLICATE: 3551648

Parameter	Units	92587319007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	756	708	7	25	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES AP-1  
Pace Project No.: 92587687

QC Batch: 678877 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: 92587687001, 92587687002, 92587687003, 92587687004, 92587687005, 92587687006, 92587687007

METHOD BLANK: 3552679 Matrix: Water  
Associated Lab Samples: 92587687001, 92587687002, 92587687003, 92587687004, 92587687005, 92587687006, 92587687007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/17/22 01:57	
Fluoride	mg/L	ND	0.10	0.050	02/17/22 01:57	
Sulfate	mg/L	ND	1.0	0.50	02/17/22 01:57	

LABORATORY CONTROL SAMPLE: 3552680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.3	97	90-110	
Fluoride	mg/L	2.5	2.3	91	90-110	
Sulfate	mg/L	50	47.1	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3552681 3552682

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92587091017 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	1.7	50	50	50.7	51.6	98	100	90-110	2	10		
Fluoride	mg/L	0.10	2.5	2.5	2.5	2.6	97	99	90-110	2	10		
Sulfate	mg/L	3.9	50	50	52.8	53.7	98	100	90-110	2	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3552683 3552684

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92587687006 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	ND	50	50	51.0	51.1	102	102	90-110	0	10		
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	101	99	90-110	1	10		
Sulfate	mg/L	ND	50	50	50.8	50.8	101	101	90-110	0	10		

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: YATES AP-1

Pace Project No.: 92587687

---

### 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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AP-1  
Pace Project No.: 92587687

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92587687001	YGWC-52				
92587687002	YGWC-44				
92587687003	YGWC-45				
92587687004	YGWC-46A				
92587687001	YGWC-52	EPA 3010A	679925	EPA 6010D	680055
92587687002	YGWC-44	EPA 3010A	679925	EPA 6010D	680055
92587687003	YGWC-45	EPA 3010A	679925	EPA 6010D	680055
92587687004	YGWC-46A	EPA 3010A	679925	EPA 6010D	680055
92587687005	AP-1-DUP-1	EPA 3010A	679925	EPA 6010D	680055
92587687006	AP-1-EB-1	EPA 3010A	679925	EPA 6010D	680055
92587687007	AP-1-FB-1	EPA 3010A	679925	EPA 6010D	680055
92587687001	YGWC-52	EPA 3005A	679927	EPA 6020B	680111
92587687002	YGWC-44	EPA 3005A	679927	EPA 6020B	680111
92587687003	YGWC-45	EPA 3005A	679927	EPA 6020B	680111
92587687004	YGWC-46A	EPA 3005A	679927	EPA 6020B	680111
92587687005	AP-1-DUP-1	EPA 3005A	679927	EPA 6020B	680111
92587687006	AP-1-EB-1	EPA 3005A	679927	EPA 6020B	680111
92587687007	AP-1-FB-1	EPA 3005A	679927	EPA 6020B	680111
92587687001	YGWC-52	EPA 7470A	678756	EPA 7470A	679374
92587687002	YGWC-44	EPA 7470A	678756	EPA 7470A	679374
92587687003	YGWC-45	EPA 7470A	678756	EPA 7470A	679374
92587687004	YGWC-46A	EPA 7470A	678756	EPA 7470A	679374
92587687005	AP-1-DUP-1	EPA 7470A	678756	EPA 7470A	679374
92587687006	AP-1-EB-1	EPA 7470A	678756	EPA 7470A	679374
92587687007	AP-1-FB-1	EPA 7470A	678756	EPA 7470A	679374
92587687001	YGWC-52	SM 2540C-2015	678705		
92587687002	YGWC-44	SM 2540C-2015	678705		
92587687003	YGWC-45	SM 2540C-2015	678705		
92587687004	YGWC-46A	SM 2540C-2015	678705		
92587687005	AP-1-DUP-1	SM 2540C-2015	678705		
92587687006	AP-1-EB-1	SM 2540C-2015	678705		
92587687007	AP-1-FB-1	SM 2540C-2015	678705		
92587687001	YGWC-52	EPA 300.0 Rev 2.1 1993	678877		
92587687002	YGWC-44	EPA 300.0 Rev 2.1 1993	678877		
92587687003	YGWC-45	EPA 300.0 Rev 2.1 1993	678877		
92587687004	YGWC-46A	EPA 300.0 Rev 2.1 1993	678877		
92587687005	AP-1-DUP-1	EPA 300.0 Rev 2.1 1993	678877		
92587687006	AP-1-EB-1	EPA 300.0 Rev 2.1 1993	678877		
92587687007	AP-1-FB-1	EPA 300.0 Rev 2.1 1993	678877		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: G. Palmer

Project #:

**WO# : 92587687**



Courier:  Commercial  Fed Ex  UPS  USPS  Client  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 2/10/22 CPK

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 214 Type of Ice:  Wet  Blue  None

Cooler Temp: 3.4 Correction Factor: Add/Subtract (°C) 401

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.5

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-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	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_



Document Name:  
**Sample Condition Upon Receipt (SCUR)**  
 Document No.:  
**F-CAR-CS-033-Rev.08**

Document Revised: November 15, 2021  
 Page 2 of 2  
 Issuing Authority:  
 Pace Carolinas Quality Office

\*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 bottles

Project #

**WO# : 92587687**

PM: NMG

Due Date: 02/24/22

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	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) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-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)	AG3A[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 Unpreserved (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (3 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)	V5GU-20 mL Scintillation vials (N/A)	DIG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

**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 (i.e. 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**

**Section B**

**Section C**

**Required Client Information:**  
 Company: GA Power  
 Address: Atlanta, GA  
 Phone: [ ] Fax [ ]  
 Requested Due Date: [ ]

**Required Project Information:**  
 Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Project Name: Plant Yates AP-1  
 Project Number: [ ]

**Invoice Information:**  
 Attention: Southern Co.  
 Company Name: [ ]  
 Address: [ ]  
 Pico Quote: [ ]  
 Pico Project Manager: Nicole D'Onofrio  
 Pico Profile #: 10840

**Regulatory Agency:**  
 State / Location: Georgia

ITEM #	SAMPLE ID <small>One Character per box (A-Z, 0-9, /, -) Sample IDs must be unique</small>	MATRIX <small>Drinking Water Water Waste Water Product Sewer/Solid Oil Other</small>	CODE <small>DW WT WW P SL OL WP AR OT TS</small>	COLLECTED			SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES								Y/N	Analyses Test	Residual Chlorine (Y/N)	pH: pH: pH: pH: pH: pH: pH:			
				DATE	TIME	DATE			TIME	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol					Other		
																						START	END
1	YGWC-62		WT G	2/21/14																		pH: 6.99	
2	YGWC-44		WT G	2/20/14																			pH: 5.73
3	YGWC-45		WT G	2/21/14																			pH: 6.15
4	YGWC-46A		WT G	2/21/14																			pH: 6.98
5	AP-1-DUP-1		WT G	2/6/14																			
6	AP-1-EB-1		WT G	2/6/14																			
7	AP-1-FB-1		WT G	2/21/14																			
8			WT G																				
9			WT G																				
10			WT G																				
11			WT G																				
12			WT G																				

**ADDITIONAL COMMENTS:**  
 Arcadis State 300 0 (Cl, F, Sulfate)  
 App III Metals: Boron 60208, Ca 80100  
 App IV Metals: Barium 60208, Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Zirconium (Zr)

**RELINQUISHED BY / AFFILIATION:**  
 [Signature] Arcadis  
 DATE: 2/10/14  
 TIME: 1435

**ACCEPTED BY / AFFILIATION:**  
 [Signature] Arcadis  
 DATE: 2/10/14  
 TIME: 1435

**Requester's Signature:**  
 [Signature]  
 DATE: [ ]

**Temp in C:** [ ]  
 Received on Ice (Y/N): [ ]  
 Custody Sealed Cooler (Y/N): [ ]  
 Samples Intact (Y/N): [ ]

Georgia Power Co. – Plant Yates

# Data Review Report

Metals, Radium, and General Chemistry Analyses

SDGs #92587680 and 92587687

Analyses Performed By:

Pace Analytical Services – Asheville, North Carolina

Pace Analytical Services – Peachtree Corners, Georgia

Pace Analytical Services – Greensburg, Pennsylvania

Report #44874R

Review Level: Tier II

Project: 30053437.00004

## Summary

This Data Review Report summarizes the review of Sample Delivery Groups (SDGs) #92587680 and 92587687 for samples collected in association with the Georgia Power Company – Plant Yates. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the chain of custody form and a table summarizing the data validation qualifiers. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
					RAD	MET	GEN CHEM
YGWC-52	92587680001 92587687001	Water	2/9/2022		X	X	X
YGWC-44	92587680002 92587687002	Water	2/9/2022		X	X	X
YGWC-45	92587680003 92587687003	Water	2/9/2022		X	X	X
YGWC-46A	92587680004 92587687004	Water	2/9/2022		X	X	X
AP-1-DUP-1	92587680005 92587687005	Water	2/9/2022	YGWC-46A	X	X	X
AP-1-EB-1	92587680006 92587687006	Water	2/9/2022		X	X	X
AP-1-FB-1	92587680007 92587687007	Water	2/9/2022		X	X	X

**Notes:**

1. Metals and total dissolved solids (TDS) analysis performed by Pace Analytical Services – Peachtree Corners, Georgia.
2. Anions (chloride, fluoride, and sulfate) analysis performed by Pace Analytical Services – Asheville, North Carolina.
3. Radium analysis performed by Pace Analytical Services – Greensburg, Pennsylvania.
4. pH analysis performed as a field measurement.

## Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

**Note:**

QA = quality assurance

## Inorganic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010D, 6020B, 7470A, 9315, and 9320; Standard Method (SM) SM4500-H+ B and SM2540C; and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA 542-R-20-006, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, October 2004, as appropriate).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
  - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
  - E The reported value is estimated due to the presence of interference.
  - N Spiked sample recovery is not within control limits.
  - \* Duplicate analysis is not within control limits.
- Validation Qualifiers
  - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
  - UB Analyte considered non-detect at the listed value due to associated blank contamination.
  - R The sample results are rejected.

Two facts should be noted by all data users. First, the “R” flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information

as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

# Metals Analyses

## 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010D/6020B	Water	180 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.

**Note:**

s.u. = standard units

All samples were analyzed within the specified holding times.

## 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Arsenic was detected in the associated method blank; however, the associated sample results were non-detect. No qualification of the sample results was required.

## 3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

### 3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

MS/MSD analysis was not performed using a sample from this SDG.

### 3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

Laboratory duplicate or MS/MSD analysis was not performed using a sample from this SDG.

### 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-46A / AP-1-DUP-1	Calcium	109	109	0.0%
	Barium	0.042	0.042	0.0%
	Boron	2.1	2.0	4.9%
	Cobalt	0.00060 J	0.00061 J	AC
	Lithium	0.014 J	0.013 J	
	Molybdenum	0.0021 J	0.0022 J	

**Note:**

AC = Acceptable

The differences in the results between the parent sample YGWC-46A and field duplicate sample AP-1-DUP-1 were acceptable.

### 5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

### 6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.



## Data Validation Checklist for Metals

METALS: SW-846 6010D/6020B/7470A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
<b>Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES)</b> <b>Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)</b> <b>Atomic Absorption – Manual Cold Vapor (CV)</b>					
<b>Tier II Validation</b>					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Laboratory Duplicate (RPD)	X				X
Field Duplicate (RPD)		X		X	

**Notes:**

%R     Percent recovery

RPD     Relative percent difference

## General Chemistry Analyses

### 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Total Dissolved Solids (TDS) by SM2540C	Water	7 days from collection to analysis	Cool to <6°C
Chloride, Fluoride, and Sulfate by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

### 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

TDS was detected in the associated equipment blank AP-1-EB-1; however, the associated sample results were greater than the BAL. No qualification of the sample results was required.

### 3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

#### 3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis performed using sample AP-1-EB-1 in association with anions analysis exhibited recoveries within the control limits.

### 3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

Laboratory duplicate analysis was not performed using a sample from this SDG in association with TDS.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis in association with anions. The MS/MSD recoveries exhibited acceptable RPDs.

### 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-46A / AP-1-DUP-1	TDS	846	826	2.4%
	Chloride	28.2	28.2	0.0%
	Fluoride	0.12	0.11	AC
	Sulfate	415	417	0.5%

**Note:**

AC = Acceptable

The differences in the results between the parent sample YGWC-46A and field duplicate sample AP-1-DUP-1 were acceptable.

### 5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

### 6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

## Data Validation Checklist for General Chemistry

General Chemistry: SM4500-H+ B, SM2540C, USEPA 300.0	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
<b>Miscellaneous Instrumentation</b>					
<b>Tier II Validation</b>					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Laboratory Duplicate (RPD)	X				X
Field Duplicate (RPD)		X		X	

**Notes:**

%R Percent recovery

RPD Relative percent difference

## Radiological Analyses

### 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

**Note:**

s.u. = standard units

All samples were analyzed within the specified holding times.

### 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and field/rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field/rinse blanks measure contamination of samples during field operations.

Blank results should be verified to be accurately reported and that tolerance limits ( $\pm 2$  sigma or standard deviation) were not exceeded; and blank results verified to be less than the minimum detectable concentration (MDC).

For blanks to be considered not applicable, verify net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria. If either of these criteria is true, the blank is considered not suspect of contamination (or non-detect).

1. Is the blank result less than the uncertainty and less than the MDC?
2. Does the blank have an uncertainty greater than the result (or indistinguishable from background) or does the blank result fall between its uncertainty and its MDC?

If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used in determining the effect of possible blank contamination on the sample results:

$$\text{Normalized absolute difference}_{\text{MethodBlank}} = \frac{| \text{Sample} - \text{Blank} |}{\sqrt{(U_{\text{Sample}})^2 + (U_{\text{Blank}})^2}}$$

Where:

$U_{\text{Sample}}$  = uncertainty of the sample

$U_{\text{Blank}}$  = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

**Note:**

\* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

Radium-228, Radium-226, and total Radium were detected in the QA blanks, however, the activities were measured as less than the uncertainty and MDC or between the uncertainty and MDC as described above. Hence, the blank results are considered non-detect and no qualification of the results was required.

### 3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

#### 3.1 MS Analysis

MS samples are not typically analyzed for gamma spectral content due to the inability of the laboratory to homogenize spike material with the sample.

If performed, the spike analysis must exhibit a percent recovery within the control limits of 70% to 130%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits.

In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of <math>\pm 3</math> sigma for either.

The numerical performance indicator for a matrix spike sample is calculated by:

$$Z_{MS} = \frac{x - x_0 - c}{\sqrt{u^2(x) + u^2(x_0) + u^2(c)}}$$

Where:

x = measured concentration of the spiked sample.

x<sub>0</sub> = measured concentration of the unspiked sample.

c = spike concentration added.

u<sup>2</sup>(x), u<sup>2</sup>(x<sub>0</sub>), u<sup>2</sup>(c) = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

MS analysis was not performed using a sample from this SDG.

### 3.2 Laboratory Duplicate Analysis

Duplicate analyses are indicators of laboratory precision based on each sample matrix. For replicate analysis results to be considered in agreement the duplicate error ratio (DER) must be less than 2.13. In the event the DER is outside of the limit of 2.13, a numerical indicator to make assessments is calculated, with a limit of  $\pm 3$  sigma or standard deviation.

The numerical performance indicator for laboratory duplicates is calculated by:

$$Z_{Dup} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

Where:

$x_1, x_2$  = two measured activity concentrations.

$u^2(x_1), u^2(x_2)$  = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

Laboratory duplicate analysis was not performed using a sample from this SDG.

### 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. There are no specific review criteria for radiological field replicate analyses comparability. The degree of agreement between these replicates is to be used in conjunction with all of the remaining quality control results as an aid in the decision as to the overall quality of the data. Data are not to be qualified due to field replicates alone. To determine the level of agreement between the replicates, the following guidelines have been established:

For all analyses in water matrices, data should be considered in agreement if results are within a factor of four of each other. Data between a factor of four and five of each other should be considered as a minor discrepancy and data greater than a factor of five should be considered a major discrepancy.

The field duplicate sample results are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-46A / AP-1-DUP-1	Radium-226	0.588 ± 0.192	0.628 ± 0.203	AC
	Radium-228	1.15 ± 0.413	0.739 ± 0.356	
	Total Radium	1.74 ± 0.605	1.37 ± 0.559	

**Note:**

AC = Acceptable

The differences in the results between the parent sample YGWC-46A and field duplicate sample AP-1-DUP-1 were acceptable.

## 5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to 110% is applied to each sample spiked with either a carrier and/or a tracer.

The tracer and carrier analyses exhibited recoveries within the control limits.

## 6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 60% to 135%. In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma.

The numerical performance indicator for a laboratory control sample is calculated by:

$$Z_{LCS} = \frac{x - c}{\sqrt{u^2(x) + u^2(c)}}$$

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

$u^2(x)$  = combined standard uncertainty of the result squared.

$u^2(c)$  = combined standard uncertainty of the LCS value squared.

LCS performance is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

## 7. Isotope Identification

For sample results to be considered "non-detect", evaluate data based on the following two criteria. If either one of these criteria is true, the sample result is considered "non-detect".

1. Sample result is less than the uncertainty and less than the MDC/MDA; or
2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- YGWC-44 – Radium-226, Radium-228, and total Radium
- YGWC-52 – Radium-226
- YGWC-45 – Radium-228



## **8. System Performance and Overall Assessment**

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

## Data Validation Checklist for Radiologicals


Radiologicals: SW-846 9315/9320	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
<b>Miscellaneous Instrumentation</b>					
<b>Tier II Validation</b>					
Holding Times		X		X	
Activity, +/- uncertainty, MDC/MDA		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Carrier (Surrogate) %R		X		X	
Tracer (Surrogate) %R		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Laboratory Duplicate (RPD)	X				X
Field Duplicate (RPD)		X		X	

**Notes:**

%R     Percent recovery

RPD     Relative percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

---

DATE: March 22, 2022

---

PEER REVIEW: Dennis Capria

DATE: March 25, 2022

---

## **Chain of Custody / Data Qualifier Summary Table**

## 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:		Section B Required Project Information:		Section C Invoice Information:		Page :    /    Of    /	
Company: GA Power		Report To: SCS Contacts		Attention: Southern Co.		Regulatory Agency	
Address: Atlanta, GA		Copy To: Arcadis Contacts		Company Name:			
Email To:		Purchase Order #:		Address:			
Phone:	Fax:	Project Name: Plant Yates AP-1		Pace Quote:			
Requested Due Date:		Project Number:		Pace Project Manager: Nicole D'Oleo		State / Location	
				Pace Profile #: 10840		Georgia	

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / . -) Sample ids must be unique	MATRIX CODE (see valid codes to left)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Y/N	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	pH:
			START DATE	TIME	END DATE	TIME			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol		Other	App III/IV Metals		Cl. F. SO4		TDS (2540C)		RAD 9315/0320				
																		Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N				
																		Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N		
1	YGWC-52	WT G	2/9/22	1114	-	-	5	2	3					X	X	X	X										pH: 6.99	
2	YGWC-44	WT G	2/9/22	1248	-	-	5	2	3					X	X	X	X										pH: 5.73	
3	YGWC-45	WT G	2/9/22	1440	-	-	5	2	3					X	X	X	X										pH: 6.15	
4	YGWC-46A	WT G	2/9/22	1613	-	-	5	2	3					X	X	X	X										pH: 6.98	
5	AP-1-DUP-1	WT G	2/9/22	-	-	-	5	2	3					X	X	X	X										pH: -	
6	AP-1-EB-1	WT G	2/9/22	1720	-	-	5	2	3					X	X	X	X										pH: -	
7	AP-1-FB-1	WT G	2/9/22	1142	-	-	5	2	3					X	X	X	X										pH: -	
8		WT G					5	2	3					X	X	X	X										pH: -	
9		WT G					5	2	3					X	X	X	X										pH: -	
10		WT G					5	2	3					X	X	X	X										pH: -	
11		WT G					5	2	3					X	X	X	X										pH: -	
12		WT G					5	2	3					X	X	X	X										pH: -	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
Anions Suite 300.0 (Cl, F, Sulfate)	<i>Mary Chest</i> / Arcadis	2/10/22	1435	<i>SP Arcadis</i>	2/10/22	1435		
App III Metals: Boron 6020B, Ca 6010D	<i>SP Arcadis</i>	2/10/22	1700	<i>SP Arcadis</i>	2/10/22	1700		
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)								

SAMPLER NAME AND SIGNATURE		TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>Mary Chest</i>					
SIGNATURE of SAMPLER: <i>Mary Chest</i>					
		DATE Signed: <i>2/10/22</i>			

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92587680						No qualifiers assigned	
92587687						No qualifiers assigned	

Georgia Power Co. – Plant Yates

# Data Review Report

Radium Analyses

SDG #92587081

Analyses Performed By:

Pace Analytical Services – Greensburg, Pennsylvania

Report #45262R

Review Level: Tier II

Project: 30052922.00004

## Summary

This Data Review Report summarizes the review of Sample Delivery Group (SDG) #92587081 for samples collected in association with the Georgia Power Company – Plant Yates. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the chain of custody form and a table summarizing the data validation qualifiers. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
					RAD	MET	GEN CHEM
YGWA-39	92587081001	Water	2/8/2022		X		
YGWA-40	92587081002	Water	2/8/2022		X		
YGWA-47	92587081003	Water	2/8/2022		X		
GWA-2	92587081004	Water	2/8/2022		X		
UP-DUP-1	92587081005	Water	2/8/2022	GWA-2	X		
YGWA-1I	92587081006	Water	2/9/2022		X		
YGWA-1D	92587081007	Water	2/9/2022		X		
YGWA-2I	92587081008	Water	2/9/2022		X		
YGWA-3I	92587081009	Water	2/9/2022		X		
YGWA-3D	92587081010	Water	2/9/2022		X		
UP-EB-1	92587081011	Water	2/9/2022		X		
UP-FB-1	92587081012	Water	2/9/2022		X		
YGWA-17S	92587081013	Water	2/9/2022		X		
YGWA-18S	92587081014	Water	2/9/2022		X		
YGWA-18I	92587081015	Water	2/9/2022		X		
YGWA-20S	92587081016	Water	2/9/2022		X		
YGWA-21I	92587081017	Water	2/9/2022		X		
YGWA-5I	92587081018	Water	2/10/2022		X		
UP-DUP-3	92587081019	Water	2/10/2022	YGWA-5I	X		



Data Review Report

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
					RAD	MET	GEN CHEM
YGWA-14S	92587081020	Water	2/10/2022		X		
UP-DUP-2	92587081021	Water	2/10/2022	YGWA-14S	X		
YGWA-30I	92587081022	Water	2/11/2022		X		
YGWA-4I	92587081023	Water	2/11/2022		X		
YGWA-5D	92587081024	Water	2/10/2022		X		
UP-EB-2	92587081025	Water	2/10/2022		X		
UP-FB-2	92587081026	Water	2/10/2022		X		

## Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

**Note:**

QA = quality assurance

## Inorganic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 9315 and 9320. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA 542-R-20-006, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, October 2004, as appropriate).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
  - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
  - E The reported value is estimated due to the presence of interference.
  - N Spiked sample recovery is not within control limits.
  - \* Duplicate analysis is not within control limits.
- Validation Qualifiers
  - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
  - UB Analyte considered non-detect at the listed value due to associated blank contamination.
  - R The sample results are rejected.

## Data Review Report

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

# Radiological Analyses

## 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

**Note:**

s.u. = standard units

All samples were analyzed within the specified holding times.

## 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and field/rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field/rinse blanks measure contamination of samples during field operations.

Blank results should be verified to be accurately reported and that tolerance limits ( $\pm 2$  sigma or standard deviation) were not exceeded; and blank results verified to be less than the minimum detectable concentration (MDC).

For blanks to be considered not applicable, verify net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria. If either of these criteria is true, the blank is considered not suspect of contamination (or non-detect).

1. Is the blank result less than the uncertainty and less than the MDC?
2. Does the blank have an uncertainty greater than the result (or indistinguishable from background) or does the blank result fall between its uncertainty and its MDC?

If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used in determining the effect of possible blank contamination on the sample results:

$$\text{Normalized absolute difference}_{\text{MethodBlank}} = \frac{| \text{Sample} - \text{Blank} |}{\sqrt{(U_{\text{Sample}})^2 + (U_{\text{Blank}})^2}}$$

Where:

$U_{\text{Sample}}$  = uncertainty of the sample

$U_{\text{Blank}}$  = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

**Note:**

\* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

Radium-228, Radium-226, and total Radium were detected in the QA blanks, however, the activities were measured as less than the uncertainty and MDC or between the uncertainty and MDC as described above. Hence, the blank results are considered non-detect and no qualification of the results was required.

### 3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

#### 3.1 MS Analysis

MS samples are not typically analyzed for gamma spectral content due to the inability of the laboratory to homogenize spike material with the sample.

If performed, the spike analysis must exhibit a percent recovery within the control limits of 70% to 130%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits.

In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of <math>\pm 3</math> sigma for either.

The numerical performance indicator for a matrix spike sample is calculated by:

$$Z_{MS} = \frac{x - x_0 - c}{\sqrt{u^2(x) + u^2(x_0) + u^2(c)}}$$

Where:

x = measured concentration of the spiked sample.

x<sub>0</sub> = measured concentration of the unspiked sample.

c = spike concentration added.

u<sup>2</sup>(x), u<sup>2</sup>(x<sub>0</sub>), u<sup>2</sup>(c) = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

MS analysis was not performed using a sample from this SDG.

## 3.2 Laboratory Duplicate Analysis

Duplicate analyses are indicators of laboratory precision based on each sample matrix. For replicate analysis results to be considered in agreement the duplicate error ratio (DER) must be less than 2.13. In the event the DER is outside of the limit of 2.13, a numerical indicator to make assessments is calculated, with a limit of  $\pm 3$  sigma or standard deviation.

The numerical performance indicator for laboratory duplicates is calculated by:

$$Z_{Dup} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

Where:

$x_1, x_2$  = two measured activity concentrations.

$u^2(x_1), u^2(x_2)$  = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

The laboratory duplicate analysis performed on sample location YGWA-39 in association with SW-846 9315 analysis exhibited acceptable difference between the results.

## 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. There are no specific review criteria for radiological field replicate analyses comparability. The degree of agreement between these replicates is to be used in conjunction with all of the remaining quality control results as an aid in the decision as to the overall quality of the data. Data are not to be qualified due to field replicates alone. To determine the level of agreement between the replicates, the following guidelines have been established:

Data should be considered in agreement if results are within a factor of four of each other. Data between a factor of four and five of each other should be considered as a minor discrepancy and data greater than a factor of five should be considered a major discrepancy.

The field duplicate sample results are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWA-2 / UP-DUP-1	Radium-226	0.151 ± 0.105	0.138 ± 0.115	AC
	Radium-228	0.311 ± 0.281	0.617 ± 0.346	
	Total Radium	0.462 ± 0.386	0.755 ± 0.461	
YGWA-5I / UP-DUP-3	Radium-226	0.0387 ± 0.0686	0.183 ± 0.111	AC
	Radium-228	0.336 ± 0.397	-0.150 ± 0.507	
	Total Radium	0.375 ± 0.466	0.183 ± 0.618	
YGWA-14S / UP-DUP-2	Radium-226	-0.0197 ± 0.0632	0.0406 ± 0.0923	AC
	Radium-228	-0.199 ± 0.449	-0.195 ± 0.313	
	Total Radium	0.000 ± 0.512	0.0406 ± 0.405	

**Note:**

AC = Acceptable

The differences in the results between the parent sample GWA-2 and field duplicate sample UP-DUP-1 were acceptable. It was noted that the Radium-226, Radium-228, and total Radium results in these samples are considered not detected based on the criteria discussed in Section 7.

The differences in the results between the parent sample YGWA-5I and field duplicate sample UP-DUP-3 were acceptable. It was noted that the Radium-226, Radium-228, and total Radium results in these samples are considered not detected based on the criteria discussed in Section 7.

The differences in the results between the parent sample YGWA-14S and field duplicate sample UP-DUP-2 were acceptable. It was noted that the Radium-226, Radium-228, and total Radium results in these samples are considered not detected based on the criteria discussed in Section 7.

## 5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to 110% is applied to each sample spiked with either a carrier and/or a tracer.

The tracer and carrier analyses exhibited recoveries within the control limits.

## 6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery



between the control limits of 60% to 135%. In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma.

The numerical performance indicator for a laboratory control sample is calculated by:

$$Z_{LCS} = \frac{x - c}{\sqrt{u^2(x) + u^2(c)}}$$

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

$u^2(x)$  = combined standard uncertainty of the result squared.

$u^2(c)$  = combined standard uncertainty of the LCS value squared.

LCS performance is acceptable when the numerical performance indicator calculation yields a value between  $\pm 3$  sigma. Warning limits have been established as  $\pm 2$  sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

## 7. Isotope Identification

For sample results to be considered “non-detect”, evaluate data based on the following two criteria. If either one of these criteria is true, the sample result is considered “non-detect”.

1. Sample result is less than the uncertainty and less than the MDC/MDA; or
2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- YGWA-39, YGWA-1D, and YGWA-4I – Radium-228
- GWA-2, UP-DUP-1, YGWA-18S, YGWA-18I, YGWA-20S, YGWA-5I, YGWA-14S, UP-DUP-2, and YGWA-30I – Radium-226, Radium-228, and total Radium
- YGWA-40, YGWA-47, YGWA-1I, YGWA-2I, YGWA-17S, and UP-DUP-3 – Radium-228 and total Radium

## 8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

## Data Validation Checklist for Radiologicals

Radiologicals: SW-846 9315/9320	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
<b>Miscellaneous Instrumentation</b>					
<b>Tier II Validation</b>					
Holding Times		X		X	
Activity, +/- uncertainty, MDC/MDA		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Carrier (Surrogate) %R		X		X	
Tracer (Surrogate) %R		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Laboratory Duplicate (RPD)		X		X	
Field Duplicate (RPD)		X		X	

**Notes:**

%R     Percent recovery

RPD     Relative percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

---

DATE: April 26, 2022

---

PEER REVIEW: Dennis Capria

DATE: April 27, 2022

---

## **Chain of Custody / Data Qualifier Summary Table**

### CHAIN-OF-CUSTODY / Analytical Request Document

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

Page :	1	Of	1
--------	---	----	---

**Section A**

**Required Client Information:**

Company: GA Power  
 Address: Atlanta, GA  
 Email To:  
 Phone: Fax  
 Requested Due Date:

**Section B**

**Required Project Information:**

Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Purchase Order #:  
 Project Name: Plant Yates Pooled Upgradient  
 Project Number:

**Section C**

**Invoice Information:**

Attention: Southern Co.  
 Company Name:  
 Address:  
 Pace Quote:  
 Pace Project Manager: Nicole D'Osio  
 Pace Profile #: 10840

Regulatory Agency  
 State / Location  
 Georgia

ITEM #	SAMPLE ID <small>One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique</small>	MATRIX <small>Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Other Tissue</small>	CODE <small>DW WT WW P SL OK WP AR OT TS</small>	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analytes Test Y/N	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)		
						START		END				Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other		App IIIIV Metals	Cl F, SO4	TDS (2540C)	RAD 9315/9320	App I/II (ppbsum only)	pH							
						DATE	TIME	DATE	TIME																								
1	YGWA-39	WT	G	WT	G	2/8/22	1455	-	-	5	2	3								X	X	X	X										pH: 5.78
2	YGWA-40	WT	G	WT	G	2/8/22	1522	-	-	5	2	3								X	X	X	X										pH: 5.26
3	YGWA-11	WT	G	WT	G	-	-	-	-	5	2	3								X	X	X	X										pH:
4	YGWA-1B	WT	G	WT	G	-	-	-	-	5	2	3								X	X	X	X										pH:
5	YGWA-2I	WT	G	WT	G	-	-	-	-	5	2	3								X	X	X	X										pH:
6	YGWA-3I	WT	G	WT	G	-	-	-	-	5	2	3								X	X	X	X										pH:
7	YGWA-3D	WT	G	WT	G	-	-	-	-	5	2	3								X	X	X	X										pH:
8	YGWA-14S	WT	G	WT	G	-	-	-	-	5	2	3								X	X	X	X										pH:
9	UP-DUP-2	WT	G	WT	G	-	-	-	-	5	2	3								X	X	X	X										pH:
10	YGWA-30I	WT	G	WT	G	-	-	-	-	5	2	3								X	X	X	X										pH:
11	UP-FB-1	WT	G	WT	G	-	-	-	-	5	2	3								X	X	X	X										pH:
12	UP-FB-1	WT	G	WT	G	-	-	-	-	5	2	3								X	X	X	X										pH:

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	<i>[Signature]</i> /Arcadis	2/9/22	0825	<i>[Signature]</i> /Arcadis	2/12/22	0825	
App III Metals: Boron 6020B, Ca 60100; App III 6020B: Zn, Ag, Ni, V	<i>[Signature]</i> /Arcadis	2/9/22	1018	<i>[Signature]</i> /Arcadis	2/9	1018	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)							

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: *Kim Lipszyski*

SIGNATURE of SAMPLER: *[Signature]* DATE Signed: *2/9/22*

**TEMP in C**

Received on Ice (Y/N)

CUSTODY Sealed Cooler (Y/N)

Samples Intact (Y/N)



### CHAIN-OF-CUSTODY / Analytical Request Document

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

Page :                      Of

<b>Section A</b> Required Client Information:			<b>Section B</b> Required Project Information:			<b>Section C</b> Invoice Information:			Regulatory Agency:		
Company: GA Power			Report To: SCS Contacts			Attention: Southern Co.					
Address: Atlanta, GA			Copy To: Arcadis Contacts			Company Name:					
Email To:			Purchase Order #:			Address:			State / Location:		
Phone:		Fax:	Project Name: Plant Yates Pooled Upgradient			Face Quote:					
Requested Due Date:			Project Number:			Face Project Manager: Nicole D'Oteo			Georgia		
						Face Profile #: 10840					

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique	MATRIX CODE (see valid codes to left)	MATRIX	CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analytes Test Y/N	Requested Analytes Filtered (Y/N)	Residual Chlorine (Y/N)	pH:					
						START		END				H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other					App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 8315/9320	App I/II (ppysum only)
						DATE	TIME	DATE	TIME																		
1	YGWA-1T	WT	G								5	2	3						X	X	X	X					pH:
2	GWA-2	WT	G								5	2	3						X	X	X	X					pH: 5.83
3	UP-DUP-1	WT	G								5	2	3						X	X	X	X					pH: <del>6.00</del>
4	YGWA-1T	WT	G								5	2	3						X	X	X	X					pH:
5	YGWA-S1	WT	G								5	2	3						X	X	X						pH:
6	UP-DUP-3	WT	G								5	2	3						X	X	X	X					pH:
7	YGWA-5D	WT	G								5	2	3						X	X	X	X					pH:
8	YGWA-17S	WT	G								5	2	3						X	X	X	X					pH:
9	LIGWA-18S	WT	G								5	2	3						X	X	X	X					pH:
10	YGWA-18I	WT	G								5	2	3						X	X	X	X					pH:
11	YGWA-20C	WT	G								5	2	3						X	X	X	X					pH:
12	YGWA-21I	WT	G								5	2	3						X	X	X	X					pH:

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Arions Suite 300.0 (Cl, F, Sulfate)	Wahli Carter / Arcadis	2/19/22	0840	[Signature]	2/19/22	0840	
App III Metals: Boron 6020B, Ce 6010D; App III 6020B: Zn, Ag, Ni, V	[Signature] / Arcadis	2/19/22	1018	[Signature]	2/19	1018	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)							

<b>SAMPLER NAME AND SIGNATURE</b>			TEMP In C	Received on Ice (Y/N)	Liquor Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Wahli Carter		DATE Stamp: 02-09-22				
SIGNATURE of SAMPLER: [Signature]						

# CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b>		<b>Section B</b>			<b>Section C</b>	
<b>Required Client Information:</b>		<b>Required Project Information:</b>			<b>Invoice Information:</b>	
Company: <b>GA Power</b>	Report To: <b>SCS Contacts</b>	Copy To: <b>Arcadis Contacts</b>			Attention: <b>Southern Co.</b>	
Address: <b>Atlanta, GA</b>	Purchase Order #:				Company Name:	
Email To:	Project Name: <b>Plant Yates Pooled Upgradient</b>				Address:	
Phone:              Fax:	Project Number:				Pace Quote:	
Requested Due Date:	Project Profile #: <b>10840</b>				Pace Project Manager: <b>Nicole D'Oleo</b>	
<b>Regulatory Agency</b>						
<b>State / Location</b>						
<b>Georgia</b>						

ITEM #	SAMPLE ID <small>One Character per box. (A-Z, 0-9 / . -) Sample ids must be unique</small>	MATRIX CODE <small>(see valid codes to left)</small>	CODE <small>(see valid codes to left)</small>	SAMPLE TYPE <small>(E-GRAB C-COMP)</small>	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analyses Test <small>Y/N</small>	Requested Analysis Filtered (Y/N)								Residual Chlorine (Y/N)
					START		END				Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O8	Methanol	Other		App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 931B/32D	App I/II (gypsum only)				
					DATE	TIME	DATE	TIME																				
1	YGWA-39	WT	G						5	2	3							X	X	X	X							
2	YGWA-48	WT	G						5	2	3							X	X	X	X							
3	YGWA-1I	WT	G						5	2	3							X	X	X	X							
4	YGWA-1D	WT	G		2/1/22	1345	-	-	5	2	3							X	X	X	X			pH: 6.24				
5	YGWA-2I	WT	G		2/1/22	1345	-	-	5	2	3							X	X	X	X			pH: 7.12				
6	YGWA-3I	WT	G		2/1/22	1335	-	-	5	2	3							X	X	X	X			pH: 5.89				
7	YGWA-3D	WT	G		2/1/22	1335	-	-	5	2	3							X	X	X	X			pH: 7.66				
8	YGWA-14S	WT	G		2/1/22	1320	-	-	5	2	3							X	X	X	X			pH: 7.97				
9	UP-BUF-2	WT	G						5	2	3							X	X	X	X			pH: -				
10	YGWA-30I	WT	G						5	2	3							X	X	X	X			pH: -				
11	UP-FB-1	WT	G						5	2	3							X	X	X	X			pH: -				
12	UP-FB-1	WT	G						5	2	3							X	X	X	X			pH: -				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS		
	Anions Suite 300.0 (Cl, F, Sulfate) App III Metals: Boron 6020B, Ca 6010D; App VI 6020B: Zn, Ag, Ni, V  App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)	<i>[Signature]</i> Arcadis		2/10/22	1435	<i>[Signature]</i> Arcadis		2/10/22	1435		
	<i>[Signature]</i> Arcadis		2/10/22	1300	<i>[Signature]</i> Arcadis		2/10/22	1300			

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER: <i>Kim Lapszynski</i>	DATE Signed: <i>2/10/22</i>
SIGNATURE of SAMPLER: <i>[Signature]</i>	

TEMP in C	Received on ice (Y/N)	Cooling (Y/N)	Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)
-----------	-----------------------	---------------	--------------	--------------	----------------------



# CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information: Company: GA Power Address: Atlanta, GA Email To: Phone: _____ Fax Requested Due Date: _____	<b>Section B</b> Required Project Information: Report To: SCS Contacts Copy To: Arcadis Contacts Purchase Order #: Project Name: Plant Yates Pooled Upgradient Project Number:	<b>Section C</b> Invoice Information: Attention: Southern Co. Company Name: Address: Pace Quote: Pace Project Manager: Nicole D'Oleo Pace Profile #: 10840	Page: _____ Of _____ Regulatory Agency: State / Location: Georgia
---	--	---	--

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique	MATRIX Drinking Water Water Waste Water Product Soil/Ground Oil Wba Air Other Tissue	CODE DW WT WW P SL CL WP AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Y/N	Requested Analysis Filtered (Y/N)					Residual Chlorine (Y/N)				
						START				END		Unpreserved	H2SO4	HNO3	HCl	NaOH		Na2S2O3	Methanol	Other	Analytical Test						
						DATE	TIME			DATE	TIME										App III/IV Metals	CI, F, SO4		TDS (2540C)	RAD 0315/9320	App I / II (ppm only)	
1	YGWA-09	WT	G						5	2									X	X	X	X					pH:
2	YGWA-40	WT	G						5	2									X	X	X	X					pH:
3	YGWA-11	WT	G						5	2									X	X	X	X					pH:
4	YGWA-1D	WT	G						5	2									X	X	X	X					pH:
5	YGWA-21	WT	G						5	2									X	X	X	X					pH:
6	YGWA-01	WT	G						5	2									X	X	X	X					pH:
7	YGWA-3D	WT	G						5	2									X	X	X	X					pH:
8	YGWA-143	WT	G						5	2									X	X	X	X					pH:
9	UP-BUP-2	WT	G						5	2									X	X	X	X					pH:
10	YGWA-901	WT	G						5	2									X	X	X	X					pH:
11	UP-EB-1	WT	G	2/19/22	1306				5	2									X	X	X	X					pH:
12	UP-FB-1	WT	G	2/19/22	1047				5	2									X	X	X	X					pH:

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	Jessica Ware Arcadis	2/10/22	1435	Jessica Ware	2/10/22	1435	
App III Metals: Boron 6020B, Ca 6010D; App VII 6020B: Zn, Ag, Ni, V	93 Arcadis	2/10/22	1700	Jessica Ware	2/10/22	1700	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)							

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER: Jessica Ware	
SIGNATURE of SAMPLER: <i>Jessica Ware</i>	DATE Signed: 2/19/22

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

### 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  
 Email To:  
 Phone:  
 Requested Due Date:

**Section B**

**Required Project Information:**  
 Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Purchase Order #: **Plant Yates Pooled Upgradient**  
 Project Name:  
 Project Number:

**Section C**

**Invoice Information:**  
 Attention: Southern Co.  
 Company Name:  
 Address:  
 Pace Quote:  
 Pace Project Manager: Nicole D'Oleo  
 Pace Profile #: 10840

ITEM #	SAMPLE ID <small>One Character per box. (A-Z, 0-9, -, ) Sample IDs must be unique</small>	MATRIX <small>Drinking Water Water Waste Water Product Semi-Solid Oil Wipe Air Other Tissue</small>	CODE <small>DW WT WW P SL QL WP AR OT TS</small>	COLLECTED		SAMPLE TEMP AT COLLECTION	PRESERVATIVES								REQUESTED ANALYSIS FILTERED (Y/N)										Residual Chlorine (Y/N)			
				DATE	TIME		UNPRESERVED	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	ANALYSIS TEST	App. I/IV Metals			TDS (2540C)	RAD 9315/9320	App. I/II (gypsum only)							
																DATE	TIME	DATE										
1	YGWA-47	WT	G												X	X	X	X								pH:		
2	<del>GWA-2</del>	<del>WT</del>	<del>G</del>												<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>								<del>pH:</del>		
3	<del>UP-DUP-1</del>	<del>WT</del>	<del>G</del>												<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>								<del>pH:</del> 5.5		
4	<del>YGWA-4I</del>	<del>WT</del>	<del>G</del>												<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>								<del>pH:</del> 5.5		
5	<del>YGWA-5I</del>	<del>WT</del>	<del>G</del>												<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>								<del>pH:</del> 5.5		
6	<del>UP-DUP-3</del>	<del>WT</del>	<del>G</del>												<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>								<del>pH:</del> 5.5		
7	<del>YGWA-5B</del>	<del>WT</del>	<del>G</del>												<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>								<del>pH:</del> 5.5		
8	YGWA-17S	WT	G	2/19/22	1020			5	2	3					X	X	X	X								pH: 5.53		
9	UGWA-18S	WT	G	2/19/22	1224			5	2	3					X	X	X	X								pH: 5.28		
10	YGWA-18I	WT	G	2/19/22	1431			5	2	3					X	X	X	X								pH: 5.98		
11	YGWA-20S	WT	G	2/19/22	1619			5	2	3					X	X	X	X								pH: 5.91		
12	YGWA-21I	WT	G	2/19/22	1740			5	2	3					X	X	X	X								pH: 6.84		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 6020: Cl, F, Sulfate	<i>Jessica Ware</i> / Arcadis	2/10/22	1435	<i>SSP</i> / Arcadis	2/10/22	1435	
App III Metals: Boron 6020B, Ca 6010D; App VII 6020B: Zn, Ag, Ni, V	<i>Jessica Ware</i> / Arcadis	2/10/22	1700	<i>M/M</i> / M	2/10	1700	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)							

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: *Jessica Ware*

SIGNATURE of SAMPLER: *Jessica Ware*      DATE Signed: *2/19/22*

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

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 4

<b>Section A</b>		<b>Section B</b>		<b>Section C</b>		Regulatory Agency			
Required Client Information:				Required Project Information:				State / Location	
Company: <u>GA Power</u>		Report To: <u>SCS Contacts</u>		Invoice Information:				<u>Georgia</u>	
Address: <u>Atlanta, GA</u>		Copy To: <u>Arcadis Contacts</u>		Attention: <u>Southern Co.</u>					
Email To:		Purchase Order #:		Company Name:					
Phone:		Project Name: <u>Plant Yates Pooled Upgradient</u>		Address:					
Requested Due Date:		Project Number:		Face Quote:					
				Face Project Manager: <u>Nicole D'Oleo</u>					
				Face Profile #: <u>10840</u>					

ITEM #	SAMPLE ID <small>One Character per box. (A-Z, 0-9 / . -)</small> <small>Sample ids must be unique</small>	MATRIX <small>Drinking Water Water Waste Water Product Soil/Solid Sl Wipe Air Other Tissue</small>	CODE <small>CW WT WW P SL CL WP AR OT TS</small>	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analytes Test <small>App III/IV Metals Cl, F, SO4 TDS (25-6C) RAD 9316/9320 App I/II (gypsum only)</small>	Residual Chlorine (Y/N)	pH						
						DATE	TIME	DATE	TIME			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other									
1	YGWA-47	WT	G																									
2	QWA-2	WT	G																									
3	UP-DUP-1	WT	G																									
4	YGWA-41	WT	G																									
5	YGWA-51	WT	G																									
6	UP-DUP-3	WT	G			2/10/22	1727																					
7	YGWA-5D	WT	C																									
8	YGWA-17G	WT	G																									
9	YGWA-18S	WT	G																									
10	YGWA-18I	WT	G																									
11	YGWA-20S	WT	G																									
12	YGWA-24I	WT	G																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/ Arcadis	2/11/22	1445	Arcadis	2/11/22	1445	
App III Metals: Boron 6020B, Ca 6010D; App VII 6020B: Zn, Ag, Ni, V	Carson	2/11/22	1445	Carson	2/11/22	1445	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)							

<b>SAMPLER NAME AND SIGNATURE</b>		TEMP in C	Received on (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	SIGNATURE of SAMPLER:				
	Mark Cheek				
	[Signature]				
DATE Signed: 2/11/22					





# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 5 Of 5

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <b>GA Power</b>		Report To: <b>SCS Contacts</b>		Attention: <b>Southern Co.</b>	
Address: <b>Atlanta, GA</b>		Copy To: <b>Arcadis Contacts</b>		Company Name:	
Email To:		Purchase Order #:		Address:	
Phone: _____ Fax: _____		Project Name: <b>Plant Yates Pooled Upgradient</b>		Pace Quote:	
Requested Due Date:		Project Number:		Pace Project Manager: <b>Nicole D'Oleao</b>	
				Pace Profile #: <b>10840</b>	

ITEM #	SAMPLE ID <small>One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique</small>	MATRIX <small>Drinking Water Water Waste Water Product Spill/Solid Oil Wipe Air Other Tissue</small>	CODE <small>DW WT WW P SL WP AR OT TS</small>	MATRIX CODE <small>(see valid codes to left)</small>	SAMPLE TYPE <small>(G=GRAB C=COMP)</small>	COLLECTED				SAMPLE TEMP AT COLLECTION	Preservatives								ANALYSES TEST <small>Y/N</small>	Requested Analysis Filtered (Y/N)					Residual Chlorine (Y/N)					
						START		END			# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol		Other	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9316/9320		App I / II (gypsum only)				
						DATE	TIME	DATE	TIME																					
1	UP-EB-2	WT	G			11/40	-	-		5	2	3									X	X	X	X						pH
2	UP-FB-2	WT	G				-	-		5	2	3									X	X	X	X						pH
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Antions Suite 300.0 (Cl, F, Sulfate)	<i>Hannah Carson</i> / Arcadis	02/11/22	11:55	<i>JOHN F. FULL</i>	2/11/22	16:45	
App III Metals: Boron 6020B, Ca 6010D; App VII 6020B: Zn, Ag, Ni, V							
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)							

<b>SAMPLER NAME AND SIGNATURE</b>		TEMP IN C	Regulated on ice (Y/N)	Custody (Y/N)	Sealed (Y/N)	Cooled (Y/N)	Samples intact (Y/N)
PRINT Name of SAMPLER:							
SIGNATURE of SAMPLER:							

## CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 4 of 4

<b>Section A Required Client Information:</b>		<b>Section B Required Project Information:</b>		<b>Section C Invoice Information:</b>	
Company: GA Power		Report To: SCS Contacts		Attention: Southern Co.	
Address: Atlanta, GA		Copy To: Arcadis Contacts		Company Name:	
Email To:		Purchase Order #:		Address:	
Phone:	Fax:	Project Name: Plant Yates Pooled Upgradient		Pace Quote #:	
Requested Due Date:		Project Number:		Pace Project Manager: Nicole D'Oleo	
				Pace Profile #: 10840	

ITEM #	SAMPLE ID <small>One Character per box. (A-Z, 0-9, -) Sample Ids must be unique</small>	MATRIX CODE <small>(see valid codes to left)</small>	SAMPLE TYPE <small>(G=GRAB C=COMP)</small>	COLLECTED				SAMPLE TEMP AT COLLECTION	Preservatives										Analytes Test <small>Y/N</small>	Requested Analytes Filtered (Y/N)							Residual Chlorine (Y/N)	
				START		END			# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	App IIIIV Metals		Cl, F, SO4	TDS (2540C)	RAD 9916320	App I/II (gypsum only)					
				DATE	TIME	DATE	TIME																					
1	UP-EB-2	WT	G						5	2	3							X	X	X	X							
2	UP-FB-2	WT	G	2/10/22	1713				5	2	3							X	X	X	X							
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION		DATE		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS
			DATE	TIME			DATE	TIME			
Anions Suite 300.0 (Cl, F, Sulfate)		Arcadis	2/11/22	1445	Mariam Carson		2/11/22	1444			
App III Metals: Boron 6020B, Ca 6010D; App III 6020B: Zn, Ag, Ni, V		Mariam Carson	2/11/22	1645	Joe [Signature]		2/11/22	1645			
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), 7040A: Mercury (Hg)											

<b>SAMPLER NAME AND SIGNATURE</b>			
PRINT Name of SAMPLER: <u>Mariam Carson</u>		DATE Signed: <u>2/11/22</u>	
SIGNATURE of SAMPLER: <u>[Signature]</u>			

TEMP: \_\_\_\_\_ C  
 Received (Y/N) \_\_\_\_\_  
 Witnessed (Y/N) \_\_\_\_\_  
 Custody Sealed (Y/N) \_\_\_\_\_  
 Cooler (Y/N) \_\_\_\_\_  
 Samples Intact (Y/N) \_\_\_\_\_

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92587081						No qualifiers assigned	



February 25, 2022

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

RE: Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Dear Ms. Petty:

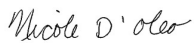
Enclosed are the analytical results for sample(s) received by the laboratory between February 09, 2022 and February 11, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where 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,



Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR  
Anna Bottum, ERM  
Andrea Brazell, ERM  
Lauren Coker, Georgia Pwer  
Geoffrey Gay, ARCADIS - Atlanta  
Kristen Jurinko  
Kelley Sharpe, ARCADIS - Atlanta  
Alex Simpson, Arcadis  
Lacy Smith, ERM  
Samantha Thomas

Caitlin Tillema, ERM  
Christine Weaver, ERM  
Albert Zumbuhl, Arcadis



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

---

### **Pace Analytical Services Charlotte**

South Carolina Laboratory ID: 99006  
9800 Kinsey Ave. Ste 100, Huntersville, NC 28078  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12  
South Carolina Laboratory ID: 99006

South Carolina Certification #: 99006001  
South Carolina Drinking Water Cert. #: 99006003  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Louisiana DoH Drinking Water #: LA029  
Virginia/VELAP Certification #: 460221

---

### **Pace Analytical Services Asheville**

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
North Carolina Drinking Water Certification #: 37712  
North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030  
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

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

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92587091001	YGWA-39	Water	02/08/22 14:55	02/09/22 10:18
92587091002	YGWA-40	Water	02/08/22 13:22	02/09/22 10:18
92587091003	YGWA-47	Water	02/08/22 11:40	02/09/22 10:18
92587091004	GWA-2	Water	02/08/22 11:50	02/09/22 10:18
92587091005	UP-DUP-1	Water	02/08/22 00:00	02/09/22 10:18
92587091006	YGWA-1I	Water	02/09/22 13:45	02/10/22 17:00
92587091007	YGWA-1D	Water	02/09/22 14:45	02/10/22 17:00
92587091008	YGWA-2I	Water	02/09/22 17:35	02/10/22 17:00
92587091009	YGWA-3I	Water	02/09/22 11:35	02/10/22 17:00
92587091010	YGWA-3D	Water	02/09/22 10:20	02/10/22 17:00
92587091011	UP-EB-1	Water	02/09/22 13:06	02/10/22 17:00
92587091012	UP-FB-1	Water	02/09/22 10:47	02/10/22 17:00
92587091013	YGWA-17S	Water	02/09/22 10:20	02/10/22 17:00
92587091014	YGWA-18S	Water	02/09/22 12:24	02/10/22 17:00
92587091015	YGWA-18I	Water	02/09/22 14:31	02/10/22 17:00
92587091016	YGWA-20S	Water	02/09/22 16:19	02/10/22 17:00
92587091017	YGWA-21I	Water	02/09/22 17:40	02/10/22 17:00
92587091018	YGWA-5I	Water	02/10/22 17:27	02/11/22 16:45
92587091019	UP-DUP-3	Water	02/10/22 00:00	02/11/22 16:45
92587091020	YGWA-14S	Water	02/10/22 16:20	02/11/22 16:45
92587091021	UP-DUP-2	Water	02/10/22 00:00	02/11/22 16:45
92587091022	YGWA-30I	Water	02/11/22 09:20	02/11/22 16:45
92587091023	YGWA-4I	Water	02/11/22 10:40	02/11/22 16:45
92587091024	YGWA-5D	Water	02/10/22 17:46	02/11/22 16:45
92587091025	UP-EB-2	Water	02/10/22 11:40	02/11/22 16:45
92587091026	UP-FB-2	Water	02/10/22 17:13	02/11/22 16:45

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92587091001	YGWA-39	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92587091002	YGWA-40	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92587091003	YGWA-47	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92587091004	GWA-2	EPA 6010D	KH	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92587091005	UP-DUP-1	EPA 6010D	KH	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92587091006	YGWA-1I	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92587091007	YGWA-1D	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92587091008	YGWA-2I	EPA 6010D	KH	1
		EPA 6020B	CW1	13

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92587091009	YGWA-3I	EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92587091010	YGWA-3D	SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92587091011	UP-EB-1	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92587091012	UP-FB-1	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
92587091013	YGWA-17S	EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
92587091014	YGWA-18S	EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92587091015	YGWA-18I	SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92587091016	YGWA-20S	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92587091017	YGWA-21I	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92587091018	YGWA-5I	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92587091019	UP-DUP-3	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92587091020	YGWA-14S	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92587091021	UP-DUP-2	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92587091022	YGWA-30I	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92587091023	YGWA-4I	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92587091024	YGWA-5D	EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92587091025	UP-EB-2	SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92587091026	UP-FB-2	SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1

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

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92587091001</b>	<b>YGWA-39</b>					
	Performed by	CUSTOME			02/09/22 12:38	
		R				
	pH	5.78	Std. Units		02/09/22 12:38	
EPA 6010D	Calcium	15.2	mg/L	1.0	02/23/22 21:07	
EPA 6020B	Arsenic	0.0034J	mg/L	0.0050	02/23/22 19:41	B
EPA 6020B	Barium	0.041	mg/L	0.0050	02/23/22 19:41	
EPA 6020B	Boron	0.13	mg/L	0.040	02/24/22 12:58	
EPA 6020B	Cadmium	0.00063	mg/L	0.00050	02/23/22 19:41	
EPA 6020B	Cobalt	0.0012J	mg/L	0.0050	02/23/22 19:41	
EPA 6020B	Lithium	0.0080J	mg/L	0.030	02/23/22 19:41	
EPA 6020B	Molybdenum	0.0035J	mg/L	0.010	02/23/22 19:41	
SM 2540C-2015	Total Dissolved Solids	248	mg/L	10.0	02/14/22 15:20	
EPA 300.0 Rev 2.1 1993	Chloride	7.4	mg/L	1.0	02/15/22 08:56	
EPA 300.0 Rev 2.1 1993	Fluoride	0.052J	mg/L	0.10	02/15/22 08:56	
EPA 300.0 Rev 2.1 1993	Sulfate	14.6	mg/L	1.0	02/15/22 08:56	
<b>92587091002</b>	<b>YGWA-40</b>					
	Performed by	CUSTOME			02/09/22 12:38	
		R				
	pH	5.26	Std. Units		02/09/22 12:38	
EPA 6010D	Calcium	6.0	mg/L	1.0	02/23/22 21:12	
EPA 6020B	Arsenic	0.0030J	mg/L	0.0050	02/23/22 19:47	B
EPA 6020B	Barium	0.039	mg/L	0.0050	02/23/22 19:47	
EPA 6020B	Beryllium	0.00028J	mg/L	0.00050	02/23/22 19:47	
EPA 6020B	Boron	0.074	mg/L	0.040	02/24/22 13:04	
EPA 6020B	Lithium	0.00076J	mg/L	0.030	02/23/22 19:47	
EPA 6020B	Selenium	0.0014J	mg/L	0.0050	02/23/22 19:47	
EPA 7470A	Mercury	0.00013J	mg/L	0.00020	02/16/22 15:55	
SM 2540C-2015	Total Dissolved Solids	93.0	mg/L	10.0	02/14/22 15:20	
EPA 300.0 Rev 2.1 1993	Chloride	6.2	mg/L	1.0	02/15/22 09:10	
EPA 300.0 Rev 2.1 1993	Sulfate	17.9	mg/L	1.0	02/15/22 09:10	
<b>92587091003</b>	<b>YGWA-47</b>					
	Performed by	CUSTOME			02/09/22 12:39	
		R				
	pH	5.40	Std. Units		02/09/22 12:39	
EPA 6010D	Calcium	9.4	mg/L	1.0	02/23/22 21:26	
EPA 6020B	Arsenic	0.0027J	mg/L	0.0050	02/23/22 19:53	B
EPA 6020B	Barium	0.030	mg/L	0.0050	02/23/22 19:53	
EPA 6020B	Beryllium	0.000056J	mg/L	0.00050	02/23/22 19:53	
EPA 6020B	Boron	0.015J	mg/L	0.040	02/23/22 19:53	
EPA 6020B	Cobalt	0.0013J	mg/L	0.0050	02/23/22 19:53	
EPA 6020B	Lithium	0.0039J	mg/L	0.030	02/23/22 19:53	
SM 2540C-2015	Total Dissolved Solids	151	mg/L	10.0	02/15/22 16:02	
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	02/15/22 09:52	
EPA 300.0 Rev 2.1 1993	Sulfate	50.9	mg/L	1.0	02/15/22 09:52	M1
<b>92587091004</b>	<b>GWA-2</b>					
	Performed by	CUSTOME			02/09/22 12:39	
		R				

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92587091004</b>	<b>GWA-2</b>					
	pH	5.83	Std. Units		02/09/22 12:39	
EPA 6010D	Calcium	25.6	mg/L	1.0	02/23/22 21:31	
EPA 6020B	Arsenic	0.0033J	mg/L	0.0050	02/23/22 19:59	B
EPA 6020B	Barium	0.037	mg/L	0.0050	02/23/22 19:59	
EPA 6020B	Cobalt	0.072	mg/L	0.0050	02/23/22 19:59	
EPA 6020B	Copper	0.0012J	mg/L	0.0050	02/23/22 19:59	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	02/23/22 19:59	
EPA 6020B	Nickel	0.017	mg/L	0.0050	02/23/22 19:59	
EPA 6020B	Zinc	0.014	mg/L	0.010	02/23/22 19:59	
SM 2540C-2015	Total Dissolved Solids	283	mg/L	10.0	02/15/22 16:03	
EPA 300.0 Rev 2.1 1993	Chloride	5.7	mg/L	1.0	02/15/22 10:34	
EPA 300.0 Rev 2.1 1993	Fluoride	0.064J	mg/L	0.10	02/15/22 10:34	
EPA 300.0 Rev 2.1 1993	Sulfate	107	mg/L	3.0	02/15/22 18:19	
<b>92587091005</b>	<b>UP-DUP-1</b>					
EPA 6010D	Calcium	25.6	mg/L	1.0	02/23/22 21:36	
EPA 6020B	Arsenic	0.0034J	mg/L	0.0050	02/23/22 20:05	B
EPA 6020B	Barium	0.034	mg/L	0.0050	02/23/22 20:05	
EPA 6020B	Cobalt	0.055	mg/L	0.0050	02/23/22 20:05	
EPA 6020B	Copper	0.0012J	mg/L	0.0050	02/23/22 20:05	
EPA 6020B	Lithium	0.0027J	mg/L	0.030	02/23/22 20:05	
EPA 6020B	Nickel	0.014	mg/L	0.0050	02/23/22 20:05	
EPA 6020B	Zinc	0.012	mg/L	0.010	02/23/22 20:05	
SM 2540C-2015	Total Dissolved Solids	271	mg/L	10.0	02/15/22 16:03	
EPA 300.0 Rev 2.1 1993	Chloride	5.7	mg/L	1.0	02/15/22 10:48	
EPA 300.0 Rev 2.1 1993	Fluoride	0.059J	mg/L	0.10	02/15/22 10:48	
EPA 300.0 Rev 2.1 1993	Sulfate	102	mg/L	2.0	02/15/22 18:34	
<b>92587091006</b>	<b>YGWA-1I</b>					
	Performed by	CUSTOMER			02/11/22 10:07	
	pH	6.24	Std. Units		02/11/22 10:07	
EPA 6010D	Calcium	2.1	mg/L	1.0	02/23/22 21:50	
EPA 6020B	Arsenic	0.0033J	mg/L	0.0050	02/23/22 20:23	B
EPA 6020B	Barium	0.0088	mg/L	0.0050	02/23/22 20:23	
EPA 6020B	Cobalt	0.0023J	mg/L	0.0050	02/23/22 20:23	
EPA 6020B	Lithium	0.0027J	mg/L	0.030	02/23/22 20:23	
EPA 6020B	Molybdenum	0.0055J	mg/L	0.010	02/23/22 20:23	
SM 2540C-2015	Total Dissolved Solids	57.0	mg/L	10.0	02/15/22 16:30	
EPA 300.0 Rev 2.1 1993	Chloride	1.3	mg/L	1.0	02/16/22 13:32	
EPA 300.0 Rev 2.1 1993	Sulfate	5.1	mg/L	1.0	02/16/22 13:32	
<b>92587091007</b>	<b>YGWA-1D</b>					
	Performed by	CUSTOMER			02/11/22 10:07	
	pH	7.12	Std. Units		02/11/22 10:07	
EPA 6010D	Calcium	14.9	mg/L	1.0	02/23/22 21:55	
EPA 6020B	Arsenic	0.0031J	mg/L	0.0050	02/23/22 20:41	B
EPA 6020B	Barium	0.0067	mg/L	0.0050	02/23/22 20:41	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92587091007</b>	<b>YGWA-1D</b>					
EPA 6020B	Cobalt	0.00072J	mg/L	0.0050	02/23/22 20:41	
EPA 6020B	Lithium	0.013J	mg/L	0.030	02/23/22 20:41	
EPA 6020B	Molybdenum	0.0093J	mg/L	0.010	02/23/22 20:41	
SM 2540C-2015	Total Dissolved Solids	105	mg/L	10.0	02/15/22 16:30	
EPA 300.0 Rev 2.1 1993	Chloride	1.0	mg/L	1.0	02/16/22 13:46	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.057J	mg/L	0.10	02/16/22 13:46	M1
EPA 300.0 Rev 2.1 1993	Sulfate	9.3	mg/L	1.0	02/16/22 13:46	M1
<b>92587091008</b>	<b>YGWA-2I</b>					
	Performed by	CUSTOMER			02/11/22 10:07	
	pH	5.89	Std. Units		02/11/22 10:07	
EPA 6010D	Calcium	23.4	mg/L	1.0	02/23/22 21:59	
EPA 6020B	Arsenic	0.0037J	mg/L	0.0050	02/23/22 20:47	B
EPA 6020B	Barium	0.0029J	mg/L	0.0050	02/23/22 20:47	
EPA 6020B	Lithium	0.0060J	mg/L	0.030	02/23/22 20:47	
EPA 6020B	Molybdenum	0.0057J	mg/L	0.010	02/23/22 20:47	
SM 2540C-2015	Total Dissolved Solids	156	mg/L	10.0	02/15/22 16:31	
EPA 300.0 Rev 2.1 1993	Chloride	1.0J	mg/L	1.0	02/16/22 14:28	
EPA 300.0 Rev 2.1 1993	Fluoride	0.094J	mg/L	0.10	02/16/22 14:28	
EPA 300.0 Rev 2.1 1993	Sulfate	18.0	mg/L	1.0	02/16/22 14:28	
<b>92587091009</b>	<b>YGWA-3I</b>					
	Performed by	CUSTOMER			02/11/22 10:07	
	pH	7.66	Std. Units		02/11/22 10:07	
EPA 6010D	Calcium	23.7	mg/L	1.0	02/23/22 22:42	
EPA 6020B	Arsenic	0.0018J	mg/L	0.0050	02/24/22 17:09	B
EPA 6020B	Barium	0.0031J	mg/L	0.0050	02/24/22 17:09	
EPA 6020B	Lithium	0.021J	mg/L	0.030	02/24/22 17:09	
EPA 6020B	Molybdenum	0.0087J	mg/L	0.010	02/24/22 17:09	
SM 2540C-2015	Total Dissolved Solids	145	mg/L	10.0	02/15/22 16:31	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	02/16/22 14:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.097J	mg/L	0.10	02/16/22 14:42	
EPA 300.0 Rev 2.1 1993	Sulfate	16.0	mg/L	1.0	02/16/22 14:42	
<b>92587091010</b>	<b>YGWA-3D</b>					
	Performed by	CUSTOMER			02/11/22 10:07	
	pH	7.97	Std. Units		02/11/22 10:07	
EPA 6010D	Calcium	30.3	mg/L	1.0	02/23/22 22:47	M1
EPA 6020B	Antimony	0.0018J	mg/L	0.0030	02/24/22 17:33	
EPA 6020B	Arsenic	0.0020J	mg/L	0.0050	02/24/22 17:33	B
EPA 6020B	Barium	0.0051	mg/L	0.0050	02/24/22 17:33	
EPA 6020B	Boron	0.010J	mg/L	0.040	02/24/22 17:33	
EPA 6020B	Lithium	0.026J	mg/L	0.030	02/24/22 17:33	
EPA 6020B	Molybdenum	0.013	mg/L	0.010	02/24/22 17:33	
SM 2540C-2015	Total Dissolved Solids	154	mg/L	10.0	02/15/22 16:31	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	02/16/22 14:55	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92587091010</b>	<b>YGWA-3D</b>					
EPA 300.0 Rev 2.1 1993	Fluoride	0.43	mg/L	0.10	02/16/22 14:55	
EPA 300.0 Rev 2.1 1993	Sulfate	7.2	mg/L	1.0	02/16/22 14:55	
<b>92587091011</b>	<b>UP-EB-1</b>					
EPA 6020B	Arsenic	0.0019J	mg/L	0.0050	02/24/22 17:39	B
<b>92587091012</b>	<b>UP-FB-1</b>					
EPA 6020B	Arsenic	0.0018J	mg/L	0.0050	02/24/22 17:45	B
<b>92587091013</b>	<b>YGWA-17S</b>					
	Performed by	CUSTOME			02/11/22 10:08	
		R				
	pH	5.53	Std. Units		02/11/22 10:08	
EPA 6010D	Calcium	2.8	mg/L	1.0	02/23/22 23:25	
EPA 6020B	Arsenic	0.0024J	mg/L	0.0050	02/24/22 17:51	B
EPA 6020B	Barium	0.017	mg/L	0.0050	02/24/22 17:51	
EPA 6020B	Beryllium	0.00011J	mg/L	0.00050	02/24/22 17:51	
EPA 6020B	Boron	0.0098J	mg/L	0.040	02/24/22 17:51	
SM 2540C-2015	Total Dissolved Solids	81.0	mg/L	10.0	02/15/22 16:31	
EPA 300.0 Rev 2.1 1993	Chloride	10.9	mg/L	1.0	02/16/22 16:55	
EPA 300.0 Rev 2.1 1993	Sulfate	4.8	mg/L	1.0	02/16/22 16:55	
<b>92587091014</b>	<b>YGWA-18S</b>					
	Performed by	CUSTOME			02/11/22 10:08	
		R				
	pH	5.28	Std. Units		02/11/22 10:08	
EPA 6010D	Calcium	0.87J	mg/L	1.0	02/23/22 23:30	
EPA 6020B	Arsenic	0.0024J	mg/L	0.0050	02/24/22 18:09	B
EPA 6020B	Barium	0.014	mg/L	0.0050	02/24/22 18:09	
EPA 6020B	Beryllium	0.000089J	mg/L	0.00050	02/24/22 18:09	
EPA 6020B	Chromium	0.0014J	mg/L	0.0050	02/24/22 18:09	B
EPA 6020B	Lithium	0.0015J	mg/L	0.030	02/24/22 18:09	
SM 2540C-2015	Total Dissolved Solids	60.0	mg/L	10.0	02/15/22 16:31	
EPA 300.0 Rev 2.1 1993	Chloride	7.0	mg/L	1.0	02/16/22 17:09	
EPA 300.0 Rev 2.1 1993	Sulfate	1.1	mg/L	1.0	02/16/22 17:09	
<b>92587091015</b>	<b>YGWA-18I</b>					
	Performed by	CUSTOME			02/11/22 10:08	
		R				
	pH	5.98	Std. Units		02/11/22 10:08	
EPA 6010D	Calcium	5.1	mg/L	1.0	02/23/22 23:35	
EPA 6020B	Arsenic	0.0022J	mg/L	0.0050	02/24/22 18:15	B
EPA 6020B	Barium	0.021	mg/L	0.0050	02/24/22 18:15	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	02/24/22 18:15	
SM 2540C-2015	Total Dissolved Solids	103	mg/L	10.0	02/15/22 16:31	
EPA 300.0 Rev 2.1 1993	Chloride	7.5	mg/L	1.0	02/16/22 17:22	
EPA 300.0 Rev 2.1 1993	Sulfate	0.51J	mg/L	1.0	02/16/22 17:22	
<b>92587091016</b>	<b>YGWA-20S</b>					
	Performed by	CUSTOME			02/11/22 10:08	
		R				

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92587091016</b>	<b>YGWA-20S</b>					
	pH	5.91	Std. Units		02/11/22 10:08	
EPA 6010D	Calcium	2.3	mg/L	1.0	02/23/22 23:40	
EPA 6020B	Arsenic	0.0021J	mg/L	0.0050	02/24/22 18:21	B
EPA 6020B	Barium	0.014	mg/L	0.0050	02/24/22 18:21	
EPA 6020B	Beryllium	0.000077J	mg/L	0.00050	02/24/22 18:21	
EPA 6020B	Lithium	0.00082J	mg/L	0.030	02/24/22 18:21	
SM 2540C-2015	Total Dissolved Solids	72.0	mg/L	10.0	02/15/22 16:31	
EPA 300.0 Rev 2.1 1993	Chloride	2.8	mg/L	1.0	02/16/22 17:36	
<b>92587091017</b>	<b>YGWA-21I</b>					
	Performed by	CUSTOMER			02/11/22 10:08	
	pH	6.84	Std. Units		02/11/22 10:08	
EPA 6010D	Calcium	9.8	mg/L	1.0	02/23/22 23:44	
EPA 6020B	Arsenic	0.0036J	mg/L	0.0050	02/24/22 18:27	B
EPA 6020B	Barium	0.011	mg/L	0.0050	02/24/22 18:27	
EPA 6020B	Cobalt	0.0078	mg/L	0.0050	02/24/22 18:27	
EPA 6020B	Lithium	0.0061J	mg/L	0.030	02/24/22 18:27	
SM 2540C-2015	Total Dissolved Solids	131	mg/L	10.0	02/15/22 16:31	
EPA 300.0 Rev 2.1 1993	Chloride	1.7	mg/L	1.0	02/17/22 02:57	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	02/17/22 02:57	
EPA 300.0 Rev 2.1 1993	Sulfate	3.9	mg/L	1.0	02/17/22 02:57	
<b>92587091018</b>	<b>YGWA-5I</b>					
	Performed by	CUSTOMER			02/14/22 11:36	
	pH	5.14	Std. Units		02/14/22 11:36	
EPA 6010D	Calcium	2.5	mg/L	1.0	02/23/22 23:49	
EPA 6020B	Arsenic	0.0016J	mg/L	0.0050	02/24/22 18:33	B
EPA 6020B	Barium	0.020	mg/L	0.0050	02/24/22 18:33	
EPA 6020B	Lithium	0.0036J	mg/L	0.030	02/24/22 18:33	
SM 2540C-2015	Total Dissolved Solids	77.0	mg/L	10.0	02/17/22 16:07	
EPA 300.0 Rev 2.1 1993	Chloride	4.4	mg/L	1.0	02/19/22 13:40	
EPA 300.0 Rev 2.1 1993	Sulfate	2.4	mg/L	1.0	02/19/22 13:40	
<b>92587091019</b>	<b>UP-DUP-3</b>					
EPA 6010D	Calcium	2.6	mg/L	1.0	02/23/22 23:54	
EPA 6020B	Arsenic	0.0017J	mg/L	0.0050	02/24/22 18:39	B
EPA 6020B	Barium	0.020	mg/L	0.0050	02/24/22 18:39	
EPA 6020B	Lithium	0.0037J	mg/L	0.030	02/24/22 18:39	
SM 2540C-2015	Total Dissolved Solids	67.0	mg/L	10.0	02/17/22 16:07	
EPA 300.0 Rev 2.1 1993	Chloride	4.4	mg/L	1.0	02/19/22 14:20	
EPA 300.0 Rev 2.1 1993	Sulfate	2.4	mg/L	1.0	02/19/22 14:20	
<b>92587091020</b>	<b>YGWA-14S</b>					
	Performed by	CUSTOMER			02/14/22 11:36	
	pH	4.50	Std. Units		02/14/22 11:36	
EPA 6010D	Calcium	1.3	mg/L	1.0	02/23/22 23:59	
EPA 6020B	Arsenic	0.0016J	mg/L	0.0050	02/24/22 18:45	B

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92587091020</b>	<b>YGWA-14S</b>					
EPA 6020B	Barium	0.0088	mg/L	0.0050	02/24/22 18:45	
EPA 6020B	Beryllium	0.00025J	mg/L	0.00050	02/24/22 18:45	
EPA 6020B	Boron	0.020J	mg/L	0.040	02/24/22 18:45	
EPA 6020B	Selenium	0.0014J	mg/L	0.0050	02/24/22 18:45	
SM 2540C-2015	Total Dissolved Solids	56.0	mg/L	10.0	02/17/22 16:07	
EPA 300.0 Rev 2.1 1993	Chloride	4.7	mg/L	1.0	02/19/22 14:34	
EPA 300.0 Rev 2.1 1993	Sulfate	6.2	mg/L	1.0	02/19/22 14:34	
<b>92587091021</b>	<b>UP-DUP-2</b>					
EPA 6010D	Calcium	1.2	mg/L	1.0	02/24/22 00:13	
EPA 6020B	Arsenic	0.0015J	mg/L	0.0050	02/24/22 18:51	B
EPA 6020B	Barium	0.0084	mg/L	0.0050	02/24/22 18:51	
EPA 6020B	Beryllium	0.00022J	mg/L	0.00050	02/24/22 18:51	
EPA 6020B	Boron	0.018J	mg/L	0.040	02/24/22 18:51	
SM 2540C-2015	Total Dissolved Solids	53.0	mg/L	10.0	02/17/22 16:07	
EPA 300.0 Rev 2.1 1993	Chloride	4.7	mg/L	1.0	02/19/22 14:47	
EPA 300.0 Rev 2.1 1993	Sulfate	6.1	mg/L	1.0	02/19/22 14:47	
<b>92587091022</b>	<b>YGWA-30I</b>					
	Performed by	CUSTOMER			02/14/22 11:37	
	pH	5.59	Std. Units		02/14/22 11:37	
EPA 6010D	Calcium	1.5	mg/L	1.0	02/24/22 00:18	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	02/24/22 18:57	B
EPA 6020B	Barium	0.0077	mg/L	0.0050	02/24/22 18:57	
EPA 6020B	Cobalt	0.0038J	mg/L	0.0050	02/24/22 18:57	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	02/24/22 18:57	
SM 2540C-2015	Total Dissolved Solids	66.0	mg/L	10.0	02/17/22 17:02	
EPA 300.0 Rev 2.1 1993	Chloride	2.1	mg/L	1.0	02/19/22 15:01	
EPA 300.0 Rev 2.1 1993	Sulfate	2.8	mg/L	1.0	02/19/22 15:01	
<b>92587091023</b>	<b>YGWA-4I</b>					
	Performed by	CUSTOMER			02/14/22 11:37	
	pH	5.95	Std. Units		02/14/22 11:37	
EPA 6010D	Calcium	7.5	mg/L	1.0	02/24/22 00:23	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	02/24/22 19:03	B
EPA 6020B	Barium	0.013	mg/L	0.0050	02/24/22 19:03	
EPA 6020B	Lithium	0.012J	mg/L	0.030	02/24/22 19:03	
SM 2540C-2015	Total Dissolved Solids	102	mg/L	10.0	02/17/22 17:02	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	02/19/22 15:14	
EPA 300.0 Rev 2.1 1993	Sulfate	7.7	mg/L	1.0	02/19/22 15:14	
<b>92587091024</b>	<b>YGWA-5D</b>					
	Performed by	CUSTOMER			02/14/22 11:37	
	pH	6.99	Std. Units		02/14/22 11:37	
EPA 6010D	Calcium	24.8	mg/L	1.0	02/24/22 00:27	
EPA 6020B	Arsenic	0.0040J	mg/L	0.0050	02/24/22 19:20	B
EPA 6020B	Barium	0.0084	mg/L	0.0050	02/24/22 19:20	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92587091024</b>	<b>YGWA-5D</b>					
EPA 6020B	Boron	0.011J	mg/L	0.040	02/24/22 19:20	
EPA 6020B	Lithium	0.0076J	mg/L	0.030	02/24/22 19:20	
EPA 6020B	Molybdenum	0.00096J	mg/L	0.010	02/24/22 19:20	
SM 2540C-2015	Total Dissolved Solids	127	mg/L	10.0	02/17/22 16:07	
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	02/19/22 15:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.055J	mg/L	0.10	02/19/22 15:54	
EPA 300.0 Rev 2.1 1993	Sulfate	4.9	mg/L	1.0	02/19/22 15:54	
<b>92587091025</b>	<b>UP-EB-2</b>					
EPA 6020B	Arsenic	0.0028J	mg/L	0.0050	02/24/22 19:32	B
<b>92587091026</b>	<b>UP-FB-2</b>					
EPA 6020B	Arsenic	0.0026J	mg/L	0.0050	02/24/22 19:38	B

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-39		Lab ID: 92587091001		Collected: 02/08/22 14:55		Received: 02/09/22 10:18		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/09/22 12:38		
pH	<b>5.78</b>	Std. Units			1		02/09/22 12:38		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>15.2</b>	mg/L	1.0	0.12	1	02/23/22 14:19	02/23/22 21:07	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:19	02/23/22 19:41	7440-36-0	
Arsenic	<b>0.0034J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 19:41	7440-38-2	B
Barium	<b>0.041</b>	mg/L	0.0050	0.00067	1	02/23/22 14:19	02/23/22 19:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:19	02/23/22 19:41	7440-41-7	
Boron	<b>0.13</b>	mg/L	0.040	0.0086	1	02/23/22 14:19	02/24/22 12:58	7440-42-8	
Cadmium	<b>0.00063</b>	mg/L	0.00050	0.00011	1	02/23/22 14:19	02/23/22 19:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 19:41	7440-47-3	
Cobalt	<b>0.0012J</b>	mg/L	0.0050	0.00039	1	02/23/22 14:19	02/23/22 19:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:19	02/23/22 19:41	7439-92-1	
Lithium	<b>0.0080J</b>	mg/L	0.030	0.00073	1	02/23/22 14:19	02/23/22 19:41	7439-93-2	
Molybdenum	<b>0.0035J</b>	mg/L	0.010	0.00074	1	02/23/22 14:19	02/23/22 19:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:19	02/23/22 19:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:19	02/23/22 19:41	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/16/22 08:00	02/16/22 15:52	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>248</b>	mg/L	10.0	10.0	1		02/14/22 15:20		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>7.4</b>	mg/L	1.0	0.60	1		02/15/22 08:56	16887-00-6	
Fluoride	<b>0.052J</b>	mg/L	0.10	0.050	1		02/15/22 08:56	16984-48-8	
Sulfate	<b>14.6</b>	mg/L	1.0	0.50	1		02/15/22 08:56	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-40		Lab ID: 92587091002		Collected: 02/08/22 13:22		Received: 02/09/22 10:18		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/09/22 12:38		
pH	<b>5.26</b>	Std. Units			1		02/09/22 12:38		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>6.0</b>	mg/L	1.0	0.12	1	02/23/22 14:19	02/23/22 21:12	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:19	02/23/22 19:47	7440-36-0	
Arsenic	<b>0.0030J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 19:47	7440-38-2	B
Barium	<b>0.039</b>	mg/L	0.0050	0.00067	1	02/23/22 14:19	02/23/22 19:47	7440-39-3	
Beryllium	<b>0.00028J</b>	mg/L	0.00050	0.000054	1	02/23/22 14:19	02/23/22 19:47	7440-41-7	
Boron	<b>0.074</b>	mg/L	0.040	0.0086	1	02/23/22 14:19	02/24/22 13:04	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:19	02/23/22 19:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 19:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:19	02/23/22 19:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:19	02/23/22 19:47	7439-92-1	
Lithium	<b>0.00076J</b>	mg/L	0.030	0.00073	1	02/23/22 14:19	02/23/22 19:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:19	02/23/22 19:47	7439-98-7	
Selenium	<b>0.0014J</b>	mg/L	0.0050	0.0014	1	02/23/22 14:19	02/23/22 19:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:19	02/23/22 19:47	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	<b>0.00013J</b>	mg/L	0.00020	0.00013	1	02/16/22 08:00	02/16/22 15:55	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>93.0</b>	mg/L	10.0	10.0	1		02/14/22 15:20		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>6.2</b>	mg/L	1.0	0.60	1		02/15/22 09:10	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/15/22 09:10	16984-48-8	
Sulfate	<b>17.9</b>	mg/L	1.0	0.50	1		02/15/22 09:10	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-47		Lab ID: 92587091003		Collected: 02/08/22 11:40		Received: 02/09/22 10:18		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/09/22 12:39		
pH	<b>5.40</b>	Std. Units			1		02/09/22 12:39		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>9.4</b>	mg/L	1.0	0.12	1	02/23/22 14:19	02/23/22 21:26	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:19	02/23/22 19:53	7440-36-0	
Arsenic	<b>0.0027J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 19:53	7440-38-2	B
Barium	<b>0.030</b>	mg/L	0.0050	0.00067	1	02/23/22 14:19	02/23/22 19:53	7440-39-3	
Beryllium	<b>0.000056J</b>	mg/L	0.00050	0.000054	1	02/23/22 14:19	02/23/22 19:53	7440-41-7	
Boron	<b>0.015J</b>	mg/L	0.040	0.0086	1	02/23/22 14:19	02/23/22 19:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:19	02/23/22 19:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 19:53	7440-47-3	
Cobalt	<b>0.0013J</b>	mg/L	0.0050	0.00039	1	02/23/22 14:19	02/23/22 19:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:19	02/23/22 19:53	7439-92-1	
Lithium	<b>0.0039J</b>	mg/L	0.030	0.00073	1	02/23/22 14:19	02/23/22 19:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:19	02/23/22 19:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:19	02/23/22 19:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:19	02/23/22 19:53	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/16/22 08:00	02/16/22 15:57	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>151</b>	mg/L	10.0	10.0	1		02/15/22 16:02		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>3.2</b>	mg/L	1.0	0.60	1		02/15/22 09:52	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/15/22 09:52	16984-48-8	M1
Sulfate	<b>50.9</b>	mg/L	1.0	0.50	1		02/15/22 09:52	14808-79-8	M1

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: GWA-2		Lab ID: 92587091004		Collected: 02/08/22 11:50		Received: 02/09/22 10:18		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/09/22 12:39		
pH	<b>5.83</b>	Std. Units			1		02/09/22 12:39		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>25.6</b>	mg/L	1.0	0.12	1	02/23/22 14:19	02/23/22 21:31	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:19	02/23/22 19:59	7440-36-0	
Arsenic	<b>0.0033J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 19:59	7440-38-2	B
Barium	<b>0.037</b>	mg/L	0.0050	0.00067	1	02/23/22 14:19	02/23/22 19:59	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:19	02/23/22 19:59	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:19	02/23/22 19:59	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:19	02/23/22 19:59	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 19:59	7440-47-3	
Cobalt	<b>0.072</b>	mg/L	0.0050	0.00039	1	02/23/22 14:19	02/23/22 19:59	7440-48-4	
Copper	<b>0.0012J</b>	mg/L	0.0050	0.00050	1	02/23/22 14:19	02/23/22 19:59	7440-50-8	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:19	02/23/22 19:59	7439-92-1	
Lithium	<b>0.0031J</b>	mg/L	0.030	0.00073	1	02/23/22 14:19	02/23/22 19:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:19	02/23/22 19:59	7439-98-7	
Nickel	<b>0.017</b>	mg/L	0.0050	0.00071	1	02/23/22 14:19	02/23/22 19:59	7440-02-0	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:19	02/23/22 19:59	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	02/23/22 14:19	02/23/22 19:59	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:19	02/23/22 19:59	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	02/23/22 14:19	02/23/22 19:59	7440-62-2	
Zinc	<b>0.014</b>	mg/L	0.010	0.0070	1	02/23/22 14:19	02/23/22 19:59	7440-66-6	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/16/22 08:00	02/16/22 16:00	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>283</b>	mg/L	10.0	10.0	1		02/15/22 16:03		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>5.7</b>	mg/L	1.0	0.60	1		02/15/22 10:34	16887-00-6	
Fluoride	<b>0.064J</b>	mg/L	0.10	0.050	1		02/15/22 10:34	16984-48-8	
Sulfate	<b>107</b>	mg/L	3.0	1.5	3		02/15/22 18:19	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: UP-DUP-1		Lab ID: 92587091005		Collected: 02/08/22 00:00		Received: 02/09/22 10:18		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	<b>25.6</b>	mg/L	1.0	0.12	1	02/23/22 14:19	02/23/22 21:36	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:19	02/23/22 20:05	7440-36-0		
Arsenic	<b>0.0034J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 20:05	7440-38-2	B	
Barium	<b>0.034</b>	mg/L	0.0050	0.00067	1	02/23/22 14:19	02/23/22 20:05	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:19	02/23/22 20:05	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:19	02/23/22 20:05	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:19	02/23/22 20:05	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 20:05	7440-47-3		
Cobalt	<b>0.055</b>	mg/L	0.0050	0.00039	1	02/23/22 14:19	02/23/22 20:05	7440-48-4		
Copper	<b>0.0012J</b>	mg/L	0.0050	0.00050	1	02/23/22 14:19	02/23/22 20:05	7440-50-8		
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:19	02/23/22 20:05	7439-92-1		
Lithium	<b>0.0027J</b>	mg/L	0.030	0.00073	1	02/23/22 14:19	02/23/22 20:05	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:19	02/23/22 20:05	7439-98-7		
Nickel	<b>0.014</b>	mg/L	0.0050	0.00071	1	02/23/22 14:19	02/23/22 20:05	7440-02-0		
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:19	02/23/22 20:05	7782-49-2		
Silver	ND	mg/L	0.0050	0.00044	1	02/23/22 14:19	02/23/22 20:05	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:19	02/23/22 20:05	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	02/23/22 14:19	02/23/22 20:05	7440-62-2		
Zinc	<b>0.012</b>	mg/L	0.010	0.0070	1	02/23/22 14:19	02/23/22 20:05	7440-66-6		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/16/22 08:00	02/16/22 16:03	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	<b>271</b>	mg/L	10.0	10.0	1		02/15/22 16:03			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	<b>5.7</b>	mg/L	1.0	0.60	1		02/15/22 10:48	16887-00-6		
Fluoride	<b>0.059J</b>	mg/L	0.10	0.050	1		02/15/22 10:48	16984-48-8		
Sulfate	<b>102</b>	mg/L	2.0	1.0	2		02/15/22 18:34	14808-79-8		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-11		Lab ID: 92587091006		Collected: 02/09/22 13:45		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:07		
pH	<b>6.24</b>	Std. Units			1		02/11/22 10:07		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>2.1</b>	mg/L	1.0	0.12	1	02/23/22 14:19	02/23/22 21:50	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:19	02/23/22 20:23	7440-36-0	
Arsenic	<b>0.0033J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 20:23	7440-38-2	B
Barium	<b>0.0088</b>	mg/L	0.0050	0.00067	1	02/23/22 14:19	02/23/22 20:23	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:19	02/23/22 20:23	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:19	02/23/22 20:23	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:19	02/23/22 20:23	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 20:23	7440-47-3	
Cobalt	<b>0.0023J</b>	mg/L	0.0050	0.00039	1	02/23/22 14:19	02/23/22 20:23	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:19	02/23/22 20:23	7439-92-1	
Lithium	<b>0.0027J</b>	mg/L	0.030	0.00073	1	02/23/22 14:19	02/23/22 20:23	7439-93-2	
Molybdenum	<b>0.0055J</b>	mg/L	0.010	0.00074	1	02/23/22 14:19	02/23/22 20:23	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:19	02/23/22 20:23	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:19	02/23/22 20:23	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/16/22 08:00	02/16/22 16:11	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>57.0</b>	mg/L	10.0	10.0	1		02/15/22 16:30		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.3</b>	mg/L	1.0	0.60	1		02/16/22 13:32	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/16/22 13:32	16984-48-8	
Sulfate	<b>5.1</b>	mg/L	1.0	0.50	1		02/16/22 13:32	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-1D		Lab ID: 92587091007		Collected: 02/09/22 14:45		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:07		
pH	<b>7.12</b>	Std. Units			1		02/11/22 10:07		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>14.9</b>	mg/L	1.0	0.12	1	02/23/22 14:19	02/23/22 21:55	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:19	02/23/22 20:41	7440-36-0	
Arsenic	<b>0.0031J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 20:41	7440-38-2	B
Barium	<b>0.0067</b>	mg/L	0.0050	0.00067	1	02/23/22 14:19	02/23/22 20:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:19	02/23/22 20:41	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:19	02/23/22 20:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:19	02/23/22 20:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 20:41	7440-47-3	
Cobalt	<b>0.00072J</b>	mg/L	0.0050	0.00039	1	02/23/22 14:19	02/23/22 20:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:19	02/23/22 20:41	7439-92-1	
Lithium	<b>0.013J</b>	mg/L	0.030	0.00073	1	02/23/22 14:19	02/23/22 20:41	7439-93-2	
Molybdenum	<b>0.0093J</b>	mg/L	0.010	0.00074	1	02/23/22 14:19	02/23/22 20:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:19	02/23/22 20:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:19	02/23/22 20:41	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/16/22 08:00	02/16/22 16:13	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>105</b>	mg/L	10.0	10.0	1		02/15/22 16:30		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.0</b>	mg/L	1.0	0.60	1		02/16/22 13:46	16887-00-6	M1
Fluoride	<b>0.057J</b>	mg/L	0.10	0.050	1		02/16/22 13:46	16984-48-8	M1
Sulfate	<b>9.3</b>	mg/L	1.0	0.50	1		02/16/22 13:46	14808-79-8	M1

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-2I		Lab ID: 92587091008		Collected: 02/09/22 17:35		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:07		
pH	<b>5.89</b>	Std. Units			1		02/11/22 10:07		
<b>6010D ATL ICP</b>	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	<b>23.4</b>	mg/L	1.0	0.12	1	02/23/22 14:19	02/23/22 21:59	7440-70-2	
<b>6020 MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:19	02/23/22 20:47	7440-36-0	
Arsenic	<b>0.0037J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 20:47	7440-38-2	B
Barium	<b>0.0029J</b>	mg/L	0.0050	0.00067	1	02/23/22 14:19	02/23/22 20:47	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:19	02/23/22 20:47	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:19	02/23/22 20:47	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:19	02/23/22 20:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:19	02/23/22 20:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:19	02/23/22 20:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:19	02/23/22 20:47	7439-92-1	
Lithium	<b>0.0060J</b>	mg/L	0.030	0.00073	1	02/23/22 14:19	02/23/22 20:47	7439-93-2	
Molybdenum	<b>0.0057J</b>	mg/L	0.010	0.00074	1	02/23/22 14:19	02/23/22 20:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:19	02/23/22 20:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:19	02/23/22 20:47	7440-28-0	
<b>7470 Mercury</b>	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/16/22 08:00	02/16/22 16:16	7439-97-6	
<b>2540C Total Dissolved Solids</b>	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	<b>156</b>	mg/L	10.0	10.0	1		02/15/22 16:31		
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	<b>1.0J</b>	mg/L	1.0	0.60	1		02/16/22 14:28	16887-00-6	
Fluoride	<b>0.094J</b>	mg/L	0.10	0.050	1		02/16/22 14:28	16984-48-8	
Sulfate	<b>18.0</b>	mg/L	1.0	0.50	1		02/16/22 14:28	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

Sample: YGWA-3I		Lab ID: 92587091009		Collected: 02/09/22 11:35		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		02/11/22 10:07		
pH	7.66	Std. Units			1		02/11/22 10:07		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	23.7	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 22:42	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 17:09	7440-36-0	
Arsenic	0.0018J	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 17:09	7440-38-2	B
Barium	0.0031J	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 17:09	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 17:09	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 17:09	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 17:09	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 17:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 17:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 17:09	7439-92-1	
Lithium	0.021J	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 17:09	7439-93-2	
Molybdenum	0.0087J	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 17:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 17:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 17:09	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:46	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	145	mg/L	10.0	10.0	1		02/15/22 16:31		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	1.1	mg/L	1.0	0.60	1		02/16/22 14:42	16887-00-6	
Fluoride	0.097J	mg/L	0.10	0.050	1		02/16/22 14:42	16984-48-8	
Sulfate	16.0	mg/L	1.0	0.50	1		02/16/22 14:42	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-3D		Lab ID: 92587091010		Collected: 02/09/22 10:20		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:07		
pH	<b>7.97</b>	Std. Units			1		02/11/22 10:07		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>30.3</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 22:47	7440-70-2	M1
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	<b>0.0018J</b>	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 17:33	7440-36-0	
Arsenic	<b>0.0020J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 17:33	7440-38-2	B
Barium	<b>0.0051</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 17:33	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 17:33	7440-41-7	
Boron	<b>0.010J</b>	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 17:33	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 17:33	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 17:33	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 17:33	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 17:33	7439-92-1	
Lithium	<b>0.026J</b>	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 17:33	7439-93-2	
Molybdenum	<b>0.013</b>	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 17:33	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 17:33	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 17:33	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:48	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>154</b>	mg/L	10.0	10.0	1		02/15/22 16:31		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.1</b>	mg/L	1.0	0.60	1		02/16/22 14:55	16887-00-6	
Fluoride	<b>0.43</b>	mg/L	0.10	0.050	1		02/16/22 14:55	16984-48-8	
Sulfate	<b>7.2</b>	mg/L	1.0	0.50	1		02/16/22 14:55	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: UP-EB-1		Lab ID: 92587091011		Collected: 02/09/22 13:06		Received: 02/10/22 17:00		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 23:06	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 17:39	7440-36-0		
Arsenic	<b>0.0019J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 17:39	7440-38-2	B	
Barium	ND	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 17:39	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 17:39	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 17:39	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 17:39	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 17:39	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 17:39	7440-48-4		
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 17:39	7439-92-1		
Lithium	ND	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 17:39	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 17:39	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 17:39	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 17:39	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:51	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		02/15/22 16:31			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/16/22 15:09	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		02/16/22 15:09	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		02/16/22 15:09	14808-79-8		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: UP-FB-1		Lab ID: 92587091012		Collected: 02/09/22 10:47		Received: 02/10/22 17:00		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 23:20	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 17:45	7440-36-0		
Arsenic	<b>0.0018J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 17:45	7440-38-2	B	
Barium	ND	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 17:45	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 17:45	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 17:45	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 17:45	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 17:45	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 17:45	7440-48-4		
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 17:45	7439-92-1		
Lithium	ND	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 17:45	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 17:45	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 17:45	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 17:45	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:53	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		02/15/22 16:31			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/16/22 15:23	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		02/16/22 15:23	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		02/16/22 15:23	14808-79-8		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-17S		Lab ID: 92587091013		Collected: 02/09/22 10:20		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:08		
pH	<b>5.53</b>	Std. Units			1		02/11/22 10:08		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>2.8</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 23:25	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 17:51	7440-36-0	
Arsenic	<b>0.0024J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 17:51	7440-38-2	B
Barium	<b>0.017</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 17:51	7440-39-3	
Beryllium	<b>0.00011J</b>	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 17:51	7440-41-7	
Boron	<b>0.0098J</b>	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 17:51	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 17:51	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 17:51	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 17:51	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 17:51	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 17:51	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 17:51	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 17:51	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 17:51	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:56	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>81.0</b>	mg/L	10.0	10.0	1		02/15/22 16:31		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>10.9</b>	mg/L	1.0	0.60	1		02/16/22 16:55	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/16/22 16:55	16984-48-8	
Sulfate	<b>4.8</b>	mg/L	1.0	0.50	1		02/16/22 16:55	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-18S      Lab ID: 92587091014      Collected: 02/09/22 12:24      Received: 02/10/22 17:00      Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:08		
pH	<b>5.28</b>	Std. Units			1		02/11/22 10:08		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>0.87J</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 23:30	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 18:09	7440-36-0	
Arsenic	<b>0.0024J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:09	7440-38-2	B
Barium	<b>0.014</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 18:09	7440-39-3	
Beryllium	<b>0.000089J</b>	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 18:09	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 18:09	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 18:09	7440-43-9	
Chromium	<b>0.0014J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:09	7440-47-3	B
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 18:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 18:09	7439-92-1	
Lithium	<b>0.0015J</b>	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 18:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 18:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 18:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 18:09	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A      Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 13:59	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>60.0</b>	mg/L	10.0	10.0	1		02/15/22 16:31		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>7.0</b>	mg/L	1.0	0.60	1		02/16/22 17:09	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/16/22 17:09	16984-48-8	
Sulfate	<b>1.1</b>	mg/L	1.0	0.50	1		02/16/22 17:09	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-181		Lab ID: 92587091015		Collected: 02/09/22 14:31		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:08		
pH	<b>5.98</b>	Std. Units			1		02/11/22 10:08		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>5.1</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 23:35	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 18:15	7440-36-0	
Arsenic	<b>0.0022J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:15	7440-38-2	B
Barium	<b>0.021</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 18:15	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 18:15	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 18:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 18:15	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 18:15	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 18:15	7439-92-1	
Lithium	<b>0.0032J</b>	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 18:15	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 18:15	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 18:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 18:15	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 14:07	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>103</b>	mg/L	10.0	10.0	1		02/15/22 16:31		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>7.5</b>	mg/L	1.0	0.60	1		02/16/22 17:22	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/16/22 17:22	16984-48-8	
Sulfate	<b>0.51J</b>	mg/L	1.0	0.50	1		02/16/22 17:22	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-20S		Lab ID: 92587091016		Collected: 02/09/22 16:19		Received: 02/10/22 17:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:08		
pH	<b>5.91</b>	Std. Units			1		02/11/22 10:08		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>2.3</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 23:40	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 18:21	7440-36-0	
Arsenic	<b>0.0021J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:21	7440-38-2	B
Barium	<b>0.014</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 18:21	7440-39-3	
Beryllium	<b>0.000077J</b>	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 18:21	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 18:21	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 18:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 18:21	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 18:21	7439-92-1	
Lithium	<b>0.00082J</b>	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 18:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 18:21	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 18:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 18:21	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 14:09	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>72.0</b>	mg/L	10.0	10.0	1		02/15/22 16:31		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>2.8</b>	mg/L	1.0	0.60	1		02/16/22 17:36	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/16/22 17:36	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/16/22 17:36	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-211		Lab ID: 92587091017		Collected: 02/09/22 17:40	Received: 02/10/22 17:00	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/11/22 10:08		
pH	<b>6.84</b>	Std. Units			1		02/11/22 10:08		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>9.8</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 23:44	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 18:27	7440-36-0	
Arsenic	<b>0.0036J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:27	7440-38-2	B
Barium	<b>0.011</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 18:27	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 18:27	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 18:27	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 18:27	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:27	7440-47-3	
Cobalt	<b>0.0078</b>	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 18:27	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 18:27	7439-92-1	
Lithium	<b>0.0061J</b>	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 18:27	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 18:27	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 18:27	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 18:27	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 14:12	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>131</b>	mg/L	10.0	10.0	1		02/15/22 16:31		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.7</b>	mg/L	1.0	0.60	1		02/17/22 02:57	16887-00-6	
Fluoride	<b>0.10</b>	mg/L	0.10	0.050	1		02/17/22 02:57	16984-48-8	
Sulfate	<b>3.9</b>	mg/L	1.0	0.50	1		02/17/22 02:57	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-5I		Lab ID: 92587091018		Collected: 02/10/22 17:27		Received: 02/11/22 16:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/14/22 11:36		
pH	<b>5.14</b>	Std. Units			1		02/14/22 11:36		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>2.5</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 23:49	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 18:33	7440-36-0	
Arsenic	<b>0.0016J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:33	7440-38-2	B
Barium	<b>0.020</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 18:33	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 18:33	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 18:33	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 18:33	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:33	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 18:33	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 18:33	7439-92-1	
Lithium	<b>0.0036J</b>	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 18:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 18:33	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 18:33	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 18:33	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 14:14	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>77.0</b>	mg/L	10.0	10.0	1		02/17/22 16:07		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>4.4</b>	mg/L	1.0	0.60	1		02/19/22 13:40	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/19/22 13:40	16984-48-8	
Sulfate	<b>2.4</b>	mg/L	1.0	0.50	1		02/19/22 13:40	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: UP-DUP-3		Lab ID: 92587091019		Collected: 02/10/22 00:00	Received: 02/11/22 16:45	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	2.6	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 23:54	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 18:39	7440-36-0		
Arsenic	0.0017J	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:39	7440-38-2	B	
Barium	0.020	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 18:39	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 18:39	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 18:39	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 18:39	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:39	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 18:39	7440-48-4		
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 18:39	7439-92-1		
Lithium	0.0037J	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 18:39	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 18:39	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 18:39	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 18:39	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/18/22 10:00	02/18/22 14:17	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	67.0	mg/L	10.0	10.0	1		02/17/22 16:07			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	4.4	mg/L	1.0	0.60	1		02/19/22 14:20	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		02/19/22 14:20	16984-48-8		
Sulfate	2.4	mg/L	1.0	0.50	1		02/19/22 14:20	14808-79-8		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-14S		Lab ID: 92587091020		Collected: 02/10/22 16:20		Received: 02/11/22 16:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/14/22 11:36		
pH	<b>4.50</b>	Std. Units			1		02/14/22 11:36		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>1.3</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/23/22 23:59	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 18:45	7440-36-0	
Arsenic	<b>0.0016J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:45	7440-38-2	B
Barium	<b>0.0088</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 18:45	7440-39-3	
Beryllium	<b>0.00025J</b>	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 18:45	7440-41-7	
Boron	<b>0.020J</b>	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 18:45	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 18:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 18:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 18:45	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 18:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 18:45	7439-98-7	
Selenium	<b>0.0014J</b>	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 18:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 18:45	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/21/22 14:45	02/22/22 10:38	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>56.0</b>	mg/L	10.0	10.0	1		02/17/22 16:07		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>4.7</b>	mg/L	1.0	0.60	1		02/19/22 14:34	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/19/22 14:34	16984-48-8	
Sulfate	<b>6.2</b>	mg/L	1.0	0.50	1		02/19/22 14:34	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: UP-DUP-2		Lab ID: 92587091021		Collected: 02/10/22 00:00	Received: 02/11/22 16:45	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	<b>1.2</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/24/22 00:13	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 18:51	7440-36-0		
Arsenic	<b>0.0015J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:51	7440-38-2	B	
Barium	<b>0.0084</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 18:51	7440-39-3		
Beryllium	<b>0.00022J</b>	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 18:51	7440-41-7		
Boron	<b>0.018J</b>	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 18:51	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 18:51	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:51	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 18:51	7440-48-4		
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 18:51	7439-92-1		
Lithium	ND	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 18:51	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 18:51	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 18:51	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 18:51	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/21/22 14:45	02/22/22 10:55	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	<b>53.0</b>	mg/L	10.0	10.0	1		02/17/22 16:07			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	<b>4.7</b>	mg/L	1.0	0.60	1		02/19/22 14:47	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		02/19/22 14:47	16984-48-8		
Sulfate	<b>6.1</b>	mg/L	1.0	0.50	1		02/19/22 14:47	14808-79-8		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-301		Lab ID: 92587091022		Collected: 02/11/22 09:20		Received: 02/11/22 16:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/14/22 11:37		
pH	<b>5.59</b>	Std. Units			1		02/14/22 11:37		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>1.5</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/24/22 00:18	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 18:57	7440-36-0	
Arsenic	<b>0.0014J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:57	7440-38-2	B
Barium	<b>0.0077</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 18:57	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 18:57	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 18:57	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 18:57	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 18:57	7440-47-3	
Cobalt	<b>0.0038J</b>	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 18:57	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 18:57	7439-92-1	
Lithium	<b>0.0014J</b>	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 18:57	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 18:57	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 18:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 18:57	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/21/22 14:45	02/22/22 10:58	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>66.0</b>	mg/L	10.0	10.0	1		02/17/22 17:02		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>2.1</b>	mg/L	1.0	0.60	1		02/19/22 15:01	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/19/22 15:01	16984-48-8	
Sulfate	<b>2.8</b>	mg/L	1.0	0.50	1		02/19/22 15:01	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-4I		Lab ID: 92587091023		Collected: 02/11/22 10:40		Received: 02/11/22 16:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/14/22 11:37		
pH	<b>5.95</b>	Std. Units			1		02/14/22 11:37		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>7.5</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/24/22 00:23	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 19:03	7440-36-0	
Arsenic	<b>0.0014J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 19:03	7440-38-2	B
Barium	<b>0.013</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 19:03	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 19:03	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 19:03	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 19:03	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 19:03	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 19:03	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 19:03	7439-92-1	
Lithium	<b>0.012J</b>	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 19:03	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 19:03	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 19:03	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 19:03	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/21/22 14:45	02/22/22 11:01	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>102</b>	mg/L	10.0	10.0	1		02/17/22 17:02		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>4.1</b>	mg/L	1.0	0.60	1		02/19/22 15:14	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/19/22 15:14	16984-48-8	
Sulfate	<b>7.7</b>	mg/L	1.0	0.50	1		02/19/22 15:14	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: YGWA-5D		Lab ID: 92587091024		Collected: 02/10/22 17:46		Received: 02/11/22 16:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/14/22 11:37		
pH	<b>6.99</b>	Std. Units			1		02/14/22 11:37		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>24.8</b>	mg/L	1.0	0.12	1	02/23/22 14:15	02/24/22 00:27	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 19:20	7440-36-0	
Arsenic	<b>0.0040J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 19:20	7440-38-2	B
Barium	<b>0.0084</b>	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 19:20	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 19:20	7440-41-7	
Boron	<b>0.011J</b>	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 19:20	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 19:20	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 19:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 19:20	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 19:20	7439-92-1	
Lithium	<b>0.0076J</b>	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 19:20	7439-93-2	
Molybdenum	<b>0.00096J</b>	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 19:20	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 19:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 19:20	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/21/22 14:45	02/22/22 11:03	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>127</b>	mg/L	10.0	10.0	1		02/17/22 16:07		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>3.2</b>	mg/L	1.0	0.60	1		02/19/22 15:54	16887-00-6	
Fluoride	<b>0.055J</b>	mg/L	0.10	0.050	1		02/19/22 15:54	16984-48-8	
Sulfate	<b>4.9</b>	mg/L	1.0	0.50	1		02/19/22 15:54	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: UP-EB-2		Lab ID: 92587091025		Collected: 02/10/22 11:40		Received: 02/11/22 16:45		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/23/22 14:15	02/24/22 00:37	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 19:32	7440-36-0		
Arsenic	<b>0.0028J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 19:32	7440-38-2	B	
Barium	ND	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 19:32	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 19:32	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 19:32	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 19:32	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 19:32	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 19:32	7440-48-4		
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 19:32	7439-92-1		
Lithium	ND	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 19:32	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 19:32	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 19:32	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 19:32	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/21/22 14:45	02/22/22 11:06	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		02/17/22 16:07			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/19/22 16:08	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		02/19/22 16:08	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		02/19/22 16:08	14808-79-8		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Sample: UP-FB-2		Lab ID: 92587091026		Collected: 02/10/22 17:13		Received: 02/11/22 16:45		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/23/22 14:15	02/24/22 00:42	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/23/22 14:12	02/24/22 19:38	7440-36-0		
Arsenic	<b>0.0026J</b>	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 19:38	7440-38-2	B	
Barium	ND	mg/L	0.0050	0.00067	1	02/23/22 14:12	02/24/22 19:38	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	02/23/22 14:12	02/24/22 19:38	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	02/23/22 14:12	02/24/22 19:38	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	02/23/22 14:12	02/24/22 19:38	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	02/23/22 14:12	02/24/22 19:38	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	02/23/22 14:12	02/24/22 19:38	7440-48-4		
Lead	ND	mg/L	0.0010	0.00089	1	02/23/22 14:12	02/24/22 19:38	7439-92-1		
Lithium	ND	mg/L	0.030	0.00073	1	02/23/22 14:12	02/24/22 19:38	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	02/23/22 14:12	02/24/22 19:38	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	02/23/22 14:12	02/24/22 19:38	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	02/23/22 14:12	02/24/22 19:38	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/21/22 14:45	02/22/22 11:08	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		02/17/22 16:07			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/19/22 16:21	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		02/19/22 16:21	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		02/19/22 16:21	14808-79-8		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

QC Batch:	680120	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92587091001, 92587091002, 92587091003, 92587091004, 92587091005, 92587091006, 92587091007, 92587091008

METHOD BLANK: 3558408 Matrix: Water

Associated Lab Samples: 92587091001, 92587091002, 92587091003, 92587091004, 92587091005, 92587091006, 92587091007, 92587091008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/23/22 19:59	

LABORATORY CONTROL SAMPLE: 3558409

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: 3558410 3558411

Parameter	Units	92587089004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	9.3	1	1	10.5	10.5	117	119	75-125	0	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch:	680226	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92587091009, 92587091010, 92587091011, 92587091012, 92587091013, 92587091014, 92587091015, 92587091016, 92587091017, 92587091018, 92587091019, 92587091020, 92587091021, 92587091022, 92587091023, 92587091024, 92587091025, 92587091026

METHOD BLANK: 3558817 Matrix: Water  
Associated Lab Samples: 92587091009, 92587091010, 92587091011, 92587091012, 92587091013, 92587091014, 92587091015, 92587091016, 92587091017, 92587091018, 92587091019, 92587091020, 92587091021, 92587091022, 92587091023, 92587091024, 92587091025, 92587091026

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/23/22 22:33	

LABORATORY CONTROL SAMPLE: 3558818

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0J	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3558819 3558820

Parameter	Units	92587091010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	30.3	1	1	30.2	29.9	-12	-45	75-125	1	20	M1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch: 680115 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92587091001, 92587091002, 92587091003, 92587091004, 92587091005, 92587091006, 92587091007, 92587091008

METHOD BLANK: 3558393 Matrix: Water  
Associated Lab Samples: 92587091001, 92587091002, 92587091003, 92587091004, 92587091005, 92587091006, 92587091007, 92587091008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/23/22 18:18	
Arsenic	mg/L	ND	0.0050	0.0011	02/23/22 18:18	
Barium	mg/L	ND	0.0050	0.00067	02/23/22 18:18	
Beryllium	mg/L	ND	0.00050	0.000054	02/23/22 18:18	
Boron	mg/L	ND	0.040	0.0086	02/23/22 18:18	
Cadmium	mg/L	ND	0.00050	0.00011	02/23/22 18:18	
Chromium	mg/L	ND	0.0050	0.0011	02/23/22 18:18	
Cobalt	mg/L	ND	0.0050	0.00039	02/23/22 18:18	
Copper	mg/L	ND	0.0050	0.00050	02/23/22 18:18	
Lead	mg/L	ND	0.0010	0.00089	02/23/22 18:18	
Lithium	mg/L	ND	0.030	0.00073	02/23/22 18:18	
Molybdenum	mg/L	ND	0.010	0.00074	02/23/22 18:18	
Nickel	mg/L	ND	0.0050	0.00071	02/23/22 18:18	
Selenium	mg/L	ND	0.0050	0.0014	02/23/22 18:18	
Silver	mg/L	ND	0.0050	0.00044	02/23/22 18:18	
Thallium	mg/L	ND	0.0010	0.00018	02/23/22 18:18	
Vanadium	mg/L	ND	0.010	0.0019	02/23/22 18:18	
Zinc	mg/L	ND	0.010	0.0070	02/23/22 18:18	

LABORATORY CONTROL SAMPLE: 3558394

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.11	106	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	111	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.11	106	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.11	105	80-120	
Silver	mg/L	0.1	0.10	104	80-120	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

LABORATORY CONTROL SAMPLE: 3558394

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.11	107	80-120	
Zinc	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3558395 3558396

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92587089002	Spike Conc.	Spike Conc.	Result								
Antimony	mg/L	ND	0.1	0.1	0.10	0.11	105	108	75-125	3	20		
Arsenic	mg/L	0.0021J	0.1	0.1	0.10	0.11	103	105	75-125	2	20		
Barium	mg/L	0.083	0.1	0.1	0.18	0.18	92	100	75-125	4	20		
Beryllium	mg/L	ND	0.1	0.1	0.11	0.10	105	102	75-125	3	20		
Boron	mg/L	2.4	1	1	3.4	3.6	100	115	75-125	4	20		
Cadmium	mg/L	0.00033J	0.1	0.1	0.10	0.10	101	102	75-125	2	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.11	104	105	75-125	1	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20		
Copper	mg/L	0.0016J	0.1	0.1	0.10	0.10	99	98	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20		
Lithium	mg/L	0.0076J	0.1	0.1	0.11	0.11	103	103	75-125	0	20		
Molybdenum	mg/L	0.0011J	0.1	0.1	0.11	0.11	107	109	75-125	2	20		
Nickel	mg/L	0.0024J	0.1	0.1	0.11	0.11	104	104	75-125	0	20		
Selenium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	2	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.098	0.097	97	97	75-125	1	20		
Vanadium	mg/L	ND	0.1	0.1	0.11	0.11	109	108	75-125	1	20		
Zinc	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch: 680225 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92587091009, 92587091010, 92587091011, 92587091012, 92587091013, 92587091014, 92587091015, 92587091016, 92587091017, 92587091018, 92587091019, 92587091020, 92587091021, 92587091022, 92587091023, 92587091024, 92587091025, 92587091026

METHOD BLANK: 3558813 Matrix: Water  
Associated Lab Samples: 92587091009, 92587091010, 92587091011, 92587091012, 92587091013, 92587091014, 92587091015, 92587091016, 92587091017, 92587091018, 92587091019, 92587091020, 92587091021, 92587091022, 92587091023, 92587091024, 92587091025, 92587091026

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/24/22 16:57	
Arsenic	mg/L	0.0015J	0.0050	0.0011	02/24/22 16:57	
Barium	mg/L	ND	0.0050	0.00067	02/24/22 16:57	
Beryllium	mg/L	ND	0.00050	0.000054	02/24/22 16:57	
Boron	mg/L	ND	0.040	0.0086	02/24/22 16:57	
Cadmium	mg/L	ND	0.00050	0.00011	02/24/22 16:57	
Chromium	mg/L	0.0019J	0.0050	0.0011	02/24/22 16:57	
Cobalt	mg/L	ND	0.0050	0.00039	02/24/22 16:57	
Lead	mg/L	ND	0.0010	0.00089	02/24/22 16:57	
Lithium	mg/L	ND	0.030	0.00073	02/24/22 16:57	
Molybdenum	mg/L	ND	0.010	0.00074	02/24/22 16:57	
Selenium	mg/L	ND	0.0050	0.0014	02/24/22 16:57	
Thallium	mg/L	ND	0.0010	0.00018	02/24/22 16:57	

LABORATORY CONTROL SAMPLE: 3558814

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	100	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	102	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.11	110	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

Parameter	Units	3558815		3558816		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		92587091009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	106	110	75-125	3	20		
Arsenic	mg/L	0.0018J	0.1	0.1	0.10	0.11	102	104	75-125	2	20		
Barium	mg/L	0.0031J	0.1	0.1	0.11	0.11	102	106	75-125	4	20		
Beryllium	mg/L	ND	0.1	0.1	0.11	0.10	106	105	75-125	1	20		
Boron	mg/L	ND	1	1	1.1	1.1	109	106	75-125	3	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	103	75-125	2	20		
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	109	109	75-125	0	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	103	103	75-125	0	20		
Lead	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20		
Lithium	mg/L	0.021J	0.1	0.1	0.13	0.13	114	113	75-125	1	20		
Molybdenum	mg/L	0.0087J	0.1	0.1	0.12	0.12	107	110	75-125	2	20		
Selenium	mg/L	ND	0.1	0.1	0.099	0.10	98	103	75-125	5	20		
Thallium	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	3	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

QC Batch:	678406	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92587091001, 92587091002, 92587091003, 92587091004, 92587091005, 92587091006, 92587091007, 92587091008

METHOD BLANK: 3550211 Matrix: Water

Associated Lab Samples: 92587091001, 92587091002, 92587091003, 92587091004, 92587091005, 92587091006, 92587091007, 92587091008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/16/22 14:36	

LABORATORY CONTROL SAMPLE: 3550212

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0021	86	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3550213 3550214

Parameter	Units	92587089001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0019	0.0018	77	74	75-125	4	20	M1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch:	678756	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92587091009, 92587091010, 92587091011, 92587091012, 92587091013, 92587091014, 92587091015, 92587091016, 92587091017, 92587091018, 92587091019

METHOD BLANK: 3551942 Matrix: Water  
Associated Lab Samples: 92587091009, 92587091010, 92587091011, 92587091012, 92587091013, 92587091014, 92587091015, 92587091016, 92587091017, 92587091018, 92587091019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/18/22 13:04	

LABORATORY CONTROL SAMPLE: 3551943

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3551944 3551945

Parameter	Units	92588161001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0022	0.0022	88	87	75-125	1	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch: 679675	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92587091020, 92587091021, 92587091022, 92587091023, 92587091024, 92587091025, 92587091026

METHOD BLANK: 3556124 Matrix: Water  
Associated Lab Samples: 92587091020, 92587091021, 92587091022, 92587091023, 92587091024, 92587091025, 92587091026

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/22/22 10:33	

LABORATORY CONTROL SAMPLE: 3556125

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0027	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3556126 3556127

Parameter	Units	3556126		3556127		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	0.0024	0.0026	96	101	75-125	5	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch: 678110	Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92587091001, 92587091002

METHOD BLANK: 3548928 Matrix: Water

Associated Lab Samples: 92587091001, 92587091002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/14/22 15:13	

LABORATORY CONTROL SAMPLE: 3548929

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	379	95	80-120	

SAMPLE DUPLICATE: 3548930

Parameter	Units	92587701001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	299	297	1	25	

SAMPLE DUPLICATE: 3548931

Parameter	Units	92587089005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		25	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch: 678369 Analysis Method: SM 2540C-2015  
QC Batch Method: SM 2540C-2015 Analysis Description: 2540C Total Dissolved Solids  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92587091003, 92587091004, 92587091005

METHOD BLANK: 3550014 Matrix: Water  
Associated Lab Samples: 92587091003, 92587091004, 92587091005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/15/22 16:02	

LABORATORY CONTROL SAMPLE: 3550015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	389	97	80-120	

SAMPLE DUPLICATE: 3550016

Parameter	Units	92587091003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	151	152	1	25	

SAMPLE DUPLICATE: 3550017

Parameter	Units	92587322007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1160	1080	7	25	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

---

QC Batch: 678370 Analysis Method: SM 2540C-2015  
 QC Batch Method: SM 2540C-2015 Analysis Description: 2540C Total Dissolved Solids  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92587091006, 92587091007, 92587091008, 92587091009, 92587091010, 92587091011, 92587091012, 92587091013, 92587091014, 92587091015, 92587091016, 92587091017

---

METHOD BLANK: 3550019 Matrix: Water  
 Associated Lab Samples: 92587091006, 92587091007, 92587091008, 92587091009, 92587091010, 92587091011, 92587091012, 92587091013, 92587091014, 92587091015, 92587091016, 92587091017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/15/22 16:29	

---

LABORATORY CONTROL SAMPLE: 3550020

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	80-120	

---

SAMPLE DUPLICATE: 3550021

Parameter	Units	92587705001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	36.0	37.0	3	25	

---

SAMPLE DUPLICATE: 3550022

Parameter	Units	92587091011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		25	

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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch: 679091 Analysis Method: SM 2540C-2015  
QC Batch Method: SM 2540C-2015 Analysis Description: 2540C Total Dissolved Solids  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92587091018, 92587091019, 92587091020, 92587091021, 92587091024, 92587091025, 92587091026

METHOD BLANK: 3553375 Matrix: Water  
Associated Lab Samples: 92587091018, 92587091019, 92587091020, 92587091021, 92587091024, 92587091025, 92587091026

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/17/22 16:05	

LABORATORY CONTROL SAMPLE: 3553376

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	374	94	80-120	

SAMPLE DUPLICATE: 3553377

Parameter	Units	92587319023 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	299	300	0	25	

SAMPLE DUPLICATE: 3553378

Parameter	Units	92587089012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	190	186	2	25	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

QC Batch: 679094	Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92587091022, 92587091023

METHOD BLANK: 3553381 Matrix: Water

Associated Lab Samples: 92587091022, 92587091023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/17/22 17:00	

LABORATORY CONTROL SAMPLE: 3553382

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	365	91	80-120	

SAMPLE DUPLICATE: 3553383

Parameter	Units	92587090008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	772	800	4	25	

SAMPLE DUPLICATE: 3553384

Parameter	Units	92587090019 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	48.0	58.0	19	25	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch: 678235 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: 92587091001, 92587091002

METHOD BLANK: 3549593 Matrix: Water  
Associated Lab Samples: 92587091001, 92587091002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/15/22 01:58	
Fluoride	mg/L	ND	0.10	0.050	02/15/22 01:58	
Sulfate	mg/L	ND	1.0	0.50	02/15/22 01:58	

LABORATORY CONTROL SAMPLE: 3549594

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.8	104	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	51.0	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3549595 3549596

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92585602018	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	10.2	50	50	64.0	63.6	108	107	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	106	105	90-110	1	10		
Sulfate	mg/L	20.0	50	50	73.7	73.7	107	107	90-110	0	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3549597 3549598

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92587089005	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	ND	50	50	52.3	53.6	105	107	90-110	2	10		
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	104	107	90-110	3	10		
Sulfate	mg/L	ND	50	50	52.2	53.5	104	107	90-110	2	10		

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch: 678236 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: 92587091003, 92587091004, 92587091005

METHOD BLANK: 3549599 Matrix: Water  
Associated Lab Samples: 92587091003, 92587091004, 92587091005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/15/22 09:24	
Fluoride	mg/L	ND	0.10	0.050	02/15/22 09:24	
Sulfate	mg/L	ND	1.0	0.50	02/15/22 09:24	

LABORATORY CONTROL SAMPLE: 3549600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.3	103	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3549601 3549602

Parameter	Units	92587091003		3549601		3549602		% Rec Limits	RPD	Max RPD	Qual	
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec					MSD % Rec
Chloride	mg/L	3.2	50	50	56.7	57.6	107	109	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.8	2.8	110	112	90-110	2	10	M1
Sulfate	mg/L	50.9	50	50	87.2	88.3	73	75	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3549603 3549604

Parameter	Units	92587240001		3549603		3549604		% Rec Limits	RPD	Max RPD	Qual	
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec					MSD % Rec
Chloride	mg/L	9.5	50	50	2.9	2.9	-13	-13	90-110	1	10	M1
Fluoride	mg/L	0.29	2.5	2.5	0.11	0.11	-7	-7	90-110	2	10	M1
Sulfate	mg/L	1.5	50	50	2.4	2.3	2	2	90-110	2	10	M1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch: 678537 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: 92587091006, 92587091007, 92587091008, 92587091009, 92587091010, 92587091011, 92587091012, 92587091013, 92587091014, 92587091015, 92587091016

METHOD BLANK: 3551059 Matrix: Water  
Associated Lab Samples: 92587091006, 92587091007, 92587091008, 92587091009, 92587091010, 92587091011, 92587091012, 92587091013, 92587091014, 92587091015, 92587091016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/16/22 09:35	
Fluoride	mg/L	ND	0.10	0.050	02/16/22 09:35	
Sulfate	mg/L	ND	1.0	0.50	02/16/22 09:35	

LABORATORY CONTROL SAMPLE: 3551060

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.8	102	90-110	
Fluoride	mg/L	2.5	2.4	95	90-110	
Sulfate	mg/L	50	50.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3551061 3551062

Parameter	Units	92585949014		3551062		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Chloride	mg/L	ND	50	50	62.2	59.5	124	119	90-110	4	10 M1
Fluoride	mg/L	ND	2.5	2.5	3.0	2.9	120	114	90-110	5	10 M1
Sulfate	mg/L	ND	50	50	62.0	59.6	124	119	90-110	4	10 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3551063 3551064

Parameter	Units	92587091007		3551064		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Chloride	mg/L	1.0	50	50	63.8	61.5	126	121	90-110	4	10 M1
Fluoride	mg/L	0.057J	2.5	2.5	3.1	3.0	123	119	90-110	3	10 M1
Sulfate	mg/L	9.3	50	50	71.8	69.6	125	121	90-110	3	10 M1

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

QC Batch: 678877	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: 92587091017

METHOD BLANK: 3552679 Matrix: Water

Associated Lab Samples: 92587091017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/17/22 01:57	
Fluoride	mg/L	ND	0.10	0.050	02/17/22 01:57	
Sulfate	mg/L	ND	1.0	0.50	02/17/22 01:57	

LABORATORY CONTROL SAMPLE: 3552680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.3	97	90-110	
Fluoride	mg/L	2.5	2.3	91	90-110	
Sulfate	mg/L	50	47.1	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3552681 3552682

Parameter	Units	92587091017		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result						
Chloride	mg/L	1.7	50	50	50.7	51.6	98	100	90-110	2	10		
Fluoride	mg/L	0.10	2.5	2.5	2.5	2.6	97	99	90-110	2	10		
Sulfate	mg/L	3.9	50	50	52.8	53.7	98	100	90-110	2	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3552683 3552684

Parameter	Units	92587687006		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result						
Chloride	mg/L	ND	50	50	51.0	51.1	102	102	90-110	0	10		
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	101	99	90-110	1	10		
Sulfate	mg/L	ND	50	50	50.8	50.8	101	101	90-110	0	10		

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

QC Batch: 679365 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: 92587091018, 92587091019, 92587091020, 92587091021, 92587091022, 92587091023, 92587091024, 92587091025, 92587091026

METHOD BLANK: 3554816 Matrix: Water  
Associated Lab Samples: 92587091018, 92587091019, 92587091020, 92587091021, 92587091022, 92587091023, 92587091024, 92587091025, 92587091026

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/19/22 13:13	
Fluoride	mg/L	ND	0.10	0.050	02/19/22 13:13	
Sulfate	mg/L	ND	1.0	0.50	02/19/22 13:13	

LABORATORY CONTROL SAMPLE: 3554817

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.6	103	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	50	51.5	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3554818 3554819

Parameter	Units	92587091018		3554819		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Chloride	mg/L	4.4	50	54.8	55.6	101	102	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.6	2.7	104	106	90-110	2	10	
Sulfate	mg/L	2.4	50	52.5	53.6	100	102	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3554820 3554821

Parameter	Units	92587090007		3554821		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Chloride	mg/L	4.2	50	55.9	56.1	103	104	90-110	0	10	
Fluoride	mg/L	ND	2.5	3.0	3.1	121	123	90-110	1	10 M1	
Sulfate	mg/L	452	50	488	491	73	78	90-110	1	10 M1	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

---

### 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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92587091001	YGWA-39				
92587091002	YGWA-40				
92587091003	YGWA-47				
92587091004	GWA-2				
92587091006	YGWA-1I				
92587091007	YGWA-1D				
92587091008	YGWA-2I				
92587091009	YGWA-3I				
92587091010	YGWA-3D				
92587091013	YGWA-17S				
92587091014	YGWA-18S				
92587091015	YGWA-18I				
92587091016	YGWA-20S				
92587091017	YGWA-21I				
92587091018	YGWA-5I				
92587091020	YGWA-14S				
92587091022	YGWA-30I				
92587091023	YGWA-4I				
92587091024	YGWA-5D				
92587091001	YGWA-39	EPA 3010A	680120	EPA 6010D	680402
92587091002	YGWA-40	EPA 3010A	680120	EPA 6010D	680402
92587091003	YGWA-47	EPA 3010A	680120	EPA 6010D	680402
92587091004	GWA-2	EPA 3010A	680120	EPA 6010D	680402
92587091005	UP-DUP-1	EPA 3010A	680120	EPA 6010D	680402
92587091006	YGWA-1I	EPA 3010A	680120	EPA 6010D	680402
92587091007	YGWA-1D	EPA 3010A	680120	EPA 6010D	680402
92587091008	YGWA-2I	EPA 3010A	680120	EPA 6010D	680402
92587091009	YGWA-3I	EPA 3010A	680226	EPA 6010D	680419
92587091010	YGWA-3D	EPA 3010A	680226	EPA 6010D	680419
92587091011	UP-EB-1	EPA 3010A	680226	EPA 6010D	680419
92587091012	UP-FB-1	EPA 3010A	680226	EPA 6010D	680419
92587091013	YGWA-17S	EPA 3010A	680226	EPA 6010D	680419
92587091014	YGWA-18S	EPA 3010A	680226	EPA 6010D	680419
92587091015	YGWA-18I	EPA 3010A	680226	EPA 6010D	680419
92587091016	YGWA-20S	EPA 3010A	680226	EPA 6010D	680419
92587091017	YGWA-21I	EPA 3010A	680226	EPA 6010D	680419
92587091018	YGWA-5I	EPA 3010A	680226	EPA 6010D	680419
92587091019	UP-DUP-3	EPA 3010A	680226	EPA 6010D	680419
92587091020	YGWA-14S	EPA 3010A	680226	EPA 6010D	680419
92587091021	UP-DUP-2	EPA 3010A	680226	EPA 6010D	680419
92587091022	YGWA-30I	EPA 3010A	680226	EPA 6010D	680419
92587091023	YGWA-4I	EPA 3010A	680226	EPA 6010D	680419
92587091024	YGWA-5D	EPA 3010A	680226	EPA 6010D	680419
92587091025	UP-EB-2	EPA 3010A	680226	EPA 6010D	680419
92587091026	UP-FB-2	EPA 3010A	680226	EPA 6010D	680419
92587091001	YGWA-39	EPA 3005A	680115	EPA 6020B	680441
92587091002	YGWA-40	EPA 3005A	680115	EPA 6020B	680441

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92587091003	YGWA-47	EPA 3005A	680115	EPA 6020B	680441
92587091004	GWA-2	EPA 3005A	680115	EPA 6020B	680441
92587091005	UP-DUP-1	EPA 3005A	680115	EPA 6020B	680441
92587091006	YGWA-1I	EPA 3005A	680115	EPA 6020B	680441
92587091007	YGWA-1D	EPA 3005A	680115	EPA 6020B	680441
92587091008	YGWA-2I	EPA 3005A	680115	EPA 6020B	680441
92587091009	YGWA-3I	EPA 3005A	680225	EPA 6020B	680450
92587091010	YGWA-3D	EPA 3005A	680225	EPA 6020B	680450
92587091011	UP-EB-1	EPA 3005A	680225	EPA 6020B	680450
92587091012	UP-FB-1	EPA 3005A	680225	EPA 6020B	680450
92587091013	YGWA-17S	EPA 3005A	680225	EPA 6020B	680450
92587091014	YGWA-18S	EPA 3005A	680225	EPA 6020B	680450
92587091015	YGWA-18I	EPA 3005A	680225	EPA 6020B	680450
92587091016	YGWA-20S	EPA 3005A	680225	EPA 6020B	680450
92587091017	YGWA-21I	EPA 3005A	680225	EPA 6020B	680450
92587091018	YGWA-5I	EPA 3005A	680225	EPA 6020B	680450
92587091019	UP-DUP-3	EPA 3005A	680225	EPA 6020B	680450
92587091020	YGWA-14S	EPA 3005A	680225	EPA 6020B	680450
92587091021	UP-DUP-2	EPA 3005A	680225	EPA 6020B	680450
92587091022	YGWA-30I	EPA 3005A	680225	EPA 6020B	680450
92587091023	YGWA-4I	EPA 3005A	680225	EPA 6020B	680450
92587091024	YGWA-5D	EPA 3005A	680225	EPA 6020B	680450
92587091025	UP-EB-2	EPA 3005A	680225	EPA 6020B	680450
92587091026	UP-FB-2	EPA 3005A	680225	EPA 6020B	680450
92587091001	YGWA-39	EPA 7470A	678406	EPA 7470A	678665
92587091002	YGWA-40	EPA 7470A	678406	EPA 7470A	678665
92587091003	YGWA-47	EPA 7470A	678406	EPA 7470A	678665
92587091004	GWA-2	EPA 7470A	678406	EPA 7470A	678665
92587091005	UP-DUP-1	EPA 7470A	678406	EPA 7470A	678665
92587091006	YGWA-1I	EPA 7470A	678406	EPA 7470A	678665
92587091007	YGWA-1D	EPA 7470A	678406	EPA 7470A	678665
92587091008	YGWA-2I	EPA 7470A	678406	EPA 7470A	678665
92587091009	YGWA-3I	EPA 7470A	678756	EPA 7470A	679374
92587091010	YGWA-3D	EPA 7470A	678756	EPA 7470A	679374
92587091011	UP-EB-1	EPA 7470A	678756	EPA 7470A	679374
92587091012	UP-FB-1	EPA 7470A	678756	EPA 7470A	679374
92587091013	YGWA-17S	EPA 7470A	678756	EPA 7470A	679374
92587091014	YGWA-18S	EPA 7470A	678756	EPA 7470A	679374
92587091015	YGWA-18I	EPA 7470A	678756	EPA 7470A	679374
92587091016	YGWA-20S	EPA 7470A	678756	EPA 7470A	679374
92587091017	YGWA-21I	EPA 7470A	678756	EPA 7470A	679374
92587091018	YGWA-5I	EPA 7470A	678756	EPA 7470A	679374
92587091019	UP-DUP-3	EPA 7470A	678756	EPA 7470A	679374
92587091020	YGWA-14S	EPA 7470A	679675	EPA 7470A	679921
92587091021	UP-DUP-2	EPA 7470A	679675	EPA 7470A	679921
92587091022	YGWA-30I	EPA 7470A	679675	EPA 7470A	679921
92587091023	YGWA-4I	EPA 7470A	679675	EPA 7470A	679921

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES POOLED UPGRADIENT

Pace Project No.: 92587091

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92587091024	YGWA-5D	EPA 7470A	679675	EPA 7470A	679921
92587091025	UP-EB-2	EPA 7470A	679675	EPA 7470A	679921
92587091026	UP-FB-2	EPA 7470A	679675	EPA 7470A	679921
92587091001	YGWA-39	SM 2540C-2015	678110		
92587091002	YGWA-40	SM 2540C-2015	678110		
92587091003	YGWA-47	SM 2540C-2015	678369		
92587091004	GWA-2	SM 2540C-2015	678369		
92587091005	UP-DUP-1	SM 2540C-2015	678369		
92587091006	YGWA-1I	SM 2540C-2015	678370		
92587091007	YGWA-1D	SM 2540C-2015	678370		
92587091008	YGWA-2I	SM 2540C-2015	678370		
92587091009	YGWA-3I	SM 2540C-2015	678370		
92587091010	YGWA-3D	SM 2540C-2015	678370		
92587091011	UP-EB-1	SM 2540C-2015	678370		
92587091012	UP-FB-1	SM 2540C-2015	678370		
92587091013	YGWA-17S	SM 2540C-2015	678370		
92587091014	YGWA-18S	SM 2540C-2015	678370		
92587091015	YGWA-18I	SM 2540C-2015	678370		
92587091016	YGWA-20S	SM 2540C-2015	678370		
92587091017	YGWA-21I	SM 2540C-2015	678370		
92587091018	YGWA-5I	SM 2540C-2015	679091		
92587091019	UP-DUP-3	SM 2540C-2015	679091		
92587091020	YGWA-14S	SM 2540C-2015	679091		
92587091021	UP-DUP-2	SM 2540C-2015	679091		
92587091022	YGWA-30I	SM 2540C-2015	679094		
92587091023	YGWA-4I	SM 2540C-2015	679094		
92587091024	YGWA-5D	SM 2540C-2015	679091		
92587091025	UP-EB-2	SM 2540C-2015	679091		
92587091026	UP-FB-2	SM 2540C-2015	679091		
92587091001	YGWA-39	EPA 300.0 Rev 2.1 1993	678235		
92587091002	YGWA-40	EPA 300.0 Rev 2.1 1993	678235		
92587091003	YGWA-47	EPA 300.0 Rev 2.1 1993	678236		
92587091004	GWA-2	EPA 300.0 Rev 2.1 1993	678236		
92587091005	UP-DUP-1	EPA 300.0 Rev 2.1 1993	678236		
92587091006	YGWA-1I	EPA 300.0 Rev 2.1 1993	678537		
92587091007	YGWA-1D	EPA 300.0 Rev 2.1 1993	678537		
92587091008	YGWA-2I	EPA 300.0 Rev 2.1 1993	678537		
92587091009	YGWA-3I	EPA 300.0 Rev 2.1 1993	678537		
92587091010	YGWA-3D	EPA 300.0 Rev 2.1 1993	678537		
92587091011	UP-EB-1	EPA 300.0 Rev 2.1 1993	678537		
92587091012	UP-FB-1	EPA 300.0 Rev 2.1 1993	678537		
92587091013	YGWA-17S	EPA 300.0 Rev 2.1 1993	678537		
92587091014	YGWA-18S	EPA 300.0 Rev 2.1 1993	678537		
92587091015	YGWA-18I	EPA 300.0 Rev 2.1 1993	678537		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES POOLED UPGRADIENT  
Pace Project No.: 92587091

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92587091016	YGWA-20S	EPA 300.0 Rev 2.1 1993	678537		
92587091017	YGWA-21I	EPA 300.0 Rev 2.1 1993	678877		
92587091018	YGWA-5I	EPA 300.0 Rev 2.1 1993	679365		
92587091019	UP-DUP-3	EPA 300.0 Rev 2.1 1993	679365		
92587091020	YGWA-14S	EPA 300.0 Rev 2.1 1993	679365		
92587091021	UP-DUP-2	EPA 300.0 Rev 2.1 1993	679365		
92587091022	YGWA-30I	EPA 300.0 Rev 2.1 1993	679365		
92587091023	YGWA-4I	EPA 300.0 Rev 2.1 1993	679365		
92587091024	YGWA-5D	EPA 300.0 Rev 2.1 1993	679365		
92587091025	UP-EB-2	EPA 300.0 Rev 2.1 1993	679365		
92587091026	UP-FB-2	EPA 300.0 Rev 2.1 1993	679365		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.





Document Name:  
**Sample Condition Upon Receipt (SCUR)**  
 Document No.:  
 F-CAR-CS-033-Rev.08

Document Revised: November 15, 2021  
 Page 1 of 2  
 Issuing Authority:  
 Pace Carolinas Quality Office

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
 Upon Receipt

Client Name:

*GA Power*

Project #:

**WO# : 92587091**



Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *2/9/22*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID: *083*

Type of Ice:

Wet  Blue  None

Cooler Temp:

*2.3*

Correction Factor:  
 Add/Subtract (°C)

*10.2*

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

*2.5*

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-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	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <i>W</i>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_

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

Project #

**WO# : 92587091**

PM: NMG

Due Date: 02/23/22

CLIENT: GA-GA Power

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

\*\*Bottom half of box is to list number of bottles

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	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) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-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)	AG3A(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 Unpreserved (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (3 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 Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

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 Certificat on Office (i.e. 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**

Required Client Information:

Company: GA Power  
 Address: Atlanta, GA  
 Email To:  
 Phone:  
 Requested Due Date:

**Section B**

Required Project Information:

Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Project Name: Plant Yates Pooled Upgradient  
 Project Number:  
 Purchase Order #:  
 Address:  
 Company Name:  
 Attention: Southern Co.  
 Project Manager: Nicole D'Ono  
 Pace Profile #: 10840

**Section C**

Invoice Information:

Address:  
 Company Name:  
 Attention: Southern Co.  
 Project Manager: Nicole D'Ono  
 Pace Profile #: 10840

Page: 1 Of 1

ITEM #	SAMPLE ID <small>One Character per box. (A-Z, 0-9 / -)</small> Sample IDs must be unique	MATRIX CODE <small>(see valid codes to left)</small>	SAMPLE TYPE <small>(G=GRAB C=COMP)</small>	COLLECTED		DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analyses Test	Y/N	Requested Analytes Filtered (Y/N)	Residual Chlorine (Y/N)	pH: 5.78 pH: 5.20					
				START	END							Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol						Other				
1	YGWA-39	WT G	G	2/12/15							5																	
2	YGWA-40	WT G	G	2/12/15							5																	
3	YGWA-11	WT G	G	2/12/15							5																	
4	YGWA-1B	WT G	G								5																	
5	YGWA-21	WT G	G								5																	
6	YGWA-21	WT G	G								5																	
7	YGWA-2D	WT G	G								5																	
8	YGWA-44S	WT G	G								5																	
9	UR-DUP-2	WT G	G								5																	
10	YGWA-301	WT G	G								5																	
11	UP-EB-1	WT G	G								5																	
12	UP-FB-1	WT G	G								5																	

SAMPLER NAME AND SIGNATURE				DATE	TIME	DATE	TIME	ACCEPTED BY / AFFILIATION				DATE	TIME	SAMPLER CONDITIONS				
PRINT Name of SAMPLER: Van Lioszynski				2/12	0825	2/12	0825	Arcadis				2/19	1018	TEMP In C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)	
SIGNATURE of SAMPLER: <i>[Signature]</i>								Arcadis										

# 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  
 Coby To: Arcadis Contacts

Section C  
 Invoice Information:  
 Attention: Southern Co.  
 Company Name:  
 Address:

Purchase Order #: Plant Yates Pooled Upgradient  
 Project Name:  
 Project Number:  
 Person Project Manager: Nicole D'Ono  
 Page Profile #: 10840  
 Regulatory Agency: State/Location Georgia

**SAMPLE ID**  
 One Character per box.  
 (A-Z, 0-9, /, -)  
 Sample IDs must be unique

ITEM #	MATRIX	CODE	COLLECTED			SAMPLE TEMP AT COLLECTION	Preservatives							Analyses Test			Residual Chlorine (Y/N)								
			START DATE	START TIME	END DATE		END TIME	# OF CONTAINERS																	
									H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N		App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320				
1	YGWA-47	WT G	2/5/12	1140	-	-	5	2	3																
2	<del>GWX-2</del>	WT G					5	2	3																
3	UP-BUP-1	WT G					5	2	3																
4	XGWA-47	WT G					5	2	3																
5	YGWA-51	WT G					5	2	3																
6	UP-BUP-3	WT G					5	2	3																
7	YGWA-50	WT G					5	2	3																
8	XGWA-175	WT G					5	2	3																
9	YGWA-183	WT G					5	2	3																
10	XGWA-181	WT G					5	2	3																
11	XGWA-205	WT G					5	2	3																
12	YGWA-211	WT G					5	2	3																

App IV Metals 60208: Arsenic (Se), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Thallium (Tl), Mercury (Hg)

App III Metals: Bacon 60208, Ca 6010D; App III 60208: Zn, Ag, Ni, V

App IV Suite 300.0 (Cl, F, Sulfate)

Relinquished by/Affiliation: Arcadis Date: 2/9/12 Time: 0825

Accepted by/Affiliation: Michael Arcadis Date: 2/9/12 Time: 0825

Sampler Name and Signature: Michael Arcadis

Print Name of Sampler: Michael Arcadis

Signature of Sampler: [Handwritten Signature] Date Signed: 2/9/12

Temp in C: \_\_\_\_\_

Received on Ice (Y/N): \_\_\_\_\_

Custody Sealed Cooler (Y/N): \_\_\_\_\_

Samples Intact (Y/N): \_\_\_\_\_

# 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  
 Email To: [ ]  
 Phone: [ ]  
 Requested Due Date: [ ]

Section B  
 Required Project Information:  
 Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Project Name: Plant Values Pooled Upgradient  
 Project Number: [ ]

Section C  
 Invoice Information:  
 Attribution: Southern Co.  
 Company Name: [ ]  
 Address: [ ]  
 POC Name: [ ]  
 POC Title: [ ]  
 POC Email: [ ]  
 POC Phone: [ ]  
 POC Fax: [ ]

Section D  
 Regulatory Agency: [ ]  
 State / Location: [ ]

Section E  
 Page: [ ] of [ ]

ITEM #	SAMPLE ID (A-Z, 0-9, -, ) Sample IDs must be unique	MATRIX Drinking Water Wastewater Surface Water Other Tissue	CODE DW WW PW SL CL WP AR OT TS	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analyses Test	Requested Analyte Filtered (Y/N)	Residual Chlorine (Y/N)	PH:	
				START	END			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3					Methanol
1	YGWVA-21						5											
2	GW/A-2						5											
3	UP-DUP-1						5											
4	YGWVA-21						5											
5	YGWVA-51						5											
6	UP-DUP-3						5											
7	YGWVA-5D						5											
8	YGWVA-7S						5											
9	LEGVA-1BS						5											
10	YGWVA-1BL						5											
11	YGWVA-2DS						5											
12	YGWVA-2H						5											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Will Kern Arcadis	2/19/22	0840	[Signature]	2/19/22	0840				
	[Signature] Arcadis	2/19/22	0840	[Signature]	2/19	1019				

SAMPLER NAME AND SIGNATURE		DATE
PRINT Name of SAMPLER:	Will Kern	02-19-22
SIGNATURE of SAMPLER:	[Signature]	

April 11, 2022

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

RE: Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

Dear Ms. Petty:

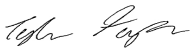
Enclosed are the analytical results for sample(s) received by the laboratory between February 09, 2022 and February 11, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where 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,



Tyler Forney for  
Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR  
Lauren Coker, Georgia Pwer  
Geoffrey Gay, ARCADIS - Atlanta  
Kristen Jurinko  
Kelley Sharpe, ARCADIS - Atlanta  
Alex Simpson, Arcadis  
Becky Steever, Arcadis  
Albert Zumbuhl, Arcadis



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

---

### **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 #: 460198  
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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92587081001	YGWA-39	Water	02/08/22 14:55	02/09/22 10:18
92587081002	YGWA-40	Water	02/08/22 13:22	02/09/22 10:18
92587081003	YGWA-47	Water	02/08/22 11:40	02/09/22 10:18
92587081004	GWA-2	Water	02/08/22 11:50	02/09/22 10:18
92587081005	UP-DUP-1	Water	02/08/22 00:00	02/09/22 10:18
92587081006	YGWA-1I	Water	02/09/22 13:45	02/10/22 17:00
92587081007	YGWA-1D	Water	02/09/22 14:45	02/10/22 17:00
92587081008	YGWA-2I	Water	02/09/22 17:35	02/10/22 17:00
92587081009	YGWA-3I	Water	02/09/22 11:35	02/10/22 17:00
92587081010	YGWA-3D	Water	02/09/22 10:20	02/10/22 17:00
92587081011	UP-EB-1	Water	02/09/22 13:06	02/10/22 17:00
92587081012	UP-FB-1	Water	02/09/22 10:47	02/10/22 17:00
92587081013	YGWA-17S	Water	02/09/22 10:20	02/10/22 17:00
92587081014	YGWA-18S	Water	02/09/22 12:24	02/10/22 17:00
92587081015	YGWA-18I	Water	02/09/22 14:31	02/10/22 17:00
92587081016	YGWA-20S	Water	02/09/22 16:19	02/10/22 17:00
92587081017	YGWA-21I	Water	02/09/22 17:40	02/10/22 17:00
92587081018	YGWA-5I	Water	02/10/22 17:27	02/11/22 16:45
92587081019	UP-DUP-3	Water	02/10/22 00:00	02/11/22 16:45
92587081020	YGWA-14S	Water	02/10/22 16:20	02/11/22 16:45
92587081021	UP-DUP-2	Water	02/10/22 00:00	02/11/22 16:45
92587081022	YGWA-30I	Water	02/10/22 09:20	02/11/22 16:45
92587081023	YGWA-4I	Water	02/11/22 10:40	02/11/22 16:45
92587081024	YGWA-5D	Water	02/10/22 17:46	02/11/22 16:45
92587081025	UP-EB-2	Water	02/10/22 11:40	02/11/22 16:45
92587081026	UP-FB-2	Water	02/10/22 17:13	02/11/22 16:45

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SAMPLE ANALYTE COUNT

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92587081001	YGWA-39	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081002	YGWA-40	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081003	YGWA-47	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081004	GWA-2	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081005	UP-DUP-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081006	YGWA-1I	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081007	YGWA-1D	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081008	YGWA-2I	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081009	YGWA-3I	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081010	YGWA-3D	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081011	UP-EB-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081012	UP-FB-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92587081013	YGWA-17S	EPA 9315	JC2	1	PASI-PA

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92587081014	YGWA-18S	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92587081015	YGWA-18I	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92587081016	YGWA-20S	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92587081017	YGWA-21I	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92587081018	YGWA-5I	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92587081019	UP-DUP-3	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92587081020	YGWA-14S	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92587081021	UP-DUP-2	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92587081022	YGWA-30I	EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92587081023	YGWA-4I	EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92587081024	YGWA-5D	EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92587081025	UP-EB-2	EPA 9320	JSM	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**SAMPLE ANALYTE COUNT**

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92587081026	UP-FB-2	Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92587081001</b>	<b>YGWA-39</b>					
EPA 9315	Radium-226	0.621 ± 0.193 (0.145) C:97% T:NA	pCi/L		03/14/22 08:22	
EPA 9320	Radium-228	0.213 ± 0.292 (0.626) C:86% T:87%	pCi/L		03/04/22 12:08	
Total Radium Calculation	Total Radium	0.834 ± 0.485 (0.771)	pCi/L		03/14/22 21:59	
<b>92587081002</b>	<b>YGWA-40</b>					
EPA 9315	Radium-226	0.390 ± 0.164 (0.197) C:87% T:NA	pCi/L		03/14/22 08:22	
EPA 9320	Radium-228	0.144 ± 0.283 (0.623) C:84% T:90%	pCi/L		03/04/22 12:08	
Total Radium Calculation	Total Radium	0.534 ± 0.447 (0.820)	pCi/L		03/14/22 21:59	
<b>92587081003</b>	<b>YGWA-47</b>					
EPA 9315	Radium-226	0.241 ± 0.130 (0.183) C:91% T:NA	pCi/L		03/14/22 08:22	
EPA 9320	Radium-228	0.159 ± 0.245 (0.528) C:84% T:90%	pCi/L		03/04/22 12:08	
Total Radium Calculation	Total Radium	0.400 ± 0.375 (0.711)	pCi/L		03/14/22 21:59	
<b>92587081004</b>	<b>GWA-2</b>					
EPA 9315	Radium-226	0.151 ± 0.105 (0.166) C:89% T:NA	pCi/L		03/14/22 08:22	
EPA 9320	Radium-228	0.311 ± 0.281 (0.568) C:87% T:90%	pCi/L		03/04/22 12:08	
Total Radium Calculation	Total Radium	0.462 ± 0.386 (0.734)	pCi/L		03/14/22 21:59	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92587081005</b>	<b>UP-DUP-1</b>					
EPA 9315	Radium-226	0.138 ± 0.115 (0.208)	pCi/L		03/14/22 08:22	
EPA 9320	Radium-228	C:75% T:NA 0.617 ± 0.346 (0.625)	pCi/L		03/04/22 12:09	
Total Radium Calculation	Total Radium	C:86% T:88% 0.755 ± 0.461 (0.833)	pCi/L		03/14/22 21:59	
<b>92587081006</b>	<b>YGWA-1I</b>					
EPA 9315	Radium-226	0.211 ± 0.123 (0.190)	pCi/L		03/14/22 08:22	
EPA 9320	Radium-228	C:95% T:NA 0.211 ± 0.575 (1.28)	pCi/L		03/04/22 12:09	
Total Radium Calculation	Total Radium	C:78% T:88% 0.422 ± 0.698 (1.47)	pCi/L		03/14/22 21:59	
<b>92587081007</b>	<b>YGWA-1D</b>					
EPA 9315	Radium-226	0.294 ± 0.135 (0.159)	pCi/L		03/14/22 08:22	
EPA 9320	Radium-228	C:93% T:NA 0.893 ± 0.529 (0.973)	pCi/L		03/04/22 12:09	
Total Radium Calculation	Total Radium	C:78% T:89% 1.19 ± 0.664 (1.13)	pCi/L		03/14/22 21:59	
<b>92587081008</b>	<b>YGWA-2I</b>					
EPA 9315	Radium-226	0.205 ± 0.114 (0.150)	pCi/L		03/14/22 08:22	
EPA 9320	Radium-228	C:91% T:NA 0.689 ± 0.535 (1.05)	pCi/L		03/04/22 12:09	
Total Radium Calculation	Total Radium	C:77% T:90% 0.894 ± 0.649 (1.20)	pCi/L		03/14/22 21:59	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92587081009</b>	<b>YGWA-3I</b>					
EPA 9315	Radium-226	0.817 ± 0.240 (0.170)	pCi/L		03/14/22 08:22	
EPA 9320	Radium-228	C:83% T:NA 1.09 ± 0.451 (0.731)	pCi/L		03/04/22 12:09	
Total Radium Calculation	Total Radium	C:81% T:89% 1.91 ± 0.691 (0.901)	pCi/L		03/14/22 21:59	
<b>92587081010</b>	<b>YGWA-3D</b>					
EPA 9315	Radium-226	1.41 ± 0.334 (0.200)	pCi/L		03/14/22 08:18	
EPA 9320	Radium-228	C:96% T:NA 1.87 ± 0.560 (0.704)	pCi/L		03/04/22 12:09	
Total Radium Calculation	Total Radium	C:82% T:90% 3.28 ± 0.894 (0.904)	pCi/L		03/14/22 21:59	
<b>92587081011</b>	<b>UP-EB-1</b>					
EPA 9315	Radium-226	0.0487 ± 0.0838 (0.189)	pCi/L		03/14/22 08:18	
EPA 9320	Radium-228	C:97% T:NA 0.387 ± 0.291 (0.568)	pCi/L		03/04/22 12:09	
Total Radium Calculation	Total Radium	C:83% T:97% 0.436 ± 0.375 (0.757)	pCi/L		03/14/22 21:59	
<b>92587081012</b>	<b>UP-FB-1</b>					
EPA 9315	Radium-226	0.0259 ± 0.0622 (0.149)	pCi/L		03/14/22 08:18	
EPA 9320	Radium-228	C:95% T:NA 0.546 ± 0.343 (0.645)	pCi/L		03/04/22 12:10	
Total Radium Calculation	Total Radium	C:81% T:93% 0.572 ± 0.405 (0.794)	pCi/L		03/14/22 21:59	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92587081013</b>	<b>YGWA-17S</b>					
EPA 9315	Radium-226	0.131 ± 0.0871 (0.122)	pCi/L		03/14/22 08:19	
EPA 9320	Radium-228	C:95% T:NA 0.00169 ± 0.325 (0.756)	pCi/L		03/04/22 12:10	
Total Radium Calculation	Total Radium	C:78% T:89% 0.133 ± 0.412 (0.878)	pCi/L		03/14/22 21:59	
<b>92587081014</b>	<b>YGWA-18S</b>					
EPA 9315	Radium-226	0.0618 ± 0.0753 (0.152)	pCi/L		03/14/22 08:19	
EPA 9320	Radium-228	C:93% T:NA -0.0652 ± 0.340 (0.796)	pCi/L		03/04/22 12:10	
Total Radium Calculation	Total Radium	C:81% T:91% 0.0618 ± 0.415 (0.948)	pCi/L		03/14/22 21:59	
<b>92587081015</b>	<b>YGWA-18I</b>					
EPA 9315	Radium-226	0.107 ± 0.0873 (0.149)	pCi/L		03/14/22 08:19	
EPA 9320	Radium-228	C:94% T:NA 0.464 ± 0.334 (0.645)	pCi/L		03/04/22 12:10	
Total Radium Calculation	Total Radium	C:76% T:92% 0.571 ± 0.421 (0.794)	pCi/L		03/14/22 21:59	
<b>92587081016</b>	<b>YGWA-20S</b>					
EPA 9315	Radium-226	0.0382 ± 0.0564 (0.120)	pCi/L		03/14/22 08:19	
EPA 9320	Radium-228	C:92% T:NA 0.466 ± 0.326 (0.625)	pCi/L		03/04/22 12:10	
Total Radium Calculation	Total Radium	C:78% T:93% 0.504 ± 0.382 (0.745)	pCi/L		03/14/22 21:59	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92587081017</b>	<b>YGWA-21I</b>					
EPA 9315	Radium-226	0.790 ± 0.237 (0.195) C:86% T:NA	pCi/L		03/14/22 08:19	
EPA 9320	Radium-228	1.15 ± 0.478 (0.782) C:81% T:88%	pCi/L		03/04/22 12:10	
Total Radium Calculation	Total Radium	1.94 ± 0.715 (0.977)	pCi/L		03/14/22 21:59	
<b>92587081018</b>	<b>YGWA-5I</b>					
EPA 9315	Radium-226	0.0387 ± 0.0686 (0.155) C:92% T:NA	pCi/L		03/18/22 09:27	
EPA 9320	Radium-228	0.336 ± 0.397 (0.841) C:85% T:89%	pCi/L		03/04/22 12:18	
Total Radium Calculation	Total Radium	0.375 ± 0.466 (0.996)	pCi/L		03/21/22 15:36	
<b>92587081019</b>	<b>UP-DUP-3</b>					
EPA 9315	Radium-226	0.183 ± 0.111 (0.169) C:95% T:NA	pCi/L		03/18/22 09:27	
EPA 9320	Radium-228	-0.150 ± 0.507 (1.19) C:69% T:82%	pCi/L		03/04/22 12:18	
Total Radium Calculation	Total Radium	0.183 ± 0.618 (1.36)	pCi/L		03/21/22 15:36	
<b>92587081020</b>	<b>YGWA-14S</b>					
EPA 9315	Radium-226	-0.0197 ± 0.0632 (0.190) C:92% T:NA	pCi/L		03/18/22 09:27	
EPA 9320	Radium-228	-0.199 ± 0.449 (1.06) C:75% T:89%	pCi/L		03/04/22 12:18	
Total Radium Calculation	Total Radium	0.000 ± 0.512 (1.25)	pCi/L		03/21/22 15:36	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92587081021</b>	<b>UP-DUP-2</b>					
EPA 9315	Radium-226	0.0406 ± 0.0923 (0.219) C:63% T:NA	pCi/L		03/18/22 09:27	
EPA 9320	Radium-228	-0.195 ± 0.313 (0.784) C:91% T:90%	pCi/L		03/04/22 18:26	
Total Radium Calculation	Total Radium	0.0406 ± 0.405 (1.00)	pCi/L		03/21/22 15:36	
<b>92587081022</b>	<b>YGWA-301</b>					
EPA 9315	Radium-226	0.0634 ± 0.0744 (0.148) C:89% T:NA	pCi/L		03/18/22 09:27	
EPA 9320	Radium-228	0.205 ± 0.331 (0.718) C:68% T:87%	pCi/L		03/08/22 15:20	
Total Radium Calculation	Total Radium	0.268 ± 0.405 (0.866)	pCi/L		03/21/22 15:36	
<b>92587081023</b>	<b>YGWA-41</b>					
EPA 9315	Radium-226	0.501 ± 0.174 (0.154) C:90% T:NA	pCi/L		03/18/22 09:27	
EPA 9320	Radium-228	0.495 ± 0.381 (0.744) C:69% T:88%	pCi/L		03/08/22 15:20	
Total Radium Calculation	Total Radium	0.996 ± 0.555 (0.898)	pCi/L		03/21/22 15:36	
<b>92587081024</b>	<b>YGWA-5D</b>					
EPA 9315	Radium-226	2.47 ± 0.487 (0.124) C:87% T:NA	pCi/L		03/18/22 10:23	
EPA 9320	Radium-228	0.856 ± 0.428 (0.737) C:69% T:93%	pCi/L		03/08/22 15:20	
Total Radium Calculation	Total Radium	3.33 ± 0.915 (0.861)	pCi/L		03/21/22 15:36	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92587081025</b>	<b>UP-EB-2</b>					
EPA 9315	Radium-226	0.0353 ± 0.0661 (0.151) C:97% T:NA	pCi/L		03/22/22 09:52	
EPA 9320	Radium-228	0.133 ± 0.314 (0.699) C:75% T:90%	pCi/L		03/08/22 15:20	
Total Radium Calculation	Total Radium	0.168 ± 0.380 (0.850)	pCi/L		03/22/22 15:27	
<b>92587081026</b>	<b>UP-FB-2</b>					
EPA 9315	Radium-226	0.0543 ± 0.0745 (0.158) C:98% T:NA	pCi/L		03/22/22 09:52	
EPA 9320	Radium-228	0.148 ± 0.542 (1.23) C:72% T:89%	pCi/L		03/08/22 18:43	
Total Radium Calculation	Total Radium	0.202 ± 0.617 (1.39)	pCi/L		03/22/22 15:27	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-39**      **Lab ID: 92587081001**      Collected: 02/08/22 14:55      Received: 02/09/22 10:18      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	<b>0.621 ± 0.193 (0.145)</b> <b>C:97% T:NA</b>	pCi/L	03/14/22 08:22	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.213 ± 0.292 (0.626)</b> <b>C:86% T:87%</b>	pCi/L	03/04/22 12:08	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.834 ± 0.485 (0.771)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-40**      **Lab ID: 92587081002**      Collected: 02/08/22 13:22      Received: 02/09/22 10:18      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	<b>0.390 ± 0.164 (0.197)</b> <b>C:87% T:NA</b>	pCi/L	03/14/22 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.144 ± 0.283 (0.623)</b> <b>C:84% T:90%</b>	pCi/L	03/04/22 12:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.534 ± 0.447 (0.820)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWA-47</b> <b>Lab ID: 92587081003</b> Collected: 02/08/22 11:40      Received: 02/09/22 10:18      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.241 ± 0.130 (0.183)</b> <b>C:91% T:NA</b>	pCi/L	03/14/22 08:22	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.159 ± 0.245 (0.528)</b> <b>C:84% T:90%</b>	pCi/L	03/04/22 12:08	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.400 ± 0.375 (0.711)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: GWA-2**      **Lab ID: 92587081004**      Collected: 02/08/22 11:50      Received: 02/09/22 10:18      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	<b>0.151 ± 0.105 (0.166)</b> <b>C:89% T:NA</b>	pCi/L	03/14/22 08:22	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.311 ± 0.281 (0.568)</b> <b>C:87% T:90%</b>	pCi/L	03/04/22 12:08	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.462 ± 0.386 (0.734)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: UP-DUP-1</b> <b>Lab ID: 92587081005</b> Collected: 02/08/22 00:00      Received: 02/09/22 10:18      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.138 ± 0.115 (0.208)</b> <b>C:75% T:NA</b>	pCi/L	03/14/22 08:22	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.617 ± 0.346 (0.625)</b> <b>C:86% T:88%</b>	pCi/L	03/04/22 12:09	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.755 ± 0.461 (0.833)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-11**      **Lab ID: 92587081006**      Collected: 02/09/22 13:45      Received: 02/10/22 17:00      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	<b>0.211 ± 0.123 (0.190)</b> <b>C:95% T:NA</b>	pCi/L	03/14/22 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.211 ± 0.575 (1.28)</b> <b>C:78% T:88%</b>	pCi/L	03/04/22 12:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.422 ± 0.698 (1.47)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-1D**      **Lab ID: 92587081007**      Collected: 02/09/22 14:45      Received: 02/10/22 17:00      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	<b>0.294 ± 0.135 (0.159)</b> <b>C:93% T:NA</b>	pCi/L	03/14/22 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.893 ± 0.529 (0.973)</b> <b>C:78% T:89%</b>	pCi/L	03/04/22 12:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.19 ± 0.664 (1.13)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-2I**      **Lab ID: 92587081008**      Collected: 02/09/22 17:35      Received: 02/10/22 17:00      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	<b>0.205 ± 0.114 (0.150)</b> <b>C:91% T:NA</b>	pCi/L	03/14/22 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.689 ± 0.535 (1.05)</b> <b>C:77% T:90%</b>	pCi/L	03/04/22 12:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.894 ± 0.649 (1.20)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-3I**      **Lab ID: 92587081009**      Collected: 02/09/22 11:35      Received: 02/10/22 17:00      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	<b>0.817 ± 0.240 (0.170)</b> <b>C:83% T:NA</b>	pCi/L	03/14/22 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.09 ± 0.451 (0.731)</b> <b>C:81% T:89%</b>	pCi/L	03/04/22 12:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.91 ± 0.691 (0.901)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWA-3D</b> <b>Lab ID: 92587081010</b> Collected: 02/09/22 10:20      Received: 02/10/22 17:00      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>1.41 ± 0.334 (0.200)</b> <b>C:96% T:NA</b>	pCi/L	03/14/22 08:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.87 ± 0.560 (0.704)</b> <b>C:82% T:90%</b>	pCi/L	03/04/22 12:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>3.28 ± 0.894 (0.904)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: UP-EB-1**      **Lab ID: 92587081011**      Collected: 02/09/22 13:06      Received: 02/10/22 17:00      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	<b>0.0487 ± 0.0838 (0.189)</b> <b>C:97% T:NA</b>	pCi/L	03/14/22 08:18	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.387 ± 0.291 (0.568)</b> <b>C:83% T:97%</b>	pCi/L	03/04/22 12:09	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.436 ± 0.375 (0.757)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: UP-FB-1**      **Lab ID: 92587081012**      Collected: 02/09/22 10:47      Received: 02/10/22 17:00      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	<b>0.0259 ± 0.0622 (0.149)</b> <b>C:95% T:NA</b>	pCi/L	03/14/22 08:18	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.546 ± 0.343 (0.645)</b> <b>C:81% T:93%</b>	pCi/L	03/04/22 12:10	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.572 ± 0.405 (0.794)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-17S**      **Lab ID: 92587081013**      Collected: 02/09/22 10:20      Received: 02/10/22 17:00      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	<b>0.131 ± 0.0871 (0.122)</b> <b>C:95% T:NA</b>	pCi/L	03/14/22 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.00169 ± 0.325 (0.756)</b> <b>C:78% T:89%</b>	pCi/L	03/04/22 12:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.133 ± 0.412 (0.878)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-18S**      **Lab ID: 92587081014**      Collected: 02/09/22 12:24      Received: 02/10/22 17:00      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	<b>0.0618 ± 0.0753 (0.152)</b> <b>C:93% T:NA</b>	pCi/L	03/14/22 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.0652 ± 0.340 (0.796)</b> <b>C:81% T:91%</b>	pCi/L	03/04/22 12:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.0618 ± 0.415 (0.948)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWA-181</b> <b>Lab ID: 92587081015</b> Collected: 02/09/22 14:31      Received: 02/10/22 17:00      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.107 ± 0.0873 (0.149)</b> <b>C:94% T:NA</b>	pCi/L	03/14/22 08:19	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.464 ± 0.334 (0.645)</b> <b>C:76% T:92%</b>	pCi/L	03/04/22 12:10	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.571 ± 0.421 (0.794)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-20S**      **Lab ID: 92587081016**      Collected: 02/09/22 16:19      Received: 02/10/22 17:00      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	<b>0.0382 ± 0.0564 (0.120)</b> <b>C:92% T:NA</b>	pCi/L	03/14/22 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.466 ± 0.326 (0.625)</b> <b>C:78% T:93%</b>	pCi/L	03/04/22 12:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.504 ± 0.382 (0.745)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-211**      **Lab ID: 92587081017**      Collected: 02/09/22 17:40      Received: 02/10/22 17:00      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	<b>0.790 ± 0.237 (0.195)</b> <b>C:86% T:NA</b>	pCi/L	03/14/22 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.15 ± 0.478 (0.782)</b> <b>C:81% T:88%</b>	pCi/L	03/04/22 12:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.94 ± 0.715 (0.977)</b>	pCi/L	03/14/22 21:59	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-5I**      **Lab ID: 92587081018**      Collected: 02/10/22 17:27      Received: 02/11/22 16:45      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	<b>0.0387 ± 0.0686 (0.155)</b> <b>C:92% T:NA</b>	pCi/L	03/18/22 09:27	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.336 ± 0.397 (0.841)</b> <b>C:85% T:89%</b>	pCi/L	03/04/22 12:18	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.375 ± 0.466 (0.996)</b>	pCi/L	03/21/22 15:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: UP-DUP-3</b> <b>Lab ID: 92587081019</b> Collected: 02/10/22 00:00      Received: 02/11/22 16:45      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.183 ± 0.111 (0.169)</b> <b>C:95% T:NA</b>	pCi/L	03/18/22 09:27	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>-0.150 ± 0.507 (1.19)</b> <b>C:69% T:82%</b>	pCi/L	03/04/22 12:18	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.183 ± 0.618 (1.36)</b>	pCi/L	03/21/22 15:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-14S**      **Lab ID: 92587081020**      Collected: 02/10/22 16:20      Received: 02/11/22 16:45      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	<b>-0.0197 ± 0.0632 (0.190)</b> <b>C:92% T:NA</b>	pCi/L	03/18/22 09:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.199 ± 0.449 (1.06)</b> <b>C:75% T:89%</b>	pCi/L	03/04/22 12:18	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.000 ± 0.512 (1.25)</b>	pCi/L	03/21/22 15:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: UP-DUP-2</b> <b>Lab ID: 92587081021</b> Collected: 02/10/22 00:00      Received: 02/11/22 16:45      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0406 ± 0.0923 (0.219)</b> <b>C:63% T:NA</b>	pCi/L	03/18/22 09:27	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>-0.195 ± 0.313 (0.784)</b> <b>C:91% T:90%</b>	pCi/L	03/04/22 18:26	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.0406 ± 0.405 (1.00)</b>	pCi/L	03/21/22 15:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWA-301</b> <b>Lab ID: 92587081022</b> Collected: 02/10/22 09:20      Received: 02/11/22 16:45      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0634 ± 0.0744 (0.148)</b> <b>C:89% T:NA</b>	pCi/L	03/18/22 09:27	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.205 ± 0.331 (0.718)</b> <b>C:68% T:87%</b>	pCi/L	03/08/22 15:20	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.268 ± 0.405 (0.866)</b>	pCi/L	03/21/22 15:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: YGWA-4I</b> <b>Lab ID: 92587081023</b> Collected: 02/11/22 10:40      Received: 02/11/22 16:45      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.501 ± 0.174 (0.154)</b> <b>C:90% T:NA</b>	pCi/L	03/18/22 09:27	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.495 ± 0.381 (0.744)</b> <b>C:69% T:88%</b>	pCi/L	03/08/22 15:20	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.996 ± 0.555 (0.898)</b>	pCi/L	03/21/22 15:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

**Sample: YGWA-5D**      **Lab ID: 92587081024**      Collected: 02/10/22 17:46      Received: 02/11/22 16:45      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	<b>2.47 ± 0.487 (0.124)</b> <b>C:87% T:NA</b>	pCi/L	03/18/22 10:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.856 ± 0.428 (0.737)</b> <b>C:69% T:93%</b>	pCi/L	03/08/22 15:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>3.33 ± 0.915 (0.861)</b>	pCi/L	03/21/22 15:36	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: UP-EB-2</b> <b>Lab ID: 92587081025</b> Collected: 02/10/22 11:40      Received: 02/11/22 16:45      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0353 ± 0.0661 (0.151)</b> <b>C:97% T:NA</b>	pCi/L	03/22/22 09:52	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.133 ± 0.314 (0.699)</b> <b>C:75% T:90%</b>	pCi/L	03/08/22 15:20	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.168 ± 0.380 (0.850)</b>	pCi/L	03/22/22 15:27	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: UP-FB-2</b> <b>Lab ID: 92587081026</b> Collected: 02/10/22 17:13      Received: 02/11/22 16:45      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0543 ± 0.0745 (0.158)</b> <b>C:98% T:NA</b>	pCi/L	03/22/22 09:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.148 ± 0.542 (1.23)</b> <b>C:72% T:89%</b>	pCi/L	03/08/22 18:43	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.202 ± 0.617 (1.39)</b>	pCi/L	03/22/22 15:27	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

QC Batch: 486614

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92587081018, 92587081019, 92587081020, 92587081021, 92587081022, 92587081023, 92587081024

METHOD BLANK: 2353261

Matrix: Water

Associated Lab Samples: 92587081018, 92587081019, 92587081020, 92587081021, 92587081022, 92587081023, 92587081024

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0547 ± 0.0680 (0.137) C:95% T:NA	pCi/L	03/18/22 09:04	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

QC Batch: 486659

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92587081021

METHOD BLANK: 2353495

Matrix: Water

Associated Lab Samples: 92587081021

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.115 ± 0.191 (0.414) C:101% T:93%	pCi/L	03/04/22 12:08	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

QC Batch: 486616

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92587081025, 92587081026

METHOD BLANK: 2353263

Matrix: Water

Associated Lab Samples: 92587081025, 92587081026

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00708 ± 0.0659 (0.175) C:97% T:NA	pCi/L	03/22/22 09:52	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL - RADIOCHEMISTRY**

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

QC Batch: 485944

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92587081001, 92587081002, 92587081003, 92587081004, 92587081005, 92587081006, 92587081007, 92587081008, 92587081009, 92587081010, 92587081011, 92587081012, 92587081013, 92587081014, 92587081015, 92587081016, 92587081017

METHOD BLANK: 2349863

Matrix: Water

Associated Lab Samples: 92587081001, 92587081002, 92587081003, 92587081004, 92587081005, 92587081006, 92587081007, 92587081008, 92587081009, 92587081010, 92587081011, 92587081012, 92587081013, 92587081014, 92587081015, 92587081016, 92587081017

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0634 ± 0.0745 (0.148) C:93% T:NA	pCi/L	03/14/22 08:22	

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**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

QC Batch:	486657	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	92587081001, 92587081002, 92587081003, 92587081004, 92587081005, 92587081006, 92587081007, 92587081008, 92587081009, 92587081010, 92587081011, 92587081012, 92587081013, 92587081014, 92587081015, 92587081016, 92587081017, 92587081018, 92587081019, 92587081020		

METHOD BLANK:	2353492	Matrix:	Water
Associated Lab Samples:	92587081001, 92587081002, 92587081003, 92587081004, 92587081005, 92587081006, 92587081007, 92587081008, 92587081009, 92587081010, 92587081011, 92587081012, 92587081013, 92587081014, 92587081015, 92587081016, 92587081017, 92587081018, 92587081019, 92587081020		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.110 ± 0.223 (0.492) C:84% T:94%	pCi/L	03/04/22 12:08	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

QC Batch: 486660

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92587081022, 92587081023, 92587081024, 92587081025, 92587081026

METHOD BLANK: 2353496

Matrix: Water

Associated Lab Samples: 92587081022, 92587081023, 92587081024, 92587081025, 92587081026

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0198 ± 0.286 (0.668) C:70% T:93%	pCi/L	03/08/22 15:19	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

---

### 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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES POOLED UPGRADIENT RAD  
Pace Project No.: 92587081

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92587081001	YGWA-39	EPA 9315	485944		
92587081002	YGWA-40	EPA 9315	485944		
92587081003	YGWA-47	EPA 9315	485944		
92587081004	GWA-2	EPA 9315	485944		
92587081005	UP-DUP-1	EPA 9315	485944		
92587081006	YGWA-1I	EPA 9315	485944		
92587081007	YGWA-1D	EPA 9315	485944		
92587081008	YGWA-2I	EPA 9315	485944		
92587081009	YGWA-3I	EPA 9315	485944		
92587081010	YGWA-3D	EPA 9315	485944		
92587081011	UP-EB-1	EPA 9315	485944		
92587081012	UP-FB-1	EPA 9315	485944		
92587081013	YGWA-17S	EPA 9315	485944		
92587081014	YGWA-18S	EPA 9315	485944		
92587081015	YGWA-18I	EPA 9315	485944		
92587081016	YGWA-20S	EPA 9315	485944		
92587081017	YGWA-21I	EPA 9315	485944		
92587081018	YGWA-5I	EPA 9315	486614		
92587081019	UP-DUP-3	EPA 9315	486614		
92587081020	YGWA-14S	EPA 9315	486614		
92587081021	UP-DUP-2	EPA 9315	486614		
92587081022	YGWA-30I	EPA 9315	486614		
92587081023	YGWA-4I	EPA 9315	486614		
92587081024	YGWA-5D	EPA 9315	486614		
92587081025	UP-EB-2	EPA 9315	486616		
92587081026	UP-FB-2	EPA 9315	486616		
92587081001	YGWA-39	EPA 9320	486657		
92587081002	YGWA-40	EPA 9320	486657		
92587081003	YGWA-47	EPA 9320	486657		
92587081004	GWA-2	EPA 9320	486657		
92587081005	UP-DUP-1	EPA 9320	486657		
92587081006	YGWA-1I	EPA 9320	486657		
92587081007	YGWA-1D	EPA 9320	486657		
92587081008	YGWA-2I	EPA 9320	486657		
92587081009	YGWA-3I	EPA 9320	486657		
92587081010	YGWA-3D	EPA 9320	486657		
92587081011	UP-EB-1	EPA 9320	486657		
92587081012	UP-FB-1	EPA 9320	486657		
92587081013	YGWA-17S	EPA 9320	486657		
92587081014	YGWA-18S	EPA 9320	486657		
92587081015	YGWA-18I	EPA 9320	486657		
92587081016	YGWA-20S	EPA 9320	486657		
92587081017	YGWA-21I	EPA 9320	486657		
92587081018	YGWA-5I	EPA 9320	486657		
92587081019	UP-DUP-3	EPA 9320	486657		
92587081020	YGWA-14S	EPA 9320	486657		
92587081021	UP-DUP-2	EPA 9320	486659		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: YATES POOLED UPGRADIENT RAD

Pace Project No.: 92587081

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92587081022	YGWA-30I	EPA 9320	486660		
92587081023	YGWA-4I	EPA 9320	486660		
92587081024	YGWA-5D	EPA 9320	486660		
92587081025	UP-EB-2	EPA 9320	486660		
92587081026	UP-FB-2	EPA 9320	486660		
92587081001	YGWA-39	Total Radium Calculation	490241		
92587081002	YGWA-40	Total Radium Calculation	490241		
92587081003	YGWA-47	Total Radium Calculation	490241		
92587081004	GWA-2	Total Radium Calculation	490241		
92587081005	UP-DUP-1	Total Radium Calculation	490241		
92587081006	YGWA-11	Total Radium Calculation	490241		
92587081007	YGWA-1D	Total Radium Calculation	490241		
92587081008	YGWA-2I	Total Radium Calculation	490241		
92587081009	YGWA-3I	Total Radium Calculation	490241		
92587081010	YGWA-3D	Total Radium Calculation	490241		
92587081011	UP-EB-1	Total Radium Calculation	490241		
92587081012	UP-FB-1	Total Radium Calculation	490241		
92587081013	YGWA-17S	Total Radium Calculation	490241		
92587081014	YGWA-18S	Total Radium Calculation	490241		
92587081015	YGWA-18I	Total Radium Calculation	490241		
92587081016	YGWA-20S	Total Radium Calculation	490241		
92587081017	YGWA-21I	Total Radium Calculation	490241		
92587081018	YGWA-5I	Total Radium Calculation	491834		
92587081019	UP-DUP-3	Total Radium Calculation	491834		
92587081020	YGWA-14S	Total Radium Calculation	491834		
92587081021	UP-DUP-2	Total Radium Calculation	491834		
92587081022	YGWA-30I	Total Radium Calculation	491834		
92587081023	YGWA-4I	Total Radium Calculation	491834		
92587081024	YGWA-5D	Total Radium Calculation	491834		
92587081025	UP-EB-2	Total Radium Calculation	492151		
92587081026	UP-FB-2	Total Radium Calculation	492151		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

*GA Power*

Project #: **WO# : 92587091**



Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *2/9/22*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: *083* Type of Ice:  Wet  Blue  None

Cooler Temp: *2.3* Correction Factor: Add/Subtract (°C) *±0.2*

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): *2.5*

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (Internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A -Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <i>W</i>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_

# 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: Arcadis Contacts

Section C Invoice Information: Attention: Southern Co. Company Name: Arcadis

Requested Due Date: Project Name: Plant Yates Pooled Upgradient Project Number: Pace Order: Pace Project Manager: Nicole D'Onofrio Pace Probe #: 10840

Regulatory Agency: State / Location: Georgia

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9, -, /) Sample IDs must be unique	MATRIX	CODE	COLLECTED		SAMPLE TEMP AT COLLECTION	Preservatives							Analyses Test	Requested Analytes Filtered (Y/N)	Residual Chlorine (Y/N)	pH			
				START DATE	END DATE		Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol					Other	App III/IV Metals	Cl, F, SO4
1	YQWA-39	Drinking Water	DW	2/12/22	2/12/22															
2	YQWA-40	Water	WT	2/12/22	2/12/22															
3	YQWA-41	Water	WT	2/12/22	2/12/22															
4	YQWA-42	Water	WT	2/12/22	2/12/22															
5	YQWA-43	Water	WT	2/12/22	2/12/22															
6	YQWA-44	Water	WT	2/12/22	2/12/22															
7	YQWA-45	Water	WT	2/12/22	2/12/22															
8	YQWA-46	Water	WT	2/12/22	2/12/22															
9	YQWA-47	Water	WT	2/12/22	2/12/22															
10	YQWA-48	Water	WT	2/12/22	2/12/22															
11	YQWA-49	Water	WT	2/12/22	2/12/22															
12	YQWA-50	Water	WT	2/12/22	2/12/22															

Relinquished by / Affiliation: [Signature] Arcadis Date: 2/12/22

Accepted by / Affiliation: [Signature] Arcadis Date: 2/19/22

Signature of Sampler: [Signature] Date Signed: 2/12/22





# CHAIN-OF-CUSTODY / Analytical Request Document

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

**Section A** Requested Client Information: Company: GA Power Address: Atlanta, GA

**Section B** Requested Project Information: Report To: SCS Contacts Copy To: Arcadis Contacts

**Section C** Invoice Information: Attention: Southern Co. Company Name: Arcadis

Regulatory Agency: Georgia State/Location: Georgia

Page:    of

Requested Due Date:    Fax:    Project Name: Plant Yates Pooled Upgradient Project Number:    Requested Analytical Method (Y/N):    State/Location: Georgia

Purchase Order #:    Plant Project Manager: Nicole D'Onofrio    Papan Order:    Papan Profile #: 10840

ITEM #	SAMPLE ID <small>One Character per box. (A-Z, 0-9 /, -) Samples must be unique</small>	MATRIX <small>Drinking Water Waste Water Surface Water Ground Water Air Other Tissue</small>	CODE <small>DN WT P SL SR WP AR OT TS</small>	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS <small>Unpreserved H2SO4 HNO3 HCl NaOH Na2S2O3 Methanol Other</small>	Preservatives			Analyses Test	Residual Chlorine (Y/N)	SAMPLER NAME AND SIGNATURE <small>PRINT Name of SAMPLER: SIGNATURE of SAMPLER:</small>	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLER COMMENTS					
				START	END			Y/N	Y/N	Y/N										Y/N	Y/N	Y/N	Y/N	Y/N
1	TCWVA-1		WT G				5	2	3	X	X	X	X	X	X	X	X	X						
2	GWA-2		WT G				5	2	3	X	X	X	X	X	X	X	X	X						
3	UP-DUP-1		WT G				5	2	3	X	X	X	X	X	X	X	X	X						
4	XGWA-1		WT G				5	2	3	X	X	X	X	X	X	X	X	X						
5	XGWA-5		WT G				5	2	3	X	X	X	X	X	X	X	X	X						
6	UP-DUP-3		WT G				5	2	3	X	X	X	X	X	X	X	X	X						
7	XGWA-5D		WT G				5	2	3	X	X	X	X	X	X	X	X	X						
8	XGWA-7S		WT G				5	2	3	X	X	X	X	X	X	X	X	X						
9	LEWA-1S		WT G				5	2	3	X	X	X	X	X	X	X	X	X						
10	XGWA-1S1		WT G				5	2	3	X	X	X	X	X	X	X	X	X						
11	XGWA-2S		WT G				5	2	3	X	X	X	X	X	X	X	X	X						
12	XGWA-2H		WT G				5	2	3	X	X	X	X	X	X	X	X	X						

**ADDITIONAL COMMENTS**  
 Arcadis Suite 300.0 (Cl, F, Sulfate)  
 App III Metals: Boron 60208, Ca 60100;  
 App III 60208, Zn, Ag, Ni, V  
 App IV Metals: Arsenic (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), TOXIC METALS (Tm)


**RELINQUISHED BY / AFFILIATION:** *Walt Kern Arcadis*    **DATE:** *2/12/22*    **TIME:** *0840*

**ACCEPTED BY / AFFILIATION:** *Walt Kern*    **DATE:** *2/19/22*    **TIME:** *0910*

**TEMP in C:**    **Received on ice (Y/N):**    **Labels Sealed Cooler (Y/N):**    **Samples Intact (Y/N):**

**SAMPLER NAME AND SIGNATURE:** *Walt Kern*    **DATE:** *2/12/22*    **TIME:** *0840*

**PRINT Name of SAMPLER:**    **SIGNATURE of SAMPLER:**    **DATE:** *2/19/22*    **TIME:** *0910*

	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project # **WO# : 92587091**

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

PM: NMG Due Date: 02/23/22  
 CLIENT: GA-GA Power

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 2/10/22  
EW

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 214 Type of Ice:  Wet  Blue  None

Cooler Temp: 3.4 Correction Factor: Add/Subtract (°C) 401

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.5

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  
 Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A -Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	.
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : \_\_\_\_\_ Of \_\_\_\_\_

<b>Section A</b> Required Client Information: Company: GA Power Address: Atlanta, GA Email To: Phone: Requested Due Date:	<b>Section B</b> Required Project Information: Report To: SCS Contacts Copy To: Arcadis Contacts Project Name: Plant Yates Pooled Upgrader Project Number: Purchase Order #:
<b>Section C</b> Invoice Information: Attention: Southern Co. Company Name: Address: Peco Quote: Peco Project Manager: Nicole D'Ono Peco Profile #: 10940	Regulatory Agency: State / Location: Georgia

ITEM #	SAMPLE ID <small>One Character per box. (A-Z, 0-9 / - ) Sample IDs must be unique</small>	MATRIX <small>Drinking Water Dishwater Wastewater Process Water Product Soil OI Wife Air Other Tissue</small>	CODE <small>DW WT WW P SL OL WP AR OT TS</small>	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	pH	
				START DATE TIME	END DATE TIME			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol				Other
1	YGWA-09			WT G			3											
2	YGWA-08			WT G			3											
3	YGWA-11			WT G	2/16/22	13:45	3											pH: 6.24
4	YGWA-1D			WT G	2/16/22	14:45	3											pH: 7.12
5	YGWA-2I			WT G	2/16/22	17:05	3											pH: 5.89
6	YGWA-3I			WT G	2/16/22	11:55	3											pH: 7.06
7	YGWA-3D			WT G	2/16/22	10:20	3											pH: 7.97
8	YGWA-1YS			WT G			3											
9	YBP-01PZ			WT G			3											
10	YGWA-3M			WT G			3											
11	YBP-EB-1			WT G			3											
12	YBP-EB-1			WT G			3											

App No Sula 300 D (Cl, F, Sulfate)  
 App III Metals: Section 6020B, Ca 6010D;  
 App VI Metals: Section 6020B, Ca 6010D;  
 App IV Metals 6020B: Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Zirconium (Zr), Ni V  
 7040A: Mercury (Hg)

RELINQUISHED BY / AFFILIATION: *M. J. Arcadis* DATE: 2/10/22 TIME: 14:35  
 ACCEPTED BY / AFFILIATION: *M. J. Arcadis* DATE: 2/10/22 TIME: 14:35

SAMPLER NAME AND SIGNATURE: *Kim Lapszynski*  
 PRINT Name of SAMPLER: KIM LAPSYNSKI  
 SIGNATURE of SAMPLER: *Kim Lapszynski* DATE Signed: 2/10/22

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

# CHAIN-OF-CUSTODY / Analytical Request Document

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

**Section A**

**Requested Client Information:**  
 Company: GA Power  
 Address: Atlanta, GA  
 Email To: [Blank]  
 Phone: [Blank]  
 Requested Due Date: [Blank]

**Requested Project Information:**  
 Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Purchase Order #: [Blank]  
 Project Name: Plant Yates Pooled Upgrakent  
 Project Number: [Blank]

**Invoice Information:**  
 Attention: Southern Co.  
 Company Name: [Blank]  
 Address: [Blank]  
 Page Order: [Blank]  
 Page Project Manager: Nicole D'Olivo  
 Page Profile #: 10840

**Section B**

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	UNPRESERVED	PRESERVATIVES							ANALYSES TEST	RESIDUAL CHLORINE (Y/N)		
			START	END				H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other			App III/IV Metals	CI, F, SO4
1	KQWA-09	WT-G				5												
2	KQWA-10	WT-G				5												
3	YGWA-11	WT-G				5												
4	KQWA-1B	WT-G				5												
5	YQWA-2	WT-G				5												
6	YQWA-2	WT-G				5												
7	YQWA-2	WT-G				5												
8	YQWA-2	WT-G				5												
9	UP-BUP-2	WT-G				5												
10	KQWA-20	WT-G				5												
11	UP-EB-1	WT-G	2/19/12	1306		5												
12	UP-FB-1	WT-G	2/19/12	1047		5												

**SAMPLE ID**  
 One Character per box  
 (A-Z, 0-9, /, -)  
 Sample IDs must be unique

**MATRIX**  
 Drinking Water  
 Wastewater  
 Wastewater  
 Process  
 Surface  
 Other  
 Tissue

**CODE**  
 DW  
 WT  
 WW  
 P  
 S  
 O  
 T

**REQUISITIONED BY / AFFILIATION**  
 Jessica Moore  
 Arcadis  
 DATE: 2/10/12 TIME: 1435

**ACCEPTED BY / AFFILIATION**  
 [Signature]  
 DATE: 2/10/12 TIME: 1700

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

**SAMPLER NAME AND SIGNATURE**  
 PRINT Name of SAMPLER: Jessica Moore  
 SIGNATURE of SAMPLER: [Signature]  
 DATE Signed: 2/19/12

# 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: SGS Contacts Copy To: Aracelis Contacts

**Section C** Invoicing Information: Attention: Southern Co. Company Name: \_\_\_\_\_

Plant Name: Plant Yates Pooled Upgradient Plant Project Manager: Nicole D'Olivo State/Location: Georgia

Requested Due Date: \_\_\_\_\_

Project Name: \_\_\_\_\_ Project Number: \_\_\_\_\_

Matrix Code: \_\_\_\_\_ Sample Type: (G=GRAB C=COMP)

Matrix:  Drinking Water  DW  WT  WWT  P  SL  OL  WP  AR  AR  OT  TS

Code: \_\_\_\_\_

One Character per box. (A-Z, 0-9 / - , -)

Sample test must be unique

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analyses Test	Y/N	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	pH:		
				START	END							Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3										Methanol	Other
1	YGWA-47	WT G									5									X	X	X	X					
2	YGWA-2	WT G									5									X	X	X	X					
3	UGDUP-1	WT G									5									X	X	X	X					
4	YGWA-41	WT G									5									X	X	X	X					
5	YGWA-51	WT G									5									X	X	X	X					
6	UGDUP-3	WT G									5									X	X	X	X					
7	YGWA-6D	WT G									5									X	X	X	X					
8	YGWA-17S	WT G									5									X	X	X	X					
9	UGWA-18S	WT G									5									X	X	X	X					
10	YGWA-181	WT G									5									X	X	X	X					
11	YGWA-20S	WT G									5									X	X	X	X					
12	YGWA-211	WT G									5									X	X	X	X					

Additional Comments: \_\_\_\_\_

App III Metals: Barium (Ba), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Strontium (Sr), Vanadium (V), Zinc (Zn)

App IV Metals: Antimony (Sb), Arsenic (As), Barium (Ba), Bismuth (Bi), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Strontium (Sr), Vanadium (V), Zinc (Zn)

App III Metals: Barium (Ba), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Strontium (Sr), Vanadium (V), Zinc (Zn)

App IV Metals: Antimony (Sb), Arsenic (As), Barium (Ba), Bismuth (Bi), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Strontium (Sr), Vanadium (V), Zinc (Zn)

Sampler Name and Signature: \_\_\_\_\_

Signature of Sampler: Jessica Ware

Date Signed: 2/9/12

Temp in C: \_\_\_\_\_

Received on Ice (Y/N): \_\_\_\_\_

Custody Sealed Cooler (Y/N): \_\_\_\_\_

Samples Intact (Y/N): \_\_\_\_\_



Document Name:  
**Sample Condition Upon Receipt (SCUR)**  
 Document No.:  
**F-CAR-CS-033-Rev.08**

Document Revised: November 15, 2021  
 Page 1 of 2  
 Issuing Authority:  
 Pace Carolinas Quality Office

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
 Upon Receipt

Client Name: GA Power

Project #: **WO# : 92587091**

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Due Date: **02/23/22**  
 CLIENT: **GA-GA Power**

Custody Seal Present?  Yes  No    Seals Intact?  Yes  No

Date/Initials Person Examining Contents: JPE 2/11/22

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  
 Yes  No  N/A

Thermometer:  IR Gun ID: 214    Type of Ice:  Wet  Blue  None

Cooler Temp: 4.1    Correction Factor: Add/Subtract (°C) +1.1

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.2

USDA Regulated Soil (  N/A, water sample)  
 Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  
 Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-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	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

**COMMENTS/SAMPLE DISCREPANCY**

Field Data Required?  Yes  No

Lot ID of split containers: \_\_\_\_\_

**CLIENT NOTIFICATION/RESOLUTION**

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_


# CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b>		<b>Section B</b>		<b>Section C</b>	
Required Client Information:		Required Project Information:		Invoice Information:	
Company: GA Power	Address: Atlanta, GA	Report To: SCS Contacts	Copy To: Arcadis Contacts	Attention: Southern Co.	Company Name:
Requested Due Date:		Purchase Order #:	Plant Yates Pooled Upgrader	Address:	
		Project Name:		Parcel Guide:	
		Project Number:		Parcel Project Manager:	Nicole D'Onofrio
				Parcel Profile #:	10840
				Regulatory Agency:	State/Location: Georgia

ITEM #	SAMPLE ID (A-Z, 0-9 / . - ) Sample IDs must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analyses Test	Requester Analysis Filtered (Y/N)	Residual Chlorine (Y/N)		
				DATE	TIME			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol				Other	App I/II Metals
1	YGWA-17	WT G	G				5												
2	GWV-2	WT G	G				5												
3	UP-DUP-1	WT G	G				5												
4	YGWA-41	WT G	G				5												
5	YGWA-51	WT G	G				5												
6	UP-DUP-3	WT G	G				5												
7	YGWA-5D	WT G	G				5												
8	YGWA-47G	WT G	G				5												
9	YGWA-48S	WT G	G				5												
10	YGWA-181	WT G	G				5												
11	YGWA-20S	WT G	G				5												
12	YGWA-841	WT G	G				5												

ADDITIONAL COMMENTS				RELINQUISHED BY / AFFILIATION				ACCEPTED BY / AFFILIATION				SAMPLE CONDITIONS			
Antons Suite 300.0 (Cl, F, Sulfate)				Arcadis				Arcadis				TEMP In C	Received on	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
App III Metals: Boron 6020B, Ca 6010D;				2/1/12				2/1/12							
App III 6020B: Zn, Ag, Ni, V				2/1/12				2/1/12							
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba),				2/1/12				2/1/12							
Benzene (Bz), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb),				2/1/12				2/1/12							
Lithium (Li), Molybdenum (Mo), Selenium (Se)				2/1/12				2/1/12							
Zinc, Mercury (Hg)				2/1/12				2/1/12							

<b>SAMPLER NAME AND SIGNATURE</b>		DATE SIGNED
PRINT Name of SAMPLER: <u>Mark Clark</u>		DATE SIGNED: <u>2/1/12</u>
SIGNATURE of SAMPLER: 		

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 3 of 15

<b>Section A</b> Requested Client Information:		<b>Section B</b> Requested Project Information:		<b>Section C</b> Invoice Information:	
Company: GA Power	Address: Atlanta, GA	Report To: SCS Contacts	Copy To: Arcadis Contacts	Agency: Southern Co.	Company Name:
Email To:	Phone:	Purchase Order #:	Project Name: Plant Yates Pooled Upgradient	Address:	State / Location: Georgia
Requested Due Date:	Fax:	Project Number:	Plant Yates Pooled Upgradient	Project Manager: Nicole Doko	Page Profile #: 10840

ITEM #	SAMPLE ID (4-2, 0-9 / -) Sample IDs must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analyses Test	Requested Analyte Filtered (Y/N)	Residual Chlorine (Y/N)	pH												
				START DATE	START TIME	END DATE	END TIME			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol					Other	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)						
1	YGWA-39	WT G	G						5	2	3							X	X	X	X											
2	YGWA-40	WT G	G						5	2	3							X	X	X	X											
3	YGWA-11	WT G	G						5	2	3							X	X	X	X											
4	YGWA-1D	WT G	G						5	2	3							X	X	X	X											
5	YGWA-2I	WT G	G						5	2	3							X	X	X	X											
6	YGWA-3I	WT G	G						5	2	3							X	X	X	X											
7	YGWA-3D	WT G	G						5	2	3							X	X	X	X											
8	YGWA-14S	WT G	G						5	2	3							X	X	X	X											
9	UP-DUP-2	WT G	G						5	2	3							X	X	X	X											
10	YGWA-30I	WT G	G						5	2	3							X	X	X	X											
11	UP-EB-1	WT G	G						5	2	3							X	X	X	X											
12	UP-FB-1	WT G	G						5	2	3							X	X	X	X											

App III Metals: Baton 6020B, Ca 6010D, Zn, Ag, Ni, V	App IV: Metals: Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Uranium (U)
Andros Sulfide 3003 (Cl, F, Sulfate)	
RELINQUISHED BY / AFFILIATION: Arcadis	DATE: 04/12/12
ACCEPTED BY / AFFILIATION: [Signature]	DATE: 04/12/12

SAMPLER NAME AND SIGNATURE: [Signature]		DATE: 04/12/12
PRINT Name of SAMPLER: [Signature]	DATE: 04/12/12	
SIGNATURE OF SAMPLER: [Signature]	DATE: 04/12/12	



**CHAIN-OF-CUSTODY / Analytical Request Document**  
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 4 of 5

**Section A Required Client Information:**  
 Company: GA Power  
 Address: Atlanta, GA  
 Email To: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Requested Due Date: \_\_\_\_\_

**Section B Required Project Information:**  
 Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Purchase Order #: \_\_\_\_\_  
 Project Name: Plant Vales Pooled Upgradient  
 Project Number: \_\_\_\_\_

**Section C Invoice Information:**  
 Attention: Southam Co.  
 Address: \_\_\_\_\_  
 Project Manager: Nicole D'Ono  
 PO# / PO# #: 10840  
 Requested Analysis Method (Y/N): \_\_\_\_\_

**Signatures:**  
 Representative Agent: \_\_\_\_\_  
 State / Location: \_\_\_\_\_

ITEM #	SAMPLE ID <i>One Character per box. (A-Z, 0-9, -, /) Sample IDs must be unique</i>	MATRIX Dinking Water Water Waste Water Product Substrate CI Wine Air Other Tissue	CODE DW WT WW P SL OL WP AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test	Y/N	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	SAL	LE CONDITIONS							
						START	END	DATE	TIME			DATE	TIME	Unpreserved	H2SO4	HNO3	HCl	NaOH											Na2S2O3	Methanol	Other				
1	YGWA-47										5																								
2	GWMA-2										5																								
3	UP-DUP-1										5																								
4	YGWA-4I										5																								
5	YGWA-5I										5																								
6	UP-DUP-3										5																								
7	YGWA-5D										5																								
8	YGWA-17S										5																								
9	UGWA-18S										5																								
10	YGWA-18I										5																								
11	YGWA-20S										5																								
12	YGWA-21I										5																								

**ADDITIONAL COMMENTS:**  
 Arcadis Slide 300.0 (Cl, F, Sulfide)  
 App III Metals: Boron 60208 Ca 60103:  
 App VII 60208 Zn, Ag, Ni, V  
 App IV Metals 60208: Arsenic (As), Barium (Ba),  
 Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb),  
 Lithium (Li), Molybdenum (Mo), Selenium (Se)  
 TDDA, Mercury (Hg)

**RELINQUISHED BY / AFFILIATION:** *Maxwell Carter* **DATE:** *02-11-15*

**ACCEPTED BY / AFFILIATION:** *Maxwell Carter* **DATE:** *02-11-15*

**SAMPLER NAME AND SIGNATURE:**  
 PRINT Name of SAMPLER: *Maxwell Carter*  
 SIGNATURE OF SAMPLER: *[Signature]* **DATE:** *02/10/15*

**TEMP in C:** \_\_\_\_\_

Received on \_\_\_\_\_ (Y/N)  
 Custody Sealed Cooler (Y/N)  
 Samples Intact (Y/N)

# CHAIN-OF-CUSTODY / Analytical Request Document

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

**Section A** Requested Client Information: Company: GA Power, Address: Atlanta, GA, Requested Due Date: \_\_\_\_\_

**Section B** Requested Project Information: Report To: SCS Controls, Copy To: Arcadis Controls, Project Name: Plant Yates Pooled Upgradient, Project Number: \_\_\_\_\_

**Section C** Invoice Information: Advertiser: Southern Co., Company Name: \_\_\_\_\_, Address: \_\_\_\_\_, Pass Project Manager: Nicole DiIuso, Pass Profile #: 10840, Requested Analyte Filtered (Y/N): \_\_\_\_\_

Page: 5 of 5

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analytes Test	Requester Analyte Filtered (Y/N)	Residual Chlorine (Y/N)		
			START DATE	END DATE			ACCEPTED BY / AFFILIATION		DATE	TIME	RECEIVED BY / AFFILIATION		DATE	TIME							
							WT	G													
1	UP-EB-2					5	2														
2	UP-FB-2					5	2														
3						5	2														
4						5	2														
5						5	2														
6						5	2														
7						5	2														
8						5	2														
9						5	2														
10						5	2														
11						5	2														
12						5	2														

**SAMPLER NAME AND SIGNATURE:** [Signature]  
**PRINT Name of SAMPLER:** [Name]  
**SIGNATURE of SAMPLER:** [Signature]      **DATE Signed:** [Date]

**ADDITIONAL COMMENTS:**  
 App IV Metals 60208: Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se), Thallium (Tl), Uranium (U), Vanadium (V)  
 App III Metals: Zn, Ag, Ni, V  
 App I Metals 300.0 (Cl, F, sulfate)  
 App IV Metals 60208: Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)  
 7040A: Mercury (Hg)

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 4 of 4

**Section A**

Required Client Information:

Company: GA Power  
 Address: Atlanta, GA  
 Email To:  
 Phone:  
 Requested Date Date:  
 Fax:

**Section B**

Required Project Information:

Report To: SCS Contacts  
 Copy To: Arcadis Contacts  
 Project Name: Plant Yates Pooled Upgradient  
 Project Number:  
 Purchase Order #:  
 Plant Yates Pooled Upgradient

**Section C**

Invoice Information:

Attention: Southern Co.  
 Company Name:  
 Address:  
 Pico Office:  
 Pico Project Manager: Nicole D'Osio  
 Pico Profile #: 10840

Regulatory Agency:  
 State/Location:  
 Georgia

ITEM #	DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	COLLECTED		PRESERVATIVES	ANALYSES TEST	DATE	TIME	DATE	TIME	SAMPLER NAME AND SIGNATURE	DATE SIGNED	TEMP IN C	RECEIVED OFFICE (Y/N)	CUSTODY SEALED COOLER (Y/N)	SAMPLES INTACT (Y/N)	
						START	END													
1	TR-EB-2																			
2	UP-FB-2		2/24/13											Michael Gordon	2/11/13					
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

**RELINQUISHED BY / AFFILIATION:** Michael Gordon Arcadis  
**DATE:** 2/11/13  
**TIME:** 1:45 PM

**ACCEPTED BY / AFFILIATION:** [Signature]  
**DATE:** 2/11/13  
**TIME:** 1:45 PM

**PRINT NAME OF SAMPLER:** Michael Gordon  
**SIGNATURE OF SAMPLER:** [Signature]  
**DATE SIGNED:** 2/11/13

# Quality Control Sample Performance Assessment



Test: Ra-226  
 Analyst: JC2  
 Date: 2/27/2022  
 Worklist: 65255  
 Matrix: DW

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Method Blank Assessment	
MB Sample ID	2349863
MB Concentration:	0.063
MB Counting Uncertainty:	0.074
MB MDC:	0.148
MB Numerical Performance Indicator:	1.68
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment		LCSD (Y or N)?	LCSD65255	LCSD65255
Count Date:	3/14/2022			
Spike I.D.:	19-033		19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.029		24.029	
Volume Used (mL):	0.10		0.10	
Aliquot Volume (L, g, F):	0.508		0.500	
Target Conc. (pCi/L, g, F):	4.727		4.804	
Uncertainty (Calculated):	0.057		0.058	
Result (pCi/L, g, F):	4.451		4.451	
LCSD/LCSD Counting Uncertainty (pCi/L, g, F):	-1.22		1.71	
Numerical Performance Indicator:	94.16%		108.86%	
Percent Recovery:	N/A		N/A	
Status vs Numerical Indicator:	Pass		Pass	
Status vs Recovery:	Pass		Pass	
Upper % Recovery Limits:	125%		125%	
Lower % Recovery Limits:	75%		75%	

Duplicate Sample Assessment		Sample I.D.:	LCSD65255	92587081001
Duplicate Sample I.D.:	LCSD65255	92587081001DUP		
Sample Result (pCi/L, g, F):	4.451	0.621		
Sample Result Counting Uncertainty (pCi/L, g, F):	0.439	0.171		
Sample Duplicate Result (pCi/L, g, F):	5.230	0.589		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.486	0.174		
Are sample and/or duplicate results below RL?	NO	See Below #		
Duplicate Numerical Performance Indicator:	-2.332	0.257		
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	14.47%	5.30%		
Duplicate Status vs Numerical Indicator:	Pass	N/A		
Duplicate Status vs RPD:	Pass	Pass		
% RPD Limit:	25%	25%		

Sample Matrix Spike Control Assessment		Sample Collection Date:	MS/MSD 1	MS/MSD 2
Sample Matrix Spike Control Assessment				
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):	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):	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:			
Sample Result Counting Uncertainty (pCi/L, g, F):	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):			
MS Numerical Performance Indicator:	MS Numerical Performance Indicator:			
MS Percent Recovery:	MS Percent Recovery:			
MSD Percent Recovery:	MSD Percent Recovery:			
MS Status vs Numerical Indicator:	MS Status vs Numerical Indicator:			
MSD Status vs Numerical Indicator:	MSD Status vs Numerical Indicator:			
MS Status vs Recovery:	MSD Status vs Recovery:			
MSD Status vs Recovery:	MS/MSD Upper % Recovery Limits:			
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.:
Matrix Spike/Matrix Spike Duplicate Sample Assessment				
Sample I.D.:	Sample MS I.D.:			
Sample MS I.D.:	Sample MSD I.D.:			
Matrix Spike 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):	Duplicate Numerical Performance Indicator:			
(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:	% RPD Limit:			

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

*See Matrix Spike*

*Jan 31/4/22*

# Quality Control Sample Performance Assessment



Test: Ra-226  
Analyst: JJC2  
Date: 2/27/2022  
Worklist: 65254  
Matrix: DW

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Method Blank Assessment	
MB Sample ID	2349823
MB Concentration:	0.023
MB Counting Uncertainty:	0.071
MB MDC:	0.175
MB Numerical Performance Indicator:	0.65
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCSD (Y or N)?	Y
Count Date:	3/11/2022	LCSD65254	LCSD65254
Spike I.D.:	19-033	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.029	24.029	24.029
Volume Used (mL):	0.10	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.503	0.503
Target Conc. (pCi/L, g, F):	4.753	4.772	4.772
Uncertainty (Calculated):	0.057	0.057	0.057
Result (pCi/L, g, F):	5.401	4.767	4.767
LCSD Counting Uncertainty (pCi/L, g, F):	2.54	-0.02	-0.02
Numerical Performance Indicator:	113.63%	99.89%	99.89%
Percent Recovery:	N/A	N/A	N/A
Status vs Numerical Indicator:	Pass	Pass	Pass
Status vs Recovery:	125%	125%	125%
Upper % Recovery Limits:	75%	75%	75%
Lower % Recovery Limits:	75%	75%	75%

Duplicate Sample Assessment		Sample I.D.:	92587078001
Duplicate Sample I.D.:	LCSD65254	92587078001DUP	
Sample Result (pCi/L, g, F):	5.401	0.273	0.136
Sample Result Counting Uncertainty (pCi/L, g, F):	0.497	0.177	0.177
Sample Duplicate Result (pCi/L, g, F):	4.767	0.106	0.106
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.465	See Below ##	See Below ##
Are sample and/or duplicate results below RL?	NO	1.824	42.81%
Duplicate Numerical Performance Indicator:	1.824	1.094	1.094
(Based on the LCSD Percent Recoveries) Duplicate RPD:	12.87%	N/A	N/A
Duplicate Status vs Numerical Indicator:	Pass	Fail**	Fail**
Duplicate Status vs RPD:	25%	25%	25%
% RPD Limit:	25%	25%	25%

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.:	Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	MS Target Conc. (pCi/L, g, F):		
Spike Volume Used in MS (mL):	MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):	MSD Aliquot (L, g, F):		
MS Aliquot (L, g, F):	MSD Target Conc. (pCi/L, g, F):		
MSD Aliquot (L, g, F):	MSD Spike Uncertainty (calculated):		
MSD Target Conc. (pCi/L, g, F):	MSD Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):	Sample Result:		
Sample Result:	Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:	Sample Matrix Spike Result:		
Matrix Spike Counting Uncertainty (pCi/L, g, F):	Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	MS Numerical Performance Indicator:		
MS Numerical Performance Indicator:	MS Percent Recovery:		
MS Percent Recovery:	MSD Percent Recovery:		
MSD 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:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		Sample I.D.:	92587078001
Sample I.D.:	Sample MS I.D.:	92587078001DUP	
Sample MSD I.D.:	Sample MSD I.D.:		
Sample Matrix Spike Result:	Sample Matrix Spike Result:		
Matrix Spike Counting Uncertainty (pCi/L, g, F):	Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:		
Sample Matrix Spike Duplicate Result:	Duplicate Numerical Performance Indicator:		
Duplicate Numerical Performance Indicator:	(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:		

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

Comments:

~~Batch must be stripped due to unacceptable precision~~

N/A  
UAM 3/14/22

UAM 3/14/22

UAM 3/14/22

# Appendix B

## Field Sampling Reports

# **August 2021 Event**

<b>Client:</b>		Georgia Power			
<b>Project Location:</b>		AP-1			
<b>Date:</b>		8/16/2021			
<b>Sampler:</b>		Jake Swanson			
<b>Equipment:</b>		water probe			
Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YGWA-47	8/16/2021	13:16:00	34.68	59.19	--
YGWC-52	8/16/2021	13:24:00	38.43	70.79	--
YGWC-44	8/16/2021	13:35:00	49.94	89.85	--
PZ-09S	8/16/2021	13:53:00	17.92	57.00	--
PZ-09I	8/16/2021	13:59:00	18.18	77.00	--
YGWC-45	8/16/2021	14:01:00	22.36	73.80	--
PZ-10I	8/16/2021	14:09:00	13.81	46.50	--
PZ-10S	8/16/2021	14:18:00	7.39	16.30	--
YGWC-46A	8/16/2021	14:39:00	38.4	79.22	--
PZ-53	8/16/2021	14:43:00	38.26	72.00	--



## August 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Mark Chest / Jake Swanson / Ash Willis

### Instrument Calibration

Date: 8/19/2021 Time: 07:30

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 532229 (Mark Chest)	SmarTROLL SN 519163 (Ash Willis)
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

Date: 8/19/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 532229 (Mark Chest)	SmarTROLL SN 519163 (Ash Willis)
DO	% saturation	100	--	100	100
Conductivity	us/cm	8000	--	8000	8000
pH	S.U.	4.00	--	4.00	4.00
pH	S.U.	7.00	--	7.00	7.00
pH	S.U.	10.00	--	10.00	10.00
ORP	mV	232.0	--	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219
0.0	NTU	0.00	--	0.00
10.0	NTU	10.00	--	10.00

#### Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

-- calibration not conducted

## August 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Mark Chest / Jake Swanson / Ash Willis

### Instrument Calibration

Date: 8/20/21 Time: 07:45

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 532229 (Mark Chest)	SmarTROLL SN 509072 (Ash Willis)
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

Date: 8/20/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 532229 (Mark Chest)	SmarTROLL SN 509072 (Ash Willis)
DO	% saturation	100	--	100	100
Conductivity	us/cm	8000	--	8000	8000
pH	S.U.	4.00	--	4.00	4.00
pH	S.U.	7.00	--	7.00	7.00
pH	S.U.	10.00	--	10.00	10.00
ORP	mV	232.0	--	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

#### Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

-- calibration not conducted

## August 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Mark Chest/Jake Swanson

### Instrument Calibration

Date: 8/27/21 Time: 08:00

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 532229 (Mark Chest)
DO	% saturation	100	100	100
Conductivity	us/cm	8000	8000	8000
pH	S.U.	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013
0.0	NTU	0.00	0.00
10.0	NTU	10.00	10.00

#### Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

\*half day of field work

# Groundwater Sampling Form

<b>Project Number</b>	30052923	<b>Well ID</b>	YGWC-46A	<b>Date</b>	08/27/2021
<b>Project Location</b>	AP-1	<b>Weather(°F)</b>	It is Mostly Cloudy. The wind is blowing E at 6.9 mph. 85F		
<b>Measuring Pt. Description</b>	Top of Inner Casing	<b>Screen Setting (ft-bmp)</b>	69.22	<b>Casing Diameter (in)</b>	2
<b>Static Water Level (ft-bmp)</b>	37.57	<b>Total Depth (ft-bmp)</b>	79.22	<b>Water Column(ft)</b>	41.65
<b>MP Elevation</b>	733.04	<b>Pump Intake (ft-bmp)</b>		<b>Purge Method</b>	Low-Flow
<b>Sample Time</b>	13:01	<b>Well Volumes Purged</b>	0.22	<b>Sample ID</b>	YGWC-46A
<b>Purge Start</b>	12:31	<b>Gallons Purged</b>	1.52	<b>Replicate/ Code No.</b>	AP-1-DUP-1
<b>Purge End</b>	12:56			<b>Color</b>	Clear

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:31:25	00:00	250	37.57	7.11	1145.02	0.64	1.09	23.1	-92.71
12:36:25	05:00	250	42.1	6.94	1171.73	32.09	0.11	21.1	-87.9
12:41:25	10:00	250	43.48	6.75	1163.94	0.68	0.15	21.4	-58.95
12:46:25	15:00	200	44.2	6.75	1151.78	0.12	0.17	21.8	-51.32
12:51:25	20:00	200	44.14	6.75	1162.62	0.86	0.22	23.3	-45.3
12:56:25	25:00	200	44.12	6.83	1146.61	0.36	0.18	23.8	-43.88

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	2	None
RAD Chem	1L Plastic	4	HNO3
Anions	250 mL Plastic	2	None
Metals	250 mL Plastic	2	HNO3

**Comments:**

**Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot      1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47  
 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

**Well Information**

Well Location: _____	Well Locked at Arrival: _____
Condition of Well: _____	Well Locked at Departure: _____
Well Completion: NA _____	Key Number To Well: NA _____

ft-bmp = feet below measuring point  
 in = inches  
 ft = feet  
 mL/min = milliliters per minute  
 mS/cm = milliSiemens per centimeter  
 NTU = Nephelometric Turbidity Unit  
 mg/L = milligrams per liter  
 µS/cm = microSiemens per centimeter

# Groundwater Sampling Form



**Project Number** 30053438      **Well ID** YGWA-47      **Date** 08/19/2021

**Project Location** AP-1      **Weather(°F)** It is Clear. The wind is blowing undefined at 0.0 mph.

**Measuring Pt. Description** Top of Inner Casing      **Screen Setting (ft-bmp)** 49.4      **Casing Diameter (in)** 2      **Well Casing Material** PVC

**Static Water Level (ft-bmp)** 34.72      **Total Depth (ft-bmp)** 59.19      **Water Column(ft)** 24.47      **Gallons in Well** 3.98

**MP Elevation** 758.22      **Pump Intake (ft-bmp)** 54      **Purge Method** Low-Flow      **Sample Method** Low-Flow

**Sample Time** 10:05      **Well Volumes Purged** 0.17      **Sample ID** YGWA-47      **Sampled by** Ash Willis

**Purge Start** 09:33      **Gallons Purged** 0.69      **Replicate/ Code No.**      **Color** Clear

**Purge End** 10:03

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
09:33:02	00:00	100	35.02	5.85	219.44	2.25	8.08	22	181.17
09:38:02	05:00	100	35.02	5.51	208.8	0.99	6.41	21.3	165.83
09:43:02	10:00	100	35.35	5.48	203.5	0.94	4.92	20.6	155.38
09:48:02	15:00	75	35.23	5.48	202.03	0.72	4.9	20.2	150.82
09:53:02	20:00	75	35.25	5.49	202.51	0.69	5.19	20.8	147.87
09:58:02	25:00	75	35.25	5.51	206.63	0.90	5.15	21.1	143.89
10:03:02	30:00	75	35.25	5.5	202.27	0.83	4.85	21.1	141.11

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	500 mL Plastic	1	HNO3
Anions	250 mL Plastic	1	None
TDS	500 mL Plastic	1	None

**Comments:**

**Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot      1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47  
 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

**Well Information**

Well Location: \_\_\_\_\_  
 Condition of Well: \_\_\_\_\_  
 Well Completion: NA \_\_\_\_\_

Well Locked at Arrival: \_\_\_\_\_  
 Well Locked at Departure: \_\_\_\_\_  
 Key Number To Well: NA \_\_\_\_\_

ft-bmp = feet below measuring point  
 in = inches  
 ft = feet  
 mL/min = milliliters per minute  
 mS/cm = milliSiemens per centimeter  
 NTU = Nephelometric Turbidity Unit  
 mg/L = milligrams per liter  
 µS/cm = microSiemens per centimete

# Groundwater Sampling Form



Project Number	30053438	Well ID	YGWC-45	Date	08/20/2021
Project Location	AP-1	Weather(°F)	Cloudy		
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	63.8	Casing Diameter (in)	2
Static Water Level (ft-bmp)	20.7	Total Depth (ft-bmp)	73.8	Water Column(ft)	53.1
MP Elevation	719.36	Pump Intake (ft-bmp)	69	Purge Method	Low-Flow
Sample Time	09:50	Well Volumes Purged	0.11	Sample ID	YGWC-45
Purge Start	09:09	Gallons Purged	0.92	Replicate/ Code No.	AP-1-FB-1
Purge End	09:44			Color	Clear

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
09:09:56	00:00	100	22.5	6.64	594.1	3.28	7.36	23.4	86.46
09:14:56	05:00	100	22.5	6.46	594.23	1.4	7.43	23.5	-17.67
09:19:56	10:00	100	22.5	6.3	592.9	1.26	7.69	23.5	-58.84
09:24:56	15:00	100	22.5	6.19	591.76	0.76	7.62	23.4	-83.12
09:29:56	20:00	100	22.5	6.14	590.65	0.76	7.5	23.5	-89.64
09:34:56	25:00	100	22.5	6.13	590.61	0.68	6.84	23.5	-88.24
09:39:56	30:00	100	22.5	6.12	589.97	0.62	6.69	23.5	-88.09
09:44:56	35:00	100	22.5	6.13	589.35	0.62	6.71	23.5	-80.52

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	4	HNO3
Metals	250 mL Plastic	2	HNO3
Anions	250 mL Plastic	2	None
TDS	500 mL Plastic	2	None

**Comments:**

**Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot      1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47  
 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

**Well Information**

Well Location: \_\_\_\_\_  
 Condition of Well: \_\_\_\_\_  
 Well Completion: NA \_\_\_\_\_

Well Locked at Arrival: \_\_\_\_\_  
 Well Locked at Departure: \_\_\_\_\_  
 Key Number To Well: NA \_\_\_\_\_

ft-bmp = feet below measuring point  
 in = inches  
 ft = feet  
 mL/min = milliliters per minute  
 mS/cm = milliSiemens per centimeter  
 NTU = Nephelometric Turbidity Unit  
 mg/L = milligrams per liter  
 µS/cm = microSiemens per centimete

# Groundwater Sampling Form

Project Number	30053438	Well ID	YGWC-44	Date	08/19/2021
Project Location	AP-1	Weather(°F)	Cloudy		
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	79.95	Casing Diameter (in)	2
Static Water Level (ft-bmp)	49.99	Total Depth (ft-bmp)	89.85	Water Column(ft)	39.86
MP Elevation	758.35	Pump Intake (ft-bmp)	83	Purge Method	Low-Flow
Sample Time	13:22	Well Volumes Purged	0.15	Sample ID	YGWC-44
Purge Start	12:07	Gallons Purged	0.99	Replicate/ Code No.	
Purge End	13:17			Color	Clear

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:07:16	00:00	50	50.33	7.26	467.89	1.27	7.57	38.9	69.94
12:12:16	05:00	50	50.4	7.35	471.93	1.08	7.66	39	74.71
12:17:16	10:00	50	50.4	7.29	480.06	1.05	8.28	38.7	67.45
12:22:16	15:00	50	50.43	6.72	468.96	1.12	8.2	38.9	-65.41
12:27:16	20:00	50	50.45	6.54	465.13	1.04	7.75	39.3	-86.22
12:32:16	25:00	50	50.45	6.3	461.38	1.44	6.96	39.6	-105.64
12:37:16	30:00	50	50.45	6.15	460.44	1.67	5.9	40.1	-111.1
12:42:16	35:00	50	50.45	6.04	461.18	1.93	4.32	39.3	-109.59
12:47:16	40:00	50	50.45	5.94	462.15	2.41	4.16	40.2	-105.76
12:52:16	45:00	50	50.45	5.88	462.88	1.13	3.93	40.4	-102.35
12:57:16	50:00	50	50.45	5.82	463.04	2.59	3.65	40.4	-93.52
13:02:16	55:00	50	50.45	5.78	462.42	1.31	3.52	40.5	-84.4
13:07:16	00:00	50	50.45	5.78	463.72	1.47	3.16	40.9	-80.22
13:12:16	05:00	50	50.45	5.77	464.89	2.55	2.86	41.3	-80.79
13:17:16	10:00	50	50.45	5.75	465.73	1.87	3.01	41.4	-76.86

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	500 mL Plastic	1	HNO3
Anions	250 mL Plastic	1	None
TDS	500 mL Plastic	1	None

**Comments:**

**Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot  
 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47  
 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

**Well Information**

Well Location: \_\_\_\_\_ Well Locked at Arrival: \_\_\_\_\_  
 Condition of Well: \_\_\_\_\_ Well Locked at Departure: \_\_\_\_\_  
 Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point  
 in = inches  
 ft = feet  
 mL/min = milliliters per minute  
 mS/cm = milliSiemens per centimeter  
 NTU = Nephelometric Turbidity Unit  
 mg/L = milligrams per liter  
 µS/cm = microSiemens per centimeter

# Groundwater Sampling Form



<b>Project Number</b>	30053438	<b>Well ID</b>	YGWC-52	<b>Date</b>	08/20/2021
<b>Project Location</b>	AP-1	<b>Weather(°F)</b>	77.7 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.		
<b>Measuring Pt. Description</b>	Top of Inner Casing	<b>Screen Setting (ft-bmp)</b>	60.79	<b>Casing Diameter (in)</b>	2
<b>Static Water Level (ft-bmp)</b>	38.38	<b>Total Depth (ft-bmp)</b>	70.79	<b>Water Column(ft)</b>	32.41
<b>MP Elevation</b>	755.86	<b>Pump Intake (ft-bmp)</b>	65	<b>Purge Method</b>	Low-Flow
<b>Sample Time</b>	14:15	<b>Well Volumes Purged</b>	0.07	<b>Sample ID</b>	YGWC-52
<b>Purge Start</b>	12:39	<b>Gallons Purged</b>	0.36	<b>Replicate/ Code No.</b>	
<b>Purge End</b>	14:10			<b>Color</b>	Clear

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:39:49	00:00	150	38.38	6.83	445.96	12.73	1.87	21.8	21.47
12:44:49	05:00	150	38.38	6.81	435.23	8.73	1.58	22.1	24.23
12:49:49	10:00	150	38.38	5.87	429.96	7.02	1.58	22.1	122.33
12:54:49	15:00	150	38.38	6.81	425.88	6.55	1.58	21.6	24.09
12:59:49	20:00	150	38.38	6.46	423.88	6.25	1.57	21.5	58.15
13:04:49	25:00	150	38.38	6.71	421.43	6.00	1.62	21.3	33.91
13:09:49	30:00	150	38.38	6.75	421.71	5.76	1.61	21.2	28.54
13:14:49	35:00	150	38.38	5.52	421.14	4.05	1.67	21.2	35.51
13:19:49	40:00	150	38.38	5.73	419.32	3.61	1.68	21.2	132.3
13:24:49	45:00	150	38.38	5.47	420.18	4.23	1.68	21	159.67
13:29:49	50:00	150	38.38	5.51	419.73	4.50	1.69	21	160.37
13:34:49	55:00	150	38.38	6.66	420.63	3.49	1.74	21	41.49
13:39:49	00:00	150	38.38	5.55	420.47	4.11	1.69	21.6	24.72
13:44:49	05:00	150	38.38	6.13	419.22	3.06	1.77	21.3	145.81
13:49:49	10:00	150	38.38	5.52	419.98	2.93	1.72	21.6	165.07
13:54:49	15:00	150	38.38	5.61	419.82	2.55	1.69	21.4	147.63
13:59:49	20:00	150	38.38	6.74	419.61	2.44	1.69	21.8	32.01
14:04:49	25:00	150	39.07	6.74	419.95	2.43	1.69	21.4	28.28
14:09:49	30:00	150	39.12	6.71	419.95	2.75	1.68	21.4	58.59

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3

**Comments:**

**Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot      1 = 0.04   1.5 = 0.09   2.5 = 0.26   3.5 = 0.50   6 = 1.47  
 1.25 = 0.06   2 = 0.16   3 = 0.37   4 = 0.65

**Well Information**

Well Location: \_\_\_\_\_ Well Locked at Arrival: \_\_\_\_\_  
 Condition of Well: \_\_\_\_\_ Well Locked at Departure: \_\_\_\_\_  
 Well Completion: NA Key Number To Well: NA

- ft-bmp = feet below measuring point
- in = inches
- ft = feet
- mL/min = milliliters per minute
- mS/cm = milliSiemens per centimeter
- NTU = Nephelometric Turbidity Unit
- mg/L = milligrams per liter
- µS/cm = microSiemens per centimete



# Groundwater Gauging Well Inspection Report



<b>Project Location:</b> AP-1			Yes	No	N/A
<b>Permit Number:</b>					
<b>Well ID:</b> YGWC-44					
<b>Person Gauging:</b> Jake Swanson					
<b>Date:</b> 8/16/2021					
<b>Time:</b> 13:35:00					
1 Location Identification:					
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing:					
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad					
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the pad surface clean (not covered with sediment or debris)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing					
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the depth of the well consistent with the original well log?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5 Sampling: Groundwater Wells Only:					
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the well require redevelopment (low flow, turbid)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6 Based on your professional judgement, is the well construction / location:					
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 Corrective actions as needed, by date: Trim grass around well pad					
8 Date by when corrective actions are needed:					

# Groundwater Gauging Well Inspection Report



<b>Project Location:</b> AP-1			Yes	No	N/A
<b>Permit Number:</b>					
<b>Well ID:</b> PZ-09S					
<b>Person Gauging:</b> Jake Swanson					
<b>Date:</b> 8/16/2021					
<b>Time:</b> 13:53:00					
1 Location Identification:					
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing:					
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad					
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the pad surface clean (not covered with sediment or debris)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing					
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the depth of the well consistent with the original well log?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5 Sampling: Groundwater Wells Only:					
a	Does well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c	Does the well require redevelopment (low flow, turbid)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6 Based on your professional judgement, is the well construction / location:					
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 Corrective actions as needed, by date:					
Trim grass around well pad					
8 Date by when corrective actions are needed:					

# Groundwater Gauging Well Inspection Report



<b>Project Location:</b> AP-1			Yes	No	N/A
<b>Permit Number:</b>					
<b>Well ID:</b> YGWA-47					
<b>Person Gauging:</b> Jake Swanson					
<b>Date:</b> 8/16/2021					
<b>Time:</b> 13:16:00					
1 Location Identification:					
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing:					
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad					
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the pad surface clean (not covered with sediment or debris)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing					
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the depth of the well consistent with the original well log?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5 Sampling: Groundwater Wells Only:					
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the well require redevelopment (low flow, turbid)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6 Based on your professional judgement, is the well construction / location:					
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 Corrective actions as needed, by date: Trim grass around well pad					
8 Date by when corrective actions are needed:					

# Groundwater Gauging Well Inspection Report



<b>Project Location:</b> AP-1			Yes	No	N/A
<b>Permit Number:</b>					
<b>Well ID:</b> PZ-09I					
<b>Person Gauging:</b> Jake Swanson					
<b>Date:</b> 8/16/2021					
<b>Time:</b> 13:59:00					
1 Location Identification:					
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing:					
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad					
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the pad surface clean (not covered with sediment or debris)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing					
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the depth of the well consistent with the original well log?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5 Sampling: Groundwater Wells Only:					
a	Does well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c	Does the well require redevelopment (low flow, turbid)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6 Based on your professional judgement, is the well construction / location:					
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 Corrective actions as needed, by date: Trim grass around well pad					
8 Date by when corrective actions are needed:					

# Groundwater Gauging Well Inspection Report



<b>Project Location:</b> AP-1			Yes	No	N/A
<b>Permit Number:</b>					
<b>Well ID:</b> YGWC-45					
<b>Person Gauging:</b> Jake Swanson					
<b>Date:</b> 8/16/2021					
<b>Time:</b> 14:01:00					
1 Location Identification:					
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing:					
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad					
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the pad surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing					
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the depth of the well consistent with the original well log?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5 Sampling: Groundwater Wells Only:					
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the well require redevelopment (low flow, turbid)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6 Based on your professional judgement, is the well construction / location:					
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 Corrective actions as needed, by date: Trim grass around well pad					
8 Date by when corrective actions are needed:					

# Groundwater Gauging Well Inspection Report



<b>Project Location:</b> AP-1			Yes	No	N/A
<b>Permit Number:</b>					
<b>Well ID:</b> PZ-101					
<b>Person Gauging:</b> Jake Swanson					
<b>Date:</b> 8/16/2021					
<b>Time:</b> 14:09:00					
1 Location Identification:					
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing:					
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad					
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the pad surface clean (not covered with sediment or debris)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing					
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the depth of the well consistent with the original well log?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5 Sampling: Groundwater Wells Only:					
a	Does well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c	Does the well require redevelopment (low flow, turbid)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6 Based on your professional judgement, is the well construction / location:					
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 Corrective actions as needed, by date: Trim grass around well pad					
8 Date by when corrective actions are needed:					

# Groundwater Gauging Well Inspection Report



<b>Project Location:</b> AP-1			Yes	No	N/A
<b>Permit Number:</b>					
<b>Well ID:</b> PZ-10S					
<b>Person Gauging:</b> Jake Swanson					
<b>Date:</b> 8/16/2021					
<b>Time:</b> 14:18:00					
1 Location Identification:					
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing:					
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad					
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the pad surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing					
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the depth of the well consistent with the original well log?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5 Sampling: Groundwater Wells Only:					
a	Does well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c	Does the well require redevelopment (low flow, turbid)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6 Based on your professional judgement, is the well construction / location:					
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 Corrective actions as needed, by date:					
8 Date by when corrective actions are needed:					

# Groundwater Gauging Well Inspection Report



<b>Project Location:</b> AP-1			Yes	No	N/A
<b>Permit Number:</b>					
<b>Well ID:</b> YGWC-46A					
<b>Person Gauging:</b> Jake Swanson					
<b>Date:</b> 8/16/2021					
<b>Time:</b> 14:39:00					
1 Location Identification:					
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing:					
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad					
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the pad surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing					
a	Does the cap prevent entry of foreign material into the well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the depth of the well consistent with the original well log?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5 Sampling: Groundwater Wells Only:					
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the well require redevelopment (low flow, turbid)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6 Based on your professional judgement, is the well construction / location:					
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 Corrective actions as needed, by date:					
Needs well cap					
8 Date by when corrective actions are needed:					
Well cap replaced on 12/7/2021.					



# Groundwater Gauging Well Inspection Report



<b>Project Location:</b> AP-1			Yes	No	N/A
<b>Permit Number:</b>					
<b>Well ID:</b> PZ-53					
<b>Person Gauging:</b> Jake Swanson					
<b>Date:</b> 8/16/2021					
<b>Time:</b> 14:43:00					
1 Location Identification:					
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing:					
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad					
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the pad surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing					
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the depth of the well consistent with the original well log?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5 Sampling: Groundwater Wells Only:					
a	Does well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c	Does the well require redevelopment (low flow, turbid)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6 Based on your professional judgement, is the well construction / location:					
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 Corrective actions as needed, by date:					
Trim grass around well pad					
8 Date by when corrective actions are needed:					

# Groundwater Gauging Well Inspection Report



<b>Project Location:</b> AP-1			Yes	No	N/A
<b>Permit Number:</b>					
<b>Well ID:</b> YGWC-52					
<b>Person Gauging:</b> Jake Swanson					
<b>Date:</b> 8/16/2021					
<b>Time:</b> 13:24:00					
1 Location Identification:					
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing:					
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad					
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the pad surface clean (not covered with sediment or debris)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing					
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e	Is the depth of the well consistent with the original well log?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5 Sampling: Groundwater Wells Only:					
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c	Does the well require redevelopment (low flow, turbid)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6 Based on your professional judgement, is the well construction / location:					
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7 Corrective actions as needed, by date:					
Trim grass around well pad					
8 Date by when corrective actions are needed:					

# **February 2022 Event**

<b>Client:</b>		Georgia Power			
<b>Project Location:</b>		AP-1			
<b>Date:</b>		2/7/2022			
<b>Sampler:</b>		Mark Chest			
<b>Equipment:</b>		water probe			
Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YGWA-47	2/7/2022	12:32:00	34.83	59.19	--
YGWC-52	2/7/2022	12:38:00	37.48	70.79	--
YGWC-44	2/7/2022	12:45:00	49.46	89.85	--
PZ-09I	2/7/2022	12:53:00	16.43	77.00	--
PZ-09S	2/7/2022	12:55:00	16.18	57.00	--
YGWC-45	2/7/2022	12:59:00	21.93	73.80	--
YGWC-46A	2/7/2022	13:18:00	37.19	79.22	--
PZ-53	2/7/2022	13:21:00	37.05	72.00	--
PZ-10S	2/7/2022	13:32:00	6.34	16.30	--
PZ-10I	2/7/2022	13:34:00	11.85	46.50	--

**February 2022 Daily Calibration Log**

Project Plant Yates

Field Staff: Mark Chest / Kim Lapszynski / Jessica Ware / Khalil Carson

**Instrument Calibration**

**Date: 02/8/2022 Initial**

Parameter	Units	Standard	SmarTROLL SN 464818 (Mark Chest)	SmarTROLL SN 514308 (Jessica Ware & Kim Lapszynski)	YSI 556 U82097X (Kim Lapszynski)	SmarTROLL SN 613192 (Khalil Carson)
DO	% saturation	100	100	100	NA*	100
Conductivity	us/cm	1409	8000	1409	NA*	8000
pH	S.U.	4.00	4.00	4.00	NA*	4.00
pH	S.U.	7.00	7.08	7.06	NA*	7.00
pH	S.U.	10.00	10.01	9.99	NA*	10.00
ORP	mV	220.0	252.1	220.0	NA*	232.0

HACH/Geotech Standard	Units	HACH	HACH U89261X	Geotech V94550X (Kim Lapszynski)	HACH
20	NTU	20.2	9.7	NA*	20.1
100	NTU	102	20	NA*	99.6
800	NTU	801	101	NA*	803
10 / <0.10	NTU	10.3	804	NA*	10.1

**Date: 2/8/2022 Time: Midday**

Parameter	Units	Standard	SmarTROLL SN 464818 (Mark Chest)	SmarTROLL SN 514308 (Jessica Ware)	YSI 556 U82097X (Kim Lapszynski)	SmarTROLL SN 613192 (Khalil Carson)
DO	% saturation	100	100	NA*	100	100
Conductivity	us/cm	1409	1413	NA*	1409	8000
pH	S.U.	4.00	4.00	NA*	4.00	4.00
pH	S.U.	7.00	7.06	NA*	7.00	7.00
pH	S.U.	10.00	10.08	NA*	10.00	10.00
ORP	mV	220.0	237.8	NA*	220.0	232.0

HACH/Geotech Standard	Units	HACH	HACH U89261X	Geotech V94550X (Kim Lapszynski)	HACH
20	NTU	--	19.7	**	--
100	NTU	--	100	**	--
800	NTU	--	794	**	--
10 / <0.10	NTU	10.2	9.88	**	10.1

**Notes:**

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = Not Applicable

-- calibration not conducted

\* Equipment not available or broken

\*\* Mid-day Calibration was conducted but data not recorded

**February 2022 Daily Calibration Log**

Project Plant Yates

Field Staff: Mark Chest / Kim Lapszynski / Jessica Ware / Khalil Carson

**Instrument Calibration**

**Date: 02/9/2022 Initial**

Parameter	Units	Standard	SmarTROLL SN 464818 (Mark Chest)	SmarTROLL SN 514308 (Kim Lapszynski)	YSI 556 U82097X (Jessica Ware)	SmarTROLL SN 613192 (Khalil Carson)
DO	% saturation	100	100	100	100.3	100
Conductivity	us/cm	1409	1413	1409	1407	1409
pH	S.U.	4.00	4.01	4.00	3.97	4.00
pH	S.U.	7.00	7.12	7.06	7.00	7.02
pH	S.U.	10.00	10.16	10.00	9.99	10.08
ORP	mV	220.0	256.8	220.0	220.0	220.0

HACH/Geotech Standard	Units	HACH (Mark Chest)	Geotech V94550X (Kim Lapszynski)	HACH U89261X (Jessica Ware)	HACH (Khalil Carson)
20	NTU	19.9	20.0	20.2	19.9
100	NTU	99.6	100.0	101	99.8
800	NTU	791	800.0	800	797
10 / <0.10	NTU	10.0	< 0.10	9.25	9.18

**Date: 2/8/2022 Time: Midday**

Parameter	Units	Standard	SmarTROLL SN 464818 (Mark Chest)	SmarTROLL SN 514308 (Kim Lapszynski)	YSI 556 U82097X (Jessica Ware)	SmarTROLL SN 613192 (Khalil Carson)
DO	% saturation	100	100	100	99.9	NA*
Conductivity	us/cm	1409	1413	1409	1411	NA*
pH	S.U.	4.00	--	4.00	4.02	NA*
pH	S.U.	7.00	7.00	7.02	7.01	NA*
pH	S.U.	10.00	--	10.08	9.92	NA*
ORP	mV	220.0	231	220.0	220.0	NA*

HACH/Geotech Standard	Units	HACH (Mark Chest)	Geotech V94550X (Kim Lapszynski)	HACH U89261X (Jessica Ware)	HACH (Khalil Carson)
20	NTU	--	**	19.7	NA*
100	NTU	--	**	100	NA*
800	NTU	--	**	799	NA*
10 / <0.10	NTU	10.2	**	9.87	NA*

**Notes:**

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = Not Applicable

-- calibration not conducted

\* Unable to Calibration due to long purge time at midday

\*\* Mid-day Calibration was conducted but data not recorded

**February 2022 Daily Calibration Log**

Project Plant Yates

Field Staff: Kim Lapszynski / Jessica Ware / Khalil Carson

**Instrument Calibration**

**Date: 02/11/2022 Initial**

Parameter	Units	Standard	SmarTROLL SN 464818 (Kim Lapszynski)	SmarTROLL SN 514308 (Jessica Ware)	SmarTROLL SN 613192 (Khalil Carson)
DO	% saturation	100	100	100	100
Conductivity	us/cm	1409	1409	1409	1409
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.06	7.02	7.02
pH	S.U.	10.00	10.16	10.12	10.05
ORP	mV	220.0	220.0	220.0	220.0

HACH/Geotech Standard	Units	Geotech V100820X (Kim Lapszynski)	HACH U89261X (Jessica Ware)	HACH (Khalil Carson)
20	NTU	20.0	20.0	19.8
100	NTU	100.0	104	99.6
800	NTU	800.0	793	788
10 / <0.10	NTU	< 0.10	9.47	10.2

**Date: 2/8/2022 Time: Midday**

Parameter	Units	Standard	SmarTROLL SN 464818 (Kim Lapszynski)	SmarTROLL SN 514308 (Jessica Ware)	SmarTROLL SN 613192 (Khalil Carson)
DO	% saturation	100	NA*	100	NA*
Conductivity	us/cm	1409	NA*	1409	NA*
pH	S.U.	4.00	NA*	4.00	NA*
pH	S.U.	7.00	NA*	7.02	NA*
pH	S.U.	10.00	NA*	10.04	NA*
ORP	mV	220.0	NA*	220.0	NA*

HACH/Geotech Standard	Units	Geotech (Kim Lapszynski)	HACH U89261X (Jessica Ware)	HACH (Khalil Carson)
20	NTU	NA*	**	NA*
100	NTU	NA*	**	NA*
800	NTU	NA*	**	NA*
10 / <0.10	NTU	NA*	**	NA*

**Notes:**

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

-- calibration not conducted

\* Half day

\*\* Mid-day Calibration was conducted but data not recorded

**February 2022 Daily Calibration Log**

Project Plant Yates

Field Staff: Mark Chest / Kim Lapszynski / Jessica Ware / Khalil Carson

**Instrument Calibration**

Date: 02/10/2022 Initial

Parameter	Units	Standard	SmarTROLL SN 464818 (Mark Chest)	SmarTROLL SN 514308 (Kim Lapszynski)	SmarTROLL SN 514308 (Jessica Ware)	SmarTROLL SN 613192 (Khalil Carson)
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	1409	1413	1409	1409	1409
pH	S.U.	4.00	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.06	7.06	7.06	7.02
pH	S.U.	10.00	10.12	10.12	10.08	10.08
ORP	mV	220.0	246.1	252.8	220.0	220.0

HACH/Geotech Standard	Units	HACH (Mark Chest)	Geotech V94550X (Kim Lapszynski)	HACH U89261X (Jessica Ware)	HACH (Khalil Carson)
20	NTU	19.9	20.0	19.8	20.7
100	NTU	101	100.0	101	104
800	NTU	797	800.0	799	827
10 / <0.10	NTU	10.1	< 0.10	9.35	10

Date: 2/8/2022 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 464818 (Mark Chest)	YSI 556 100686 (Kim Lapszynski)	SmarTROLL SN 514308 (Jessica Ware)	SmarTROLL SN 613192 (Khalil Carson)
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	1409	1413	1406	1409	1409
pH	S.U.	4.00	--	7.00	4.00	4.00
pH	S.U.	7.00	7.00	4.00	7.02	7.02
pH	S.U.	10.00	--	9.99	10.04	10.08
ORP	mV	220.0	230	220	220.0	220.0

HACH/Geotech Standard	Units	HACH (Mark Chest)	Geotech (Kim Lapszynski)	HACH U89261X (Jessica Ware)	HACH (Khalil Carson)
20	NTU	--	**	19.9	**
100	NTU	--	**	102	**
800	NTU	--	**	788	**
10 / <0.10	NTU	9.96	**	9.57	9.94

**Notes:**

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = Not Applicable

-- Calibration not conducted

\*\* Mid-day Calibration was conducted but data not recorded



# Groundwater Sampling Form

Updated : 2/16/2022 4:39:50 PM  
-05:00

<b>Project Number</b>	30052923	<b>Well ID</b>	YGWC-44	<b>Date</b>	02/09/2022		
<b>Project Location</b>	AP-1	<b>Weather(°F)</b>	57.9 degrees F and Clear. The wind is blowing W at 8.1 mph.				
<b>Measuring Pt. Description</b>	Top of Inner Casing	<b>Screen Setting (ft-bmp)</b>	79.95	<b>Casing Diameter (in)</b>	2	<b>Well Casing Material</b>	PVC
<b>Static Water Level (ft-bmp)</b>	49.45	<b>Total Depth (ft-bmp)</b>	89.85	<b>Water Column(ft)</b>	40.4	<b>Gallons in Well</b>	6.56
<b>MP Elevation</b>	758.35	<b>Pump Intake (ft-bmp)</b>	83	<b>Purge Method</b>	Low-Flow	<b>Sample Method</b>	Low-Flow
<b>Sample Time</b>	12:48	<b>Well Volumes Purged</b>	0.28	<b>Sample ID</b>	YGWC-44	<b>Sampled by</b>	Mark Chest
<b>Purge Start</b>	12:10	<b>Gallons Purged</b>	1.85	<b>Replicate/ Code No.</b>	AP-1-FB-1	<b>Color</b>	Clear
<b>Purge End</b>	12:45						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:10:00	00:00	200	49.45	5.59	449.46	0.85	1.83	17.3	-86.84
12:15:00	05:00	200	53.11	5.35	455.78	0.50	0.24	17.6	0.08
12:20:00	10:00	200	53.11	5.41	452.96	0.42	0.35	17.5	18.99
12:25:00	15:00	200	53.11	5.51	455.28	1.40	0.40	17.4	23.21
12:30:00	20:00	200	53.11	5.59	456.51	0.22	0.36	17.7	23.36
12:35:00	25:00	200	53.11	5.68	454.39	0.55	0.36	17.6	24.28
12:40:00	30:00	200	53.11	5.71	453.67	0.45	0.35	17.8	26.49
12:45:00	35:00	200	53.11	5.73	450.85	0.87	0.37	17.8	29.30

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	None
Metals	250 mL Plastic	1	HNO3
Cl, F, SO4	250 mL Plastic	1	None
TDS	500 mL Plastic	1	None

**Comments:**

**Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot    1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47  
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

**Well Information**

Well Location: \_\_\_\_\_ Well Locked at Arrival: \_\_\_\_\_  
 Condition of Well: \_\_\_\_\_ Well Locked at Departure: \_\_\_\_\_  
 Well Completion: NA \_\_\_\_\_ Key Number To Well: NA \_\_\_\_\_

# Groundwater Sampling Form

Updated : 2/16/2022 4:16:59 PM  
-05:00

<b>Project Number</b>	30052923	<b>Well ID</b>	YGWC-45	<b>Date</b>	02/09/2022		
<b>Project Location</b>	AP-1	<b>Weather(°F)</b>	57.9 degrees and Clear				
<b>Measuring Pt. Description</b>	Top of Inner Casing	<b>Screen Setting (ft-bmp)</b>	63.8	<b>Casing Diameter (in)</b>	2	<b>Well Casing Material</b>	PVC
<b>Static Water Level (ft-bmp)</b>	22	<b>Total Depth (ft-bmp)</b>	73.8	<b>Water Column(ft)</b>	51.8	<b>Gallons in Well</b>	8.42
<b>MP Elevation</b>	719.36	<b>Pump Intake (ft-bmp)</b>	69	<b>Purge Method</b>	Low-Flow	<b>Sample Method</b>	Low-Flow
<b>Sample Time</b>	14:40	<b>Well Volumes Purged</b>	0.19	<b>Sample ID</b>	YGWC-45	<b>Sampled by</b>	Mark Chest
<b>Purge Start</b>	14:06	<b>Gallons Purged</b>	1.59	<b>Replicate/ Code No.</b>		<b>Color</b>	Clear
<b>Purge End</b>	14:36						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
14:06:00	00:00	200	22	6.54	548.23	3.04	2.78	19.4	-79.78
14:11:00	05:00	200	24.11	5.93	559.17	3.08	0.44	18.1	-42.64
14:16:00	10:00	200	24.11	6.02	561.13	3.42	0.21	18.1	-16.52
14:21:00	15:00	200	24.09	6.08	560.08	2.18	0.19	17.9	-11.87
14:26:00	20:00	200	24.13	6.18	564.26	1.77	0.17	17.8	-16.32
14:31:00	25:00	200	24.09	6.21	564.09	1.59	0.15	17.7	-24.95
14:36:00	30:00	200	24.11	6.15	559.38	1.56	0.16	17.7	-21.06

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	None
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
CL, F, SO4	250 mL Plastic	1	None

**Comments:**

**Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot  
 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47  
 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

**Well Information**

Well Location: \_\_\_\_\_ Well Locked at Arrival: \_\_\_\_\_  
 Condition of Well: \_\_\_\_\_ Well Locked at Departure: \_\_\_\_\_  
 Well Completion: NA Key Number To Well: NA

# Groundwater Sampling Form

Updated : 2/18/2022 10:24:33 AM -05:00

<b>Project Number</b>	30052923	<b>Well ID</b>	YGWC-46A	<b>Date</b>	02/09/2022		
<b>Project Location</b>	AP-1	<b>Weather(°F)</b>	57.9 degrees and Clear				
<b>Measuring Pt. Description</b>	Top of Inner Casing	<b>Screen Setting (ft-bmp)</b>	69.22	<b>Casing Diameter (in)</b>	2	<b>Well Casing Material</b>	PVC
<b>Static Water Level (ft-bmp)</b>	37.25	<b>Total Depth (ft-bmp)</b>	79.22	<b>Water Column(ft)</b>	41.97	<b>Gallons in Well</b>	6.82
<b>MP Elevation</b>	733.04	<b>Pump Intake (ft-bmp)</b>	65	<b>Purge Method</b>	Low-Flow	<b>Sample Method</b>	Low-Flow
<b>Sample Time</b>	16:13	<b>Well Volumes Purged</b>	0.23	<b>Sample ID</b>	YGWC-46A	<b>Sampled by</b>	Mark Chest
<b>Purge Start</b>	15:39	<b>Gallons Purged</b>	1.59	<b>Replicate/ Code No.</b>	AP-1-DUP-1	<b>Color</b>	Clear
<b>Purge End</b>	16:09						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
15:39:00	00:00	200	37.25	6.74	1095.58	1.69	4.28	18.8	-58.60
15:44:00	05:00	200	38.99	6.91	1172.39	1.03	0.62	18.6	-68.95
15:49:00	10:00	200	39.07	7.00	1172.03	1.70	0.35	18.3	-90.85
15:54:00	15:00	200	39.11	7.03	1175.01	1.56	0.22	18.4	-111.38
15:59:00	20:00	200	39.18	7.02	1162.13	0.58	0.20	18.3	-114.68
16:04:00	25:00	200	39.2	6.99	1148.40	0.54	0.18	18.7	-112.30
16:09:00	30:00	200	39.25	6.98	1132.77	1.33	0.19	18.3	-111.14

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	4	HNO3
Metals	250 mL Plastic	2	HNO3
TDS	500 mL Plastic	2	None
Cl, F, SO4	250 mL Plastic	2	None

**Comments:**

**Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot    1 = 0.04   1.5 = 0.09   2.5 = 0.26   3.5 = 0.50   6 = 1.47  
 1.25 = 0.06   2 = 0.16   3 = 0.37   4 = 0.65

**Well Information**

Well Location: \_\_\_\_\_ Well Locked at Arrival: \_\_\_\_\_  
 Condition of Well: \_\_\_\_\_ Well Locked at Departure: \_\_\_\_\_  
 Well Completion: NA \_\_\_\_\_ Key Number To Well: NA \_\_\_\_\_

# Groundwater Sampling Form



Updated : 2/8/2022 2:45:10 PM - 05:00

<b>Project Number</b>	30052923	<b>Well ID</b>	YGWA-47	<b>Date</b>	02/08/2022		
<b>Project Location</b>	AP-1	<b>Weather(°F)</b>	53.4 degrees F and Clear. The wind is blowing N/NE at 10.3 mph.				
<b>Measuring Pt. Description</b>	Top of Inner Casing	<b>Screen Setting (ft-bmp)</b>	49.4	<b>Casing Diameter (in)</b>	2	<b>Well Casing Material</b>	PVC
<b>Static Water Level (ft-bmp)</b>	34.8	<b>Total Depth (ft-bmp)</b>	59.19	<b>Water Column(ft)</b>	24.39	<b>Gallons in Well</b>	3.96
<b>MP Elevation</b>	758.22	<b>Pump Intake (ft-bmp)</b>	54	<b>Purge Method</b>	Low-Flow	<b>Sample Method</b>	Low-Flow
<b>Sample Time</b>	11:40	<b>Well Volumes Purged</b>	0.40	<b>Sample ID</b>	YGWA-47	<b>Sampled by</b>	Mark Chest
<b>Purge Start</b>	11:12	<b>Gallons Purged</b>	1.59	<b>Replicate/ Code No.</b>		<b>Color</b>	Clear
<b>Purge End</b>	11:37						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
11:12:00	00:00	200	34.8	5.15	193.83	0.11	2.88	17.3	238.85
11:17:00	05:00	200	35.55	5.24	195.95	0.01	2.87	17.0	241.34
11:22:00	10:00	200	35.55	5.30	197.08	0.00	2.93	17.1	240.91
11:27:00	15:00	200	35.55	5.38	196.93	0.10	2.95	17.1	238.23
11:32:00	20:00	200	35.55	5.42	197.63	1.23	2.86	17.0	237.76
11:37:00	25:00	200	35.55	5.40	197.93	0.07	2.82	17.2	239.78
11:42:00	30:00	200	35.55	5.53	201.00	0.00	2.95	18.2	229.25

Constituent Sampled	Container	Number	Preservative
Metals	250mL HDPE Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Wet Chem Non Metals	250 mL Plastic	1	None

**Comments:**

**Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot  
 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47  
 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

**Well Information**

Well Location: \_\_\_\_\_ Well Locked at Arrival: \_\_\_\_\_  
 Condition of Well: \_\_\_\_\_ Well Locked at Departure: \_\_\_\_\_  
 Well Completion: NA Key Number To Well: NA

# Groundwater Sampling Form



Updated : 2/15/2022 11:27:24 AM -05:00

<b>Project Number</b>	30052923	<b>Well ID</b>	YGWC-52	<b>Date</b>	02/09/2022		
<b>Project Location</b>	AP-1	<b>Weather(°F)</b>	Clear, Sunny, 53 F				
<b>Measuring Pt. Description</b>	Top of Inner Casing	<b>Screen Setting (ft-bmp)</b>	60.79	<b>Casing Diameter (in)</b>	2	<b>Well Casing Material</b>	PVC
<b>Static Water Level (ft-bmp)</b>	37.45	<b>Total Depth (ft-bmp)</b>	70.79	<b>Water Column(ft)</b>	33.34	<b>Gallons in Well</b>	5.42
<b>MP Elevation</b>	755.86	<b>Pump Intake (ft-bmp)</b>	65	<b>Purge Method</b>	Low-Flow	<b>Sample Method</b>	Low-Flow
<b>Sample Time</b>	11:14	<b>Well Volumes Purged</b>	0.34	<b>Sample ID</b>	YGWC-52	<b>Sampled by</b>	Mark Chest
<b>Purge Start</b>	10:37	<b>Gallons Purged</b>	1.85	<b>Replicate/ Code No.</b>		<b>Color</b>	Clear
<b>Purge End</b>	11:12						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
10:37:00	00:00	200	37.45	6.11	395.92	93.9	2.64	17.5	200.90
10:42:00	05:00	200	38.36	5.93	400.49	1.64	4.93	17.4	206.65
10:47:00	10:00	200	38.4	5.96	398.43	12.2	5.64	17.5	202.93
10:52:00	15:00	200	38.43	5.98	393.66	8.74	5.67	17.5	199.45
10:57:00	20:00	200	38.49	5.99	391.58	7.21	5.75	17.5	196.72
11:02:00	25:00	200	38.52	6.00	390.06	4.51	5.81	17.6	195.07
11:07:00	30:00	200	38.54	5.98	388.76	4.48	5.91	17.6	194.19
11:12:00	35:00	200	38.54	5.99	387.69	4.08	6.14	17.6	192.52

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Cl, F, SO4	250 mL Plastic	1	None
TDS	500 mL Plastic	1	None

**Comments:**

**Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot    1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47  
 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

**Well Information**

Well Location: \_\_\_\_\_ Well Locked at Arrival: \_\_\_\_\_  
 Condition of Well: \_\_\_\_\_ Well Locked at Departure: \_\_\_\_\_  
 Well Completion: NA \_\_\_\_\_ Key Number To Well: NA \_\_\_\_\_

# Groundwater Gauging Well Inspection Report

<b>Project Location:</b>		AP-1			
<b>Permit Number:</b>					
<b>Well ID:</b>		YGWA-47			
<b>Person Gauging:</b>		Mark Chest			
<b>Date:</b>		2/7/2022			
<b>Time:</b>		12:32:00			
			Yes	No	N/A
1	Location Identification:				
a	Is the well visible and accessible?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Protective Casing:				
a	Is the protective casing free from apparent damage and able to be secured?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Internal Casing				
a	Does the cap prevent entry of foreign material into the well?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equilibration of air pressure?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sampling: Groundwater Wells Only:				
a	Does well recharge adequately when purged?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow, turbid)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgement, is the well construction / location:				
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	and 2) comply with the applicable regulatory requirements?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

# Groundwater Gauging Well Inspection Report

<b>Project Location:</b>		AP-1			
<b>Permit Number:</b>					
<b>Well ID:</b>		YGWC-52			
<b>Person Gauging:</b>		Mark Chest			
<b>Date:</b>		2/7/2022			
<b>Time:</b>		12:38:00			
			Yes	No	N/A
1	Location Identification:				
a	Is the well visible and accessible?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Protective Casing:				
a	Is the protective casing free from apparent damage and able to be secured?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Internal Casing				
a	Does the cap prevent entry of foreign material into the well?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equilibration of air pressure?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sampling: Groundwater Wells Only:				
a	Does well recharge adequately when purged?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow, turbid)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgement, is the well construction / location:				
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	and 2) comply with the applicable regulatory requirements?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed, by date:				
	None				
8	Date by when corrective actions are needed:				

# Groundwater Gauging Well Inspection Report

<b>Project Location:</b>		AP-1			
<b>Permit Number:</b>					
<b>Well ID:</b>		YGWC-44			
<b>Person Gauging:</b>		Mark Chest			
<b>Date:</b>		2/7/2022			
<b>Time:</b>		12:45:00			
			Yes	No	N/A
1	Location Identification:				
a	Is the well visible and accessible?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Protective Casing:				
a	Is the protective casing free from apparent damage and able to be secured?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Internal Casing				
a	Does the cap prevent entry of foreign material into the well?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equilibration of air pressure?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sampling: Groundwater Wells Only:				
a	Does well recharge adequately when purged?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow, turbid)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgement, is the well construction / location:				
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	and 2) comply with the applicable regulatory requirements?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed, by date:				
	None				
8	Date by when corrective actions are needed:				



# Groundwater Gauging Well Inspection Report

<b>Project Location:</b>		AP-1			
<b>Permit Number:</b>					
<b>Well ID:</b>		PZ-09S			
<b>Person Gauging:</b>		Mark Chest			
<b>Date:</b>		2/7/2022			
<b>Time:</b>		12:55:00			
			Yes	No	N/A
1	Location Identification:				
a	Is the well visible and accessible?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Protective Casing:				
a	Is the protective casing free from apparent damage and able to be secured?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Internal Casing				
a	Does the cap prevent entry of foreign material into the well?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equilibration of air pressure?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sampling: Groundwater Wells Only:				
a	Does well recharge adequately when purged?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow, turbid)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgement, is the well construction / location:				
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	and 2) comply with the applicable regulatory requirements?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed, by date:				
	None				
8	Date by when corrective actions are needed:				

# Groundwater Gauging Well Inspection Report

<b>Project Location:</b>		AP-1			
<b>Permit Number:</b>					
<b>Well ID:</b>		PZ-09I			
<b>Person Gauging:</b>		Mark Chest			
<b>Date:</b>		2/7/2022			
<b>Time:</b>		12:53:00			
			Yes	No	N/A
1	Location Identification:				
a	Is the well visible and accessible?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Protective Casing:				
a	Is the protective casing free from apparent damage and able to be secured?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Internal Casing				
a	Does the cap prevent entry of foreign material into the well?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equilibration of air pressure?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sampling: Groundwater Wells Only:				
a	Does well recharge adequately when purged?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow, turbid)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgement, is the well construction / location:				
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	and 2) comply with the applicable regulatory requirements?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

# Groundwater Gauging Well Inspection Report

<b>Project Location:</b>		AP-1			
<b>Permit Number:</b>					
<b>Well ID:</b>		YGWC-45			
<b>Person Gauging:</b>		Mark Chest			
<b>Date:</b>		2/7/2022			
<b>Time:</b>		12:59:00			
			Yes	No	N/A
1	Location Identification:				
a	Is the well visible and accessible?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Protective Casing:				
a	Is the protective casing free from apparent damage and able to be secured?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Internal Casing				
a	Does the cap prevent entry of foreign material into the well?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equilibration of air pressure?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sampling: Groundwater Wells Only:				
a	Does well recharge adequately when purged?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow, turbid)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgement, is the well construction / location:				
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	and 2) comply with the applicable regulatory requirements?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

# Groundwater Gauging Well Inspection Report

<b>Project Location:</b>		AP-1			
<b>Permit Number:</b>					
<b>Well ID:</b>		YGWC-46A			
<b>Person Gauging:</b>		Mark Chest			
<b>Date:</b>		2/7/2022			
<b>Time:</b>		13:18:00			
			Yes	No	N/A
1	Location Identification:				
a	Is the well visible and accessible?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Protective Casing:				
a	Is the protective casing free from apparent damage and able to be secured?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Internal Casing				
a	Does the cap prevent entry of foreign material into the well?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equilibration of air pressure?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sampling: Groundwater Wells Only:				
a	Does well recharge adequately when purged?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow, turbid)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgement, is the well construction / location:				
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	and 2) comply with the applicable regulatory requirements?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed, by date:				
	None				
8	Date by when corrective actions are needed:				

# Groundwater Gauging Well Inspection Report

<b>Project Location:</b>		AP-1			
<b>Permit Number:</b>					
<b>Well ID:</b>		PZ-53			
<b>Person Gauging:</b>		Mark Chest			
<b>Date:</b>		2/7/2022			
<b>Time:</b>		13:21:00			
			Yes	No	N/A
1	Location Identification:				
a	Is the well visible and accessible?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Protective Casing:				
a	Is the protective casing free from apparent damage and able to be secured?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Internal Casing				
a	Does the cap prevent entry of foreign material into the well?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equilibration of air pressure?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sampling: Groundwater Wells Only:				
a	Does well recharge adequately when purged?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow, turbid)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgement, is the well construction / location:				
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	and 2) comply with the applicable regulatory requirements?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

# Groundwater Gauging Well Inspection Report

<b>Project Location:</b>		AP-1			
<b>Permit Number:</b>					
<b>Well ID:</b>		PZ-10S			
<b>Person Gauging:</b>		Mark Chest			
<b>Date:</b>		2/7/2022			
<b>Time:</b>		13:32:00			
			Yes	No	N/A
1	Location Identification:				
a	Is the well visible and accessible?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Protective Casing:				
a	Is the protective casing free from apparent damage and able to be secured?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Internal Casing				
a	Does the cap prevent entry of foreign material into the well?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equilibration of air pressure?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sampling: Groundwater Wells Only:				
a	Does well recharge adequately when purged?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow, turbid)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgement, is the well construction / location:				
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	and 2) comply with the applicable regulatory requirements?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed, by date:				
	None				
8	Date by when corrective actions are needed:				

# Groundwater Gauging Well Inspection Report

<b>Project Location:</b>		AP-1			
<b>Permit Number:</b>					
<b>Well ID:</b>		PZ-10I			
<b>Person Gauging:</b>		Mark Chest			
<b>Date:</b>		2/7/2022			
<b>Time:</b>		13:34:00			
			Yes	No	N/A
1	Location Identification:				
a	Is the well visible and accessible?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Protective Casing:				
a	Is the protective casing free from apparent damage and able to be secured?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Internal Casing				
a	Does the cap prevent entry of foreign material into the well?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equilibration of air pressure?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sampling: Groundwater Wells Only:				
a	Does well recharge adequately when purged?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow, turbid)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgement, is the well construction / location:				
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	and 2) comply with the applicable regulatory requirements?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed, by date:				
	None				
8	Date by when corrective actions are needed:				

# Appendix C

## Statistical Analysis

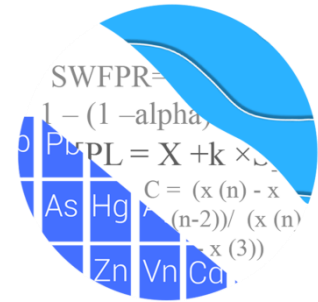


**Appendix III Statistically Significant Increase Summary (August 2021 and February 2022)**

Appendix III Parameter	Monitoring Wells	
	August 2021	February 2022
Boron	YGWC-44, YGWC-45, YGWC-46A	YGWC-44, YGWC-45, YGWC-46A
Calcium	YGWC-45, YGWC-46A, YGWC-52	YGWC-45, YGWC-46A, YGWC-52
Chloride	YGWC-44, YGWC-46A	YGWC-44, YGWC-46A
Sulfate	YGWC-46A	YGWC-45, YGWC-46A
Total Dissolved Solids	YGWC-44, YGWC-45, YGWC-46A, YGWC-52	YGWC-44, YGWC-45, YGWC-46A, YGWC-52

# **August 2021 Event**

## GROUNDWATER STATS CONSULTING



February 28, 2022

Southern Company Services  
Attn: Ms. Lauren Coker  
241 Ralph McGill Blvd NE, Bin 10160  
Atlanta, Georgia 30308-3374

Re: Plant Yates Ash Pond 1 (AP-1)  
August/September 2021 Sample Event

Dear Ms. Coker,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August/September 2021 semi-annual Groundwater Detection and Assessment Monitoring statistical analysis for Georgia Power Company's Plant Yates AP-1. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10, and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling for the Appendix III parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. Semi-annual sampling of the majority of Appendix IV constituents has been performed for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:**
  - **AP-1:** YGWA-47
  - **AP-2:** YGWA-1D, YGWA-1I, YGWA-2I, YGWA-3D, YGWA-3I, YGWA-14S and, YGWA-30I
  - **Gypsum Landfill:** GWA-2
  - **AMA-R6:** YGWA-17S, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-21I, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D, and YGWA-5I
- **Downgradient wells:** YGWC-44, YGWC-45, YGWC-46A, and YGWC-52

Well YGWC-46 was abandoned in June 2020, and baseline sampling began at well YGWC-46A in July 2020 to supplement existing data in well YGWC-46. YGWC-46 was screened during the 2019 evaluation and the findings of that report are summarized below. Reported observations from the August/September 2021 sample event for Appendix III constituent at YGWC-46A are compared to established interwell prediction limits in this analysis.

Currently, confidence intervals are used to evaluate the combined data from both wells for the Appendix IV constituents. All concentrations from both wells are below established MCLs. When a minimum of 8 samples have been collected from new well YGWC-46A, the Mann-Whitney test of medians will be used to evaluate whether the medians of both wells are statistically similar for the Appendix IV constituents. In cases where statistically significant differences are identified at the 99% confidence level, the historical record will be truncated so that only data from new well YGWC-46A, which may be more representative of present-day groundwater quality, are evaluated with confidence interval comparisons to respective Groundwater Protection Standards. Well YGWC-52 was installed in June 2020, and baseline sampling began in August 2020.

All data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Groundwater Statistician of Groundwater Stats Consulting.

The CCR program consists of the constituents listed below. The terms “parameters” and “constituents” are used interchangeably.

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of Appendix IV downgradient well/constituent pairs with 100% non-detects follows this letter. Additionally, when Appendix IV constituents are not detected during a scheduled Scan event, no statistical analyses are required during the semi-annual sample event, and sampling of those constituents is not required during the subsequent events. In some cases, upgradient wells at a given unit were not sampled for all constituents if no detections were present at downgradient wells for that particular unit. The following constituents were not detected during their respective Scan events at other Plant Yates units; therefore, upgradient wells at the units listed below were not sampled for these constituents:

- Yates AP-2: mercury and thallium
- Yates AMA-R6: thallium

Combined upgradient well data from all units at Plant Yates are utilized to construct statistical limits for Appendix III and IV parameters. The absence of samples from upgradient wells will affect the sample size of the combined background data set that is used for interwell limits among all units at Plant Yates; however, the calculated limits should not be affected greatly.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data and this generally gives the most conservative limit in each case. In time series plots, a single reporting limit substitution is used across all wells for a given parameter since the wells are plotted as a group. For interwell prediction and tolerance limits, a single reporting limit substitution is used across upgradient wells for a given parameter. Regarding the case of cobalt, due to varying detection limits in individual wells, the most recent reporting limit of 0.005 mg/L was substituted across all wells for all calculations and reports.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

## Summary of Statistical Methods – Appendix III and IV Parameters

Based on the April 2019 evaluation and state and federal regulatory requirements described below, the following methods were selected for Appendix III and IV constituents:

- Appendix III: Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- Appendix IV: Confidence intervals on downgradient well data compared against Groundwater Protections Standards (GWPS) for Appendix IV constituents

The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. Parametric prediction limits (or tolerance limits or confidence intervals as applicable) are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric prediction limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric prediction limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling non-detects (USEPA, 2009):

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers.

In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

## **Summary of Background Screening – Appendix III and IV Constituents - Conducted in April 2019**

### Outlier Analysis

Time series plots were used to identify suspected outliers for the original well network which consisted of upgradient well YGWA-47 and downgradient wells YGWC-44, YGWC-45, and YGWC-46, or extreme values that would result in limits that are not representative of the current background data population. All other upgradient well data from neighboring units were previously screened for outliers with their respective reports. Suspected outliers at all wells for Appendix III and IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, a couple outliers were identified. While this did not occur in the present data set, when the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

The reported non-detect value of 0.01 mg/L for cobalt at well YGWC-45 and the detected value of 6.3 s.u. for pH at well YGWA-47 were flagged as outliers because they were both unusually high during a single event compared to all other values at neighboring wells. The high non-detect value for cobalt does not provide any useful information. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages will display the flagged value in a lighter font as well.

## Seasonality

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

## Trend Test Evaluation

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at upgradient well YGWA-47 and downgradient wells YGWC-44, YGWC-45, and YGWC-46 to identify whether statistically significant increasing or decreasing trends were present. The trend analyses showed a statistically significant increasing trend for lithium in well YGWC-46. Concentrations of lithium at this well decreased in 2019 and increased again in 2020.

The reports were submitted with the background screening analysis, and all other upgradient wells at neighboring units were evaluated for trends with their respective reports. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. While no records required adjustment at this time, if that is necessary in the future a summary report will be provided to show the date ranges used in construction of the statistical limits.

## Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) is typically used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach (interwell or intrawell). However, only one upgradient well was present at the time of the screening and the ANOVA requires a minimum of two wells. Therefore, the ANOVA was not utilized in the background screening.

Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a



single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter. While data were further tested for intrawell eligibility during the screening, interwell methods will be used for all Appendix III constituents in accordance with Georgia EPD requirements.

## **Statistical Analysis of Appendix III Parameters – August/September 2021**

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed for potential outliers during this analysis. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. No new values were flagged for Appendix III parameters, and a summary of flagged outliers follows this report (Figure C).

### Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical pooled upgradient well data through September 2021 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The August/September 2021 sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs).

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When a resample confirms the initial exceedance, a statistically significant increase is identified, and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result. Therefore, no exceedance is noted, and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. A summary table of the interwell prediction limits follows this letter (Figure D). Prediction limit exceedances were noted for the following Appendix III well/constituent pairs:

- Boron: YGWC-44, YGWC-45, and YGWC-46A
- Calcium: YGWC-45, YGWC-46A, and YGWC-52
- Chloride: YGWC-44 and YGWC-46A
- Sulfate: YGWC-46A

- TDS: YGWC-44, YGWC-45, YGWC-46A, and YGWC-52

### Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen’s Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. Upgradient trends are an indication of natural variability in groundwater unrelated to practices at the site. Both a summary and complete graphical results of the trend tests follow this report. No statistically significant increasing trends were identified for any downgradient wells. The following statistically significant trends were identified:

#### Increasing:

- Calcium: YGWA-1D, YGWA-21I, YGWA-17S, and GWA-2 (all upgradient)
- Chloride: YGWA-17S and YGWA-20S (both upgradient)
- Sulfate: YGWA-1D, YGWA-3D, YGWA-5I, and GWA-2 (all upgradient)

#### Decreasing:

- Boron: YGWA-40 and YGWA-47 (both upgradient)
- Calcium: YGWA-1I, YGWA-5D, YGWA-18S, YGWA-47, and YGWA-40 (all upgradient)
- Chloride: YGWA-3D, YGWA-3I, YGWA-5D, and YGWA-47 (all upgradient)
- Sulfate: YGWA-5D (upgradient), YGWA-39 (upgradient), YGWA-40 (upgradient), YGWA-47 (upgradient), and YGWC-46A
- TDS: YGWA-5D, YGWA-40, and YGWA-47 (all upgradient)

A complete list of trend test results and all statistically significant increasing and decreasing trends may be found following this letter in the Trend Test Summary Table.

### **Statistical Analysis of Appendix IV Parameters – August/September 2021**

For analysis of Appendix IV parameters, confidence intervals for each downgradient well/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Downgradient well/constituent pairs that have 100% non-detects or trace values below the reporting limits do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis.

A high value of 0.074 mg/L for cobalt at upgradient well GWA-2 from the August 2021 sample event was flagged in order to maintain statistical limits that are conservative (i.e. lower) from a regulatory perspective. The more recent reported measurements since August 2020 were previously flagged as these measurements were two orders of magnitude higher than remaining measurements at this well. If further studies indicate these measurements represent natural variation in groundwater quality, the values will be included in construction of interwell prediction limits. A summary of flagged outliers follows this report (Figure C).

### Interwell Upper Tolerance Limits

First, interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through September 2021 for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. When the alpha level (or false positive rate) for a nonparametric limit is shown as NaN in the results table, it indicates that the background sample size is large enough such that the resulting alpha level is too small to display in the results table.

### Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a).

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

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified levels have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the State 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 CCR and Georgia EPD Rule requirements, Federal and State GWPS were established for Appendix IV constituents for the August/September 2021 sample event (Figure G).

### Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the detected Appendix IV constituents in each downgradient well using all historical data through September 2021 according to both Federal and State rules (Figures H and I, respectively). As mentioned above, confidence intervals were not required for cadmium, mercury, selenium, and thallium. Beryllium and selenium were 100% non-detects at all downgradient wells.

The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the Federal GWPS and to the State GWPS defined above. Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. Summaries of confidence intervals and complete graphical results follow this letter. For both Federal and State confidence intervals, no exceedances were identified.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Yates AP-1. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Andrew T. Collins  
Project Manager



Kristina L. Rayner  
Groundwater Statistician

# 100% Non-Detects: Appendix IV Downgradient

Analysis Run 11/2/2021 5:18 PM View: Appendix IV  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

Antimony (mg/L)  
YGWC-44, YGWC-52

Arsenic (mg/L)  
YGWC-52

Beryllium (mg/L)  
YGWC-44, YGWC-45, YGWC-46A, YGWC-52

Cadmium (mg/L)  
YGWC-44, YGWC-45, YGWC-52

Chromium (mg/L)  
YGWC-44, YGWC-46A

Fluoride, total (mg/L)  
YGWC-52

Lead (mg/L)  
YGWC-44

Mercury (mg/L)  
YGWC-52

Molybdenum (mg/L)  
YGWC-52

Selenium (mg/L)  
YGWC-44, YGWC-45, YGWC-46A, YGWC-52

Thallium (mg/L)  
YGWC-45, YGWC-52

# Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 11/2/2021, 4:58 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	YGWC-44	0.16	n/a	8/19/2021	0.56	Yes	312	n/a	n/a	47.12	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Boron, total (mg/L)	YGWC-45	0.16	n/a	8/19/2021	0.31	Yes	312	n/a	n/a	47.12	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Boron, total (mg/L)	YGWC-46A	0.16	n/a	8/27/2021	1.9	Yes	312	n/a	n/a	47.12	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-45	37	n/a	8/19/2021	50.4	Yes	312	n/a	n/a	0.9615	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-46A	37	n/a	8/27/2021	108	Yes	312	n/a	n/a	0.9615	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-52	37	n/a	8/20/2021	47.9	Yes	312	n/a	n/a	0.9615	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	YGWC-44	8.5	n/a	8/19/2021	13	Yes	312	n/a	n/a	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	YGWC-46A	8.5	n/a	8/27/2021	29.3	Yes	312	n/a	n/a	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-46A	160	n/a	8/27/2021	423	Yes	312	n/a	n/a	6.09	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	YGWC-44	210.1	n/a	8/19/2021	333	Yes	312	10.03	2.584	0.641	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	YGWC-45	210.1	n/a	8/19/2021	391	Yes	312	10.03	2.584	0.641	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	YGWC-46A	210.1	n/a	8/27/2021	810	Yes	312	10.03	2.584	0.641	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	YGWC-52	210.1	n/a	8/20/2021	289	Yes	312	10.03	2.584	0.641	None	sqrt(x)	0.00188	Param Inter 1 of 2

# Appendix III Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 11/2/2021, 4:58 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
<b>Boron, total (mg/L)</b>	<b>YGWC-44</b>	<b>0.16</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>0.56</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>47.12</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Boron, total (mg/L)</b>	<b>YGWC-45</b>	<b>0.16</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>0.31</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>47.12</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Boron, total (mg/L)</b>	<b>YGWC-46A</b>	<b>0.16</b>	<b>n/a</b>	<b>8/27/2021</b>	<b>1.9</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>47.12</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Boron, total (mg/L)	YGWC-52	0.16	n/a	8/20/2021	0.04ND	No	312	n/a	n/a	47.12	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-44	37	n/a	8/19/2021	31.7	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Calcium, total (mg/L)</b>	<b>YGWC-45</b>	<b>37</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>50.4</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9615</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium, total (mg/L)</b>	<b>YGWC-46A</b>	<b>37</b>	<b>n/a</b>	<b>8/27/2021</b>	<b>108</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9615</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium, total (mg/L)</b>	<b>YGWC-52</b>	<b>37</b>	<b>n/a</b>	<b>8/20/2021</b>	<b>47.9</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9615</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Chloride, Total (mg/L)</b>	<b>YGWC-44</b>	<b>8.5</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>13</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride, Total (mg/L)	YGWC-45	8.5	n/a	8/19/2021	4.1	No	312	n/a	n/a	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Chloride, Total (mg/L)</b>	<b>YGWC-46A</b>	<b>8.5</b>	<b>n/a</b>	<b>8/27/2021</b>	<b>29.3</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride, Total (mg/L)	YGWC-52	8.5	n/a	8/20/2021	3.1	No	312	n/a	n/a	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	YGWC-44	0.68	n/a	8/19/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-45	0.68	n/a	8/19/2021	0.075J	No	381	n/a	n/a	67.98	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-46A	0.68	n/a	8/27/2021	0.13	No	381	n/a	n/a	67.98	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-52	0.68	n/a	8/20/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	YGWC-44	8.39	4.4	8/19/2021	5.73	No	391	n/a	n/a	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-45	8.39	4.4	8/19/2021	6.13	No	391	n/a	n/a	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-46A	8.39	4.4	8/27/2021	6.83	No	391	n/a	n/a	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-52	8.39	4.4	8/20/2021	6.71	No	391	n/a	n/a	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-44	160	n/a	8/19/2021	115	No	312	n/a	n/a	6.09	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-45	160	n/a	8/19/2021	149	No	312	n/a	n/a	6.09	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-46A</b>	<b>160</b>	<b>n/a</b>	<b>8/27/2021</b>	<b>423</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>6.09</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate as SO4 (mg/L)	YGWC-52	160	n/a	8/20/2021	122	No	312	n/a	n/a	6.09	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-44</b>	<b>210.1</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>333</b>	<b>Yes</b>	<b>312</b>	<b>10.03</b>	<b>2.584</b>	<b>0.641</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-45</b>	<b>210.1</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>391</b>	<b>Yes</b>	<b>312</b>	<b>10.03</b>	<b>2.584</b>	<b>0.641</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-46A</b>	<b>210.1</b>	<b>n/a</b>	<b>8/27/2021</b>	<b>810</b>	<b>Yes</b>	<b>312</b>	<b>10.03</b>	<b>2.584</b>	<b>0.641</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-52</b>	<b>210.1</b>	<b>n/a</b>	<b>8/20/2021</b>	<b>289</b>	<b>Yes</b>	<b>312</b>	<b>10.03</b>	<b>2.584</b>	<b>0.641</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter 1 of 2</b>

# Appendix III Trend Tests - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 11/2/2021, 5:03 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	YGWA-47 (bg)	-0.000923	-50	-48	Yes	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-40 (bg)	-0.01963	-52	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-47 (bg)	-1.845	-69	-48	Yes	14	7.143	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-17S (bg)	0.12	74	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-18S (bg)	-0.07527	-79	-63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-211 (bg)	1.218	82	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-5D (bg)	-2.169	-74	-63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	GWA-2 (bg)	4.423	71	53	Yes	15	6.667	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-1D (bg)	0.7142	68	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-11 (bg)	-0.1058	-73	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-47 (bg)	-0.4824	-58	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-17S (bg)	0.4027	92	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-20S (bg)	0.1782	82	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-5D (bg)	-0.8704	-97	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-3D (bg)	-0.05961	-72	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-3I (bg)	-0.05007	-72	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-47 (bg)	-21.6	-78	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-39 (bg)	-3.378	-51	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-40 (bg)	-10.75	-65	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5D (bg)	-3.658	-104	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5I (bg)	0.09609	85	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	GWA-2 (bg)	23.3	74	53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-1D (bg)	1.025	88	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-3D (bg)	0.4885	74	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWC-46A	-69.55	-92	-68	Yes	18	5.556	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-47 (bg)	-15.69	-67	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-40 (bg)	-16.17	-53	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-5D (bg)	-17	-86	-63	Yes	17	0	n/a	n/a	0.01	NP



# Appendix III Trend Tests - All Results

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 11/2/2021, 5:03 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
<b>Boron, total (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-0.000923</b>	<b>-50</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron, total (mg/L)	YGWC-44	-0.0226	-36	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWC-45	0	-3	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-17S (bg)	0	1	63	No	17	11.76	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18I (bg)	0	-30	-63	No	17	76.47	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18S (bg)	0	0	63	No	17	17.65	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-20S (bg)	0	-13	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-21I (bg)	-0.005469	-53	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-39 (bg)	0.004253	27	48	No	14	7.143	n/a	n/a	0.01	NP
<b>Boron, total (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-0.01963</b>	<b>-52</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron, total (mg/L)	YGWA-4I (bg)	0	-11	-63	No	17	64.71	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5D (bg)	0.0001974	14	63	No	17	11.76	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5I (bg)	0	-39	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron, total (mg/L)	GWA-2 (bg)	0	11	53	No	15	60	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-14S (bg)	-0.0008768	-36	-63	No	17	11.76	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1D (bg)	0.00007668	10	63	No	17	29.41	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1I (bg)	0	-18	-63	No	17	70.59	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-2I (bg)	0	-14	-63	No	17	76.47	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-30I (bg)	0	-25	-63	No	17	82.35	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3D (bg)	0	-1	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3I (bg)	0	-21	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWC-46A	0.03192	15	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-1.845</b>	<b>-69</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>7.143</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWC-45	-0.04198	-5	-48	No	14	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-17S (bg)</b>	<b>0.12</b>	<b>74</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-18I (bg)	0.02122	10	63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-18S (bg)</b>	<b>-0.07527</b>	<b>-79</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-20S (bg)	0.06963	56	63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-21I (bg)</b>	<b>1.218</b>	<b>82</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-39 (bg)	0.6588	26	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-40 (bg)	-0.8022	-47	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-4I (bg)	0.2132	21	63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-2.169</b>	<b>-74</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-5I (bg)	0.07389	58	63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>GWA-2 (bg)</b>	<b>4.423</b>	<b>71</b>	<b>53</b>	<b>Yes</b>	<b>15</b>	<b>6.667</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-14S (bg)	-0.01957	-45	-63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-1D (bg)</b>	<b>0.7142</b>	<b>68</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium, total (mg/L)</b>	<b>YGWA-1I (bg)</b>	<b>-0.1058</b>	<b>-73</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-2I (bg)	0.3107	22	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-30I (bg)	0	0	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3D (bg)	0.5989	46	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3I (bg)	0.5549	41	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWC-46A	2.626	47	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWC-52	-4.486	-5	-14	No	6	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-0.4824</b>	<b>-58</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWC-44	0.2235	31	48	No	14	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-17S (bg)</b>	<b>0.4027</b>	<b>92</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWA-18I (bg)	0.06344	47	63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-18S (bg)	0.2062	62	63	No	17	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-20S (bg)</b>	<b>0.1782</b>	<b>82</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWA-21I (bg)	-0.1349	-41	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-39 (bg)	0.3996	26	48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-40 (bg)	0.2116	37	48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-4I (bg)	0.1004	41	63	No	17	0	n/a	n/a	0.01	NP

# Appendix III Trend Tests - All Results

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 11/2/2021, 5:03 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
<b>Chloride, Total (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-0.8704</b>	<b>-97</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWA-5I (bg)	0	-3	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	GWA-2 (bg)	0.1877	43	53	No	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-14S (bg)	0.1776	42	63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-1D (bg)	-0.002869	-40	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-11 (bg)	-0.02701	-41	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-2I (bg)	-0.04401	-47	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-30I (bg)	-0.02202	-32	-63	No	17	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-3D (bg)</b>	<b>-0.05961</b>	<b>-72</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride, Total (mg/L)</b>	<b>YGWA-3I (bg)</b>	<b>-0.05007</b>	<b>-72</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWC-46A	-1.396	-49	-68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-21.6</b>	<b>-78</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-17S (bg)	0.1098	59	63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-18I (bg)	-0.1768	-60	-63	No	17	23.53	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-18S (bg)	-0.1647	-50	-63	No	17	11.76	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-20S (bg)	0	30	63	No	17	64.71	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-21I (bg)	-0.1968	-22	-63	No	17	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-39 (bg)</b>	<b>-3.378</b>	<b>-51</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-10.75</b>	<b>-65</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-4I (bg)	0.1495	44	63	No	17	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-3.658</b>	<b>-104</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-5I (bg)</b>	<b>0.09609</b>	<b>85</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>GWA-2 (bg)</b>	<b>23.3</b>	<b>74</b>	<b>53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-14S (bg)	0.08247	21	63	No	17	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-1D (bg)</b>	<b>1.025</b>	<b>88</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-1I (bg)	-0.2433	-23	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-2I (bg)	0.4455	27	63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-30I (bg)	-0.07072	-31	-63	No	17	11.76	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-3D (bg)</b>	<b>0.4885</b>	<b>74</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-3I (bg)	1.181	61	63	No	17	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-46A</b>	<b>-69.55</b>	<b>-92</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>5.556</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-15.69</b>	<b>-67</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWC-44	-11.5	-37	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-45	-3.103	-16	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-17S (bg)	5.4	32	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18I (bg)	-1.272	-13	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18S (bg)	0.4413	9	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-20S (bg)	3.135	31	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-21I (bg)	13.94	56	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-39 (bg)	25.58	41	48	No	14	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-16.17</b>	<b>-53</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWA-4I (bg)	0.3992	4	63	No	17	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-17</b>	<b>-86</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWA-5I (bg)	0	-1	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	GWA-2 (bg)	25.14	48	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-14S (bg)	1.46	17	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-1D (bg)	0.915	10	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-1I (bg)	-3.586	-32	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-2I (bg)	-2.761	-35	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-30I (bg)	1.885	20	63	No	17	11.76	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3D (bg)	1.346	10	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3I (bg)	1.702	14	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-46A	-83.44	-59	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-52	-70.72	-9	-14	No	6	0	n/a	n/a	0.01	NP

# Upper Tolerance Limits Summary Table

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 11/2/2021, 5:13 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0047	n/a	n/a	n/a	334	n/a	n/a	86.83	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	382	n/a	n/a	78.8	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.071	n/a	n/a	n/a	382	n/a	n/a	2.88	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	366	n/a	n/a	80.87	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	366	n/a	n/a	95.63	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0093	n/a	n/a	n/a	334	n/a	n/a	78.74	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.035	n/a	n/a	n/a	378	n/a	n/a	69.31	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.92	n/a	n/a	n/a	361	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride, total (mg/L)	n/a	0.68	n/a	n/a	n/a	381	n/a	n/a	67.98	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	336	n/a	n/a	83.63	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	361	n/a	n/a	27.15	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	290	n/a	n/a	93.1	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.014	n/a	n/a	n/a	325	n/a	n/a	60	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	364	n/a	n/a	92.03	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	300	n/a	n/a	96.67	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		0.0047	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		0.0005	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.92	6.92	6.92
Fluoride, Total (mg/L)	4		0.68	4	4
Lead, Total (mg/L)		0.015	0.0013	0.015	0.0013
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03
Mercury, Total (mg/L)	0.002		0.0002	0.002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014
Selenium, Total (mg/L)	0.05		0.005	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 11/2/2021, 5:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-45	0.003	0.0017	0.006	No	13	0.0029	0.0003606	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-46A	0.003	0.00029	0.006	No	16	0.002831	0.0006775	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-44	0.005	0.0007	0.01	No	15	0.003575	0.002088	66.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00072	0.01	No	15	0.003847	0.001979	73.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-46A	0.005	0.00087	0.01	No	18	0.002228	0.001804	27.78	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-44	0.1153	0.09674	2	No	15	0.106	0.01366	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.07154	0.05813	2	No	15	0.06483	0.009899	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46A	0.04138	0.03051	2	No	18	0.03594	0.008986	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-52	0.021	0.019	2	No	6	0.01967	0.001033	0	None	No	0.0155	NP (normality)
Cadmium (mg/L)	YGWC-46A	0.0005	0.00012	0.005	No	15	0.0004227	0.0001602	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-45	0.0061	0.0006	0.1	No	13	0.004406	0.001721	76.92	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-52	0.005	0.00073	0.1	No	6	0.002922	0.002278	50	None	No	0.0155	NP (normality)
Cobalt (mg/L)	YGWC-44	0.004	0.0017	0.035	No	15	0.0033	0.002706	6.667	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0008626	0.0006388	0.035	No	14	0.0007507	0.000158	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46A	0.02754	0.007995	0.035	No	18	0.01777	0.01615	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-52	0.002193	0.001174	0.035	No	6	0.001683	0.000371	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.063	0.2869	6.92	No	15	0.7386	0.6373	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.556	0.9342	6.92	No	15	1.245	0.459	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46A	1.706	0.9912	6.92	No	18	1.349	0.5911	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-52	0.852	0.268	6.92	No	5	0.6562	0.2633	0	None	No	0.031	NP (normality)
Fluoride, total (mg/L)	YGWC-44	0.12	0.07	4	No	16	0.09563	0.0175	81.25	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	YGWC-45	0.22	0.075	4	No	16	0.1685	0.1664	25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	YGWC-46A	0.13	0.08	4	No	19	0.1099	0.067	26.32	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-45	0.001	0.0001	0.015	No	13	0.0009308	0.0002496	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-46A	0.001	0.000044	0.015	No	16	0.0009403	0.000239	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-52	0.001	0.00006	0.015	No	6	0.0003838	0.0004774	33.33	None	No	0.0155	NP (normality)
Lithium (mg/L)	YGWC-44	0.01344	0.01238	0.04	No	15	0.01291	0.0007842	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.0147	0.012	0.04	No	15	0.01328	0.001594	0	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-46A	0.01176	0.008917	0.04	No	18	0.01034	0.00235	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-52	0.004758	0.004076	0.04	No	6	0.004417	0.0002483	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0002	0.0002	0.002	No	11	0.0001883	0.00003889	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-46A	0.0002	0.00007	0.002	No	13	0.00019	0.00003606	92.31	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.0005	0.1	No	15	0.009367	0.002453	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.01	0.0012	0.1	No	15	0.00316	0.003555	20	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-46A	0.0039	0.0015	0.1	No	18	0.0034	0.003118	16.67	None	No	0.01	NP (normality)
Thallium (mg/L)	YGWC-44	0.001	0.00008	0.002	No	13	0.0009292	0.0002552	92.31	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-46A	0.001	0.000073	0.002	No	15	0.0009382	0.0002394	93.33	None	No	0.01	NP (NDs)

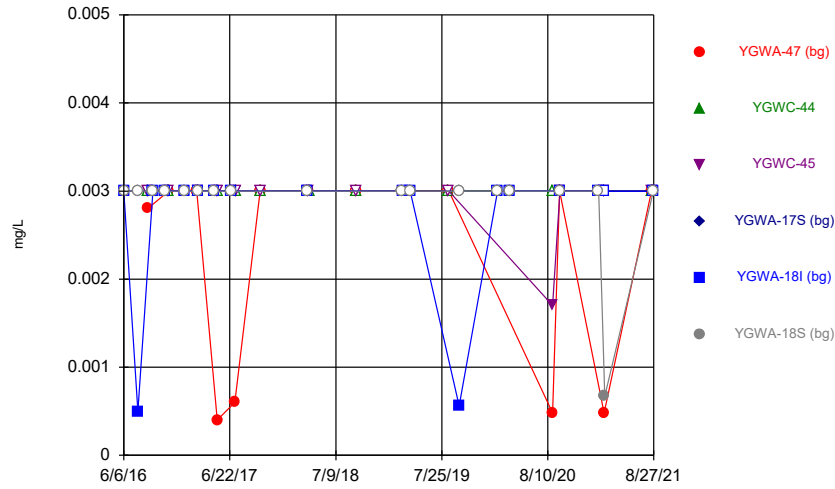
# State Confidence Intervals - All Results (No Significant)

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 11/2/2021, 5:25 PM

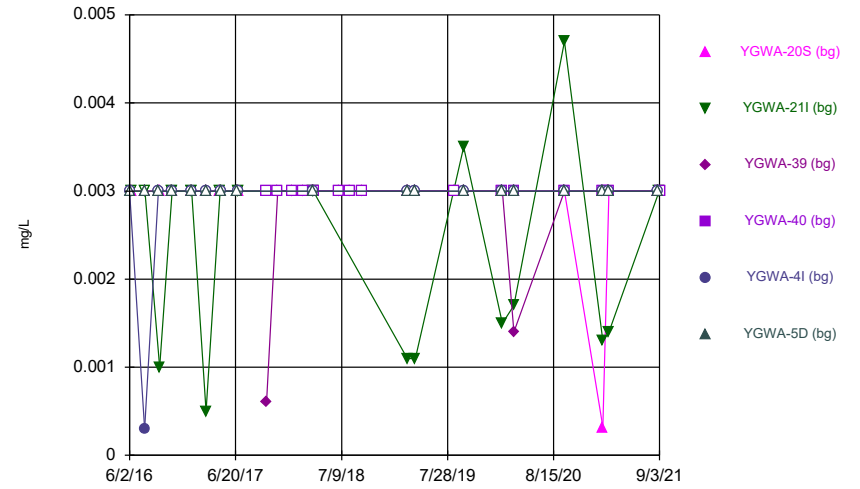
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-45	0.003	0.0017	0.006	No	13	0.0029	0.0003606	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-46A	0.003	0.00029	0.006	No	16	0.002831	0.0006775	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-44	0.005	0.0007	0.01	No	15	0.003575	0.002088	66.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00072	0.01	No	15	0.003847	0.001979	73.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-46A	0.005	0.00087	0.01	No	18	0.002228	0.001804	27.78	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-44	0.1153	0.09674	2	No	15	0.106	0.01366	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.07154	0.05813	2	No	15	0.06483	0.009899	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46A	0.04138	0.03051	2	No	18	0.03594	0.008986	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-52	0.021	0.019	2	No	6	0.01967	0.001033	0	None	No	0.0155	NP (normality)
Cadmium (mg/L)	YGWC-46A	0.0005	0.00012	0.005	No	15	0.0004227	0.0001602	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-45	0.0061	0.0006	0.1	No	13	0.004406	0.001721	76.92	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-52	0.005	0.00073	0.1	No	6	0.002922	0.002278	50	None	No	0.0155	NP (normality)
Cobalt (mg/L)	YGWC-44	0.004	0.0017	0.035	No	15	0.0033	0.002706	6.667	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0008626	0.0006388	0.035	No	14	0.0007507	0.000158	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46A	0.02754	0.007995	0.035	No	18	0.01777	0.01615	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-52	0.002193	0.001174	0.035	No	6	0.001683	0.000371	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.063	0.2869	6.92	No	15	0.7386	0.6373	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.556	0.9342	6.92	No	15	1.245	0.459	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46A	1.706	0.9912	6.92	No	18	1.349	0.5911	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-52	0.852	0.268	6.92	No	5	0.6562	0.2633	0	None	No	0.031	NP (normality)
Fluoride, total (mg/L)	YGWC-44	0.12	0.07	4	No	16	0.09563	0.0175	81.25	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	YGWC-45	0.22	0.075	4	No	16	0.1685	0.1664	25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	YGWC-46A	0.13	0.08	4	No	19	0.1099	0.067	26.32	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-45	0.001	0.0001	0.0013	No	13	0.0009308	0.0002496	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-46A	0.001	0.000044	0.0013	No	16	0.0009403	0.000239	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-52	0.001	0.00006	0.0013	No	6	0.0003838	0.0004774	33.33	None	No	0.0155	NP (normality)
Lithium (mg/L)	YGWC-44	0.01344	0.01238	0.03	No	15	0.01291	0.0007842	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.0147	0.012	0.03	No	15	0.01328	0.001594	0	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-46A	0.01176	0.008917	0.03	No	18	0.01034	0.00235	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-52	0.004758	0.004076	0.03	No	6	0.004417	0.0002483	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0002	0.0002	0.002	No	11	0.0001883	0.00003889	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-46A	0.0002	0.00007	0.002	No	13	0.00019	0.00003606	92.31	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.0005	0.014	No	15	0.009367	0.002453	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.01	0.0012	0.014	No	15	0.00316	0.003555	20	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-46A	0.0039	0.0015	0.014	No	18	0.0034	0.003118	16.67	None	No	0.01	NP (normality)
Thallium (mg/L)	YGWC-44	0.001	0.00008	0.002	No	13	0.0009292	0.0002552	92.31	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-46A	0.001	0.000073	0.002	No	15	0.0009382	0.0002394	93.33	None	No	0.01	NP (NDs)

FIGURE A.

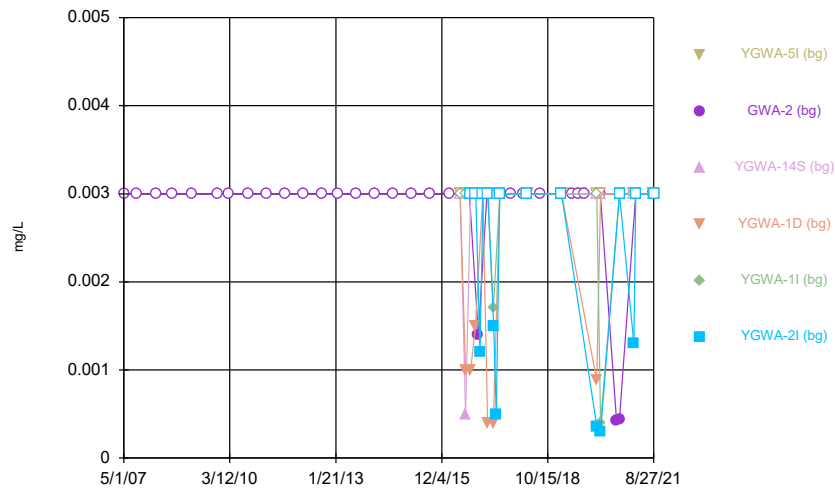
### Time Series



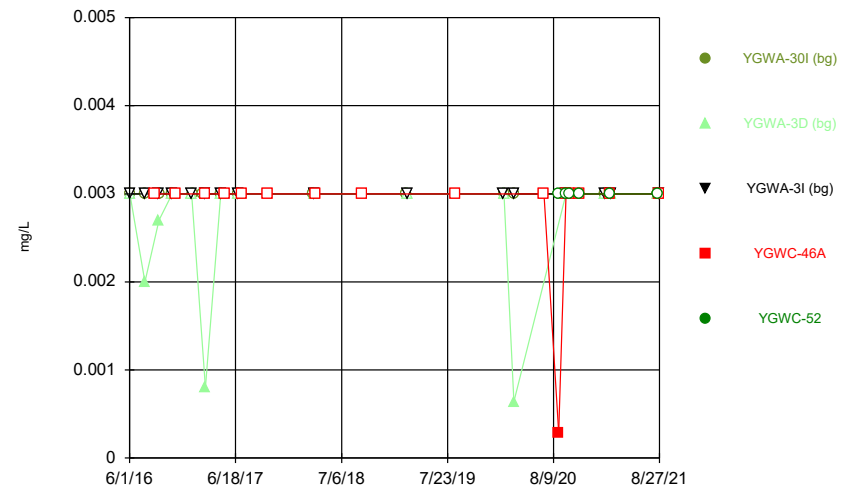
### Time Series



### Time Series

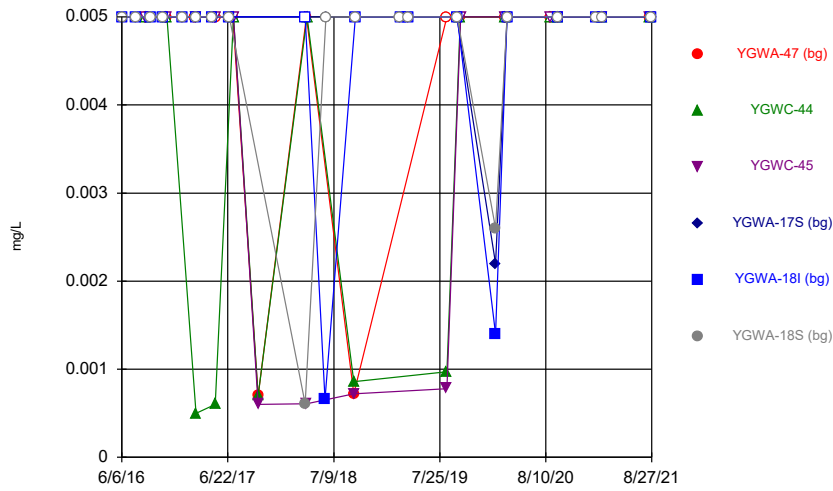


### Time Series



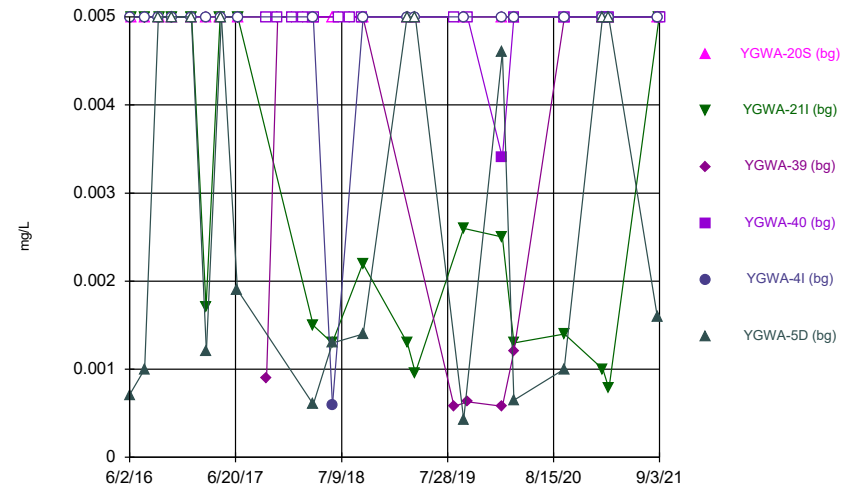


Time Series



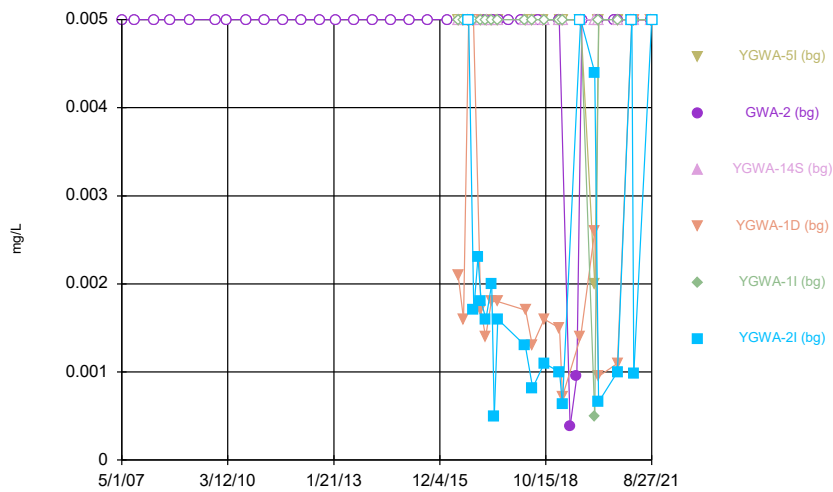
Constituent: Arsenic Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



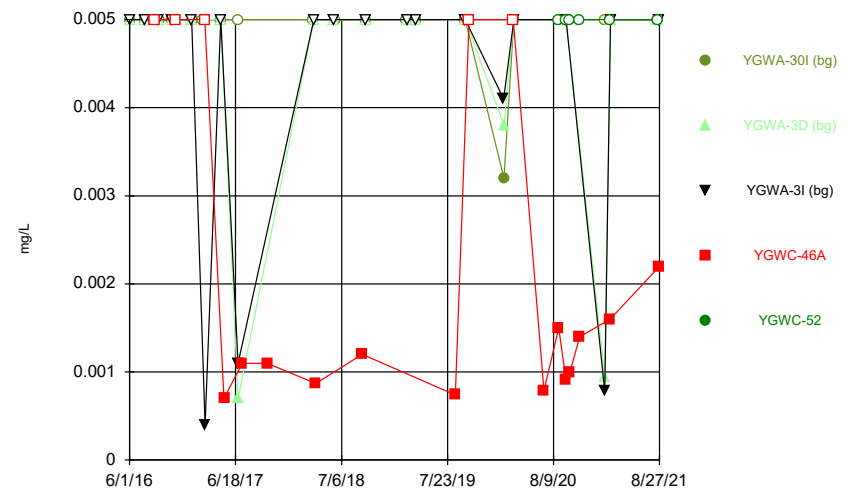
Constituent: Arsenic Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



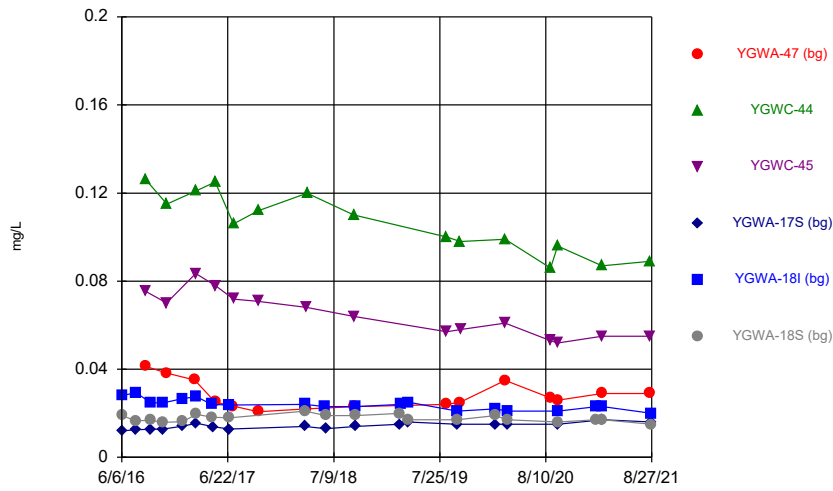
Constituent: Arsenic Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



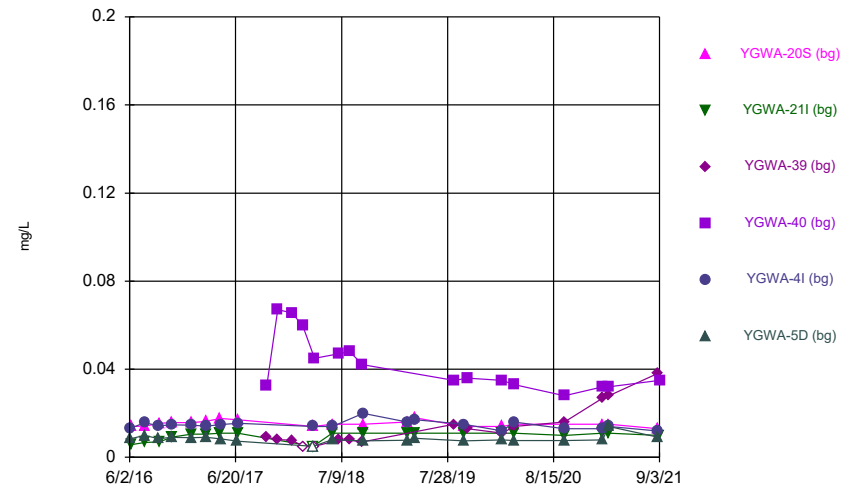
Constituent: Arsenic Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



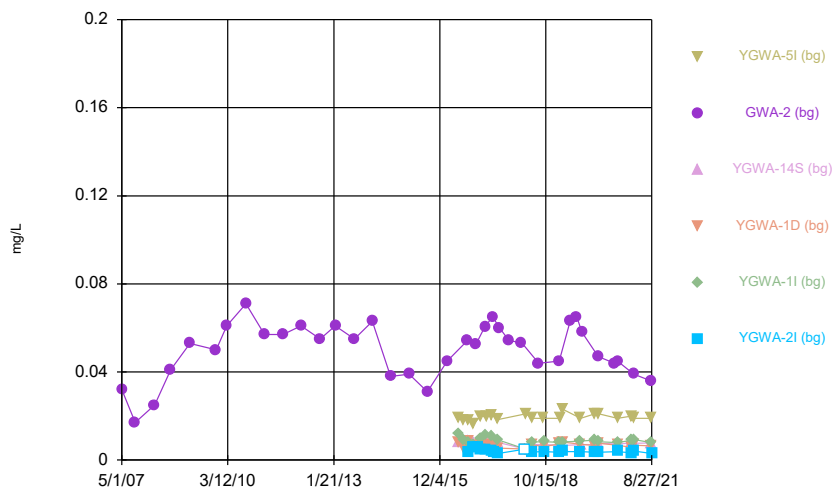
Constituent: Barium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



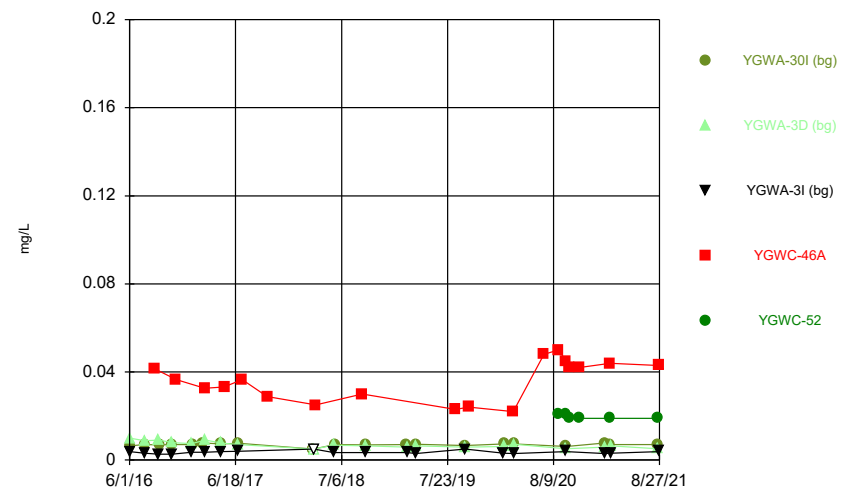
Constituent: Barium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



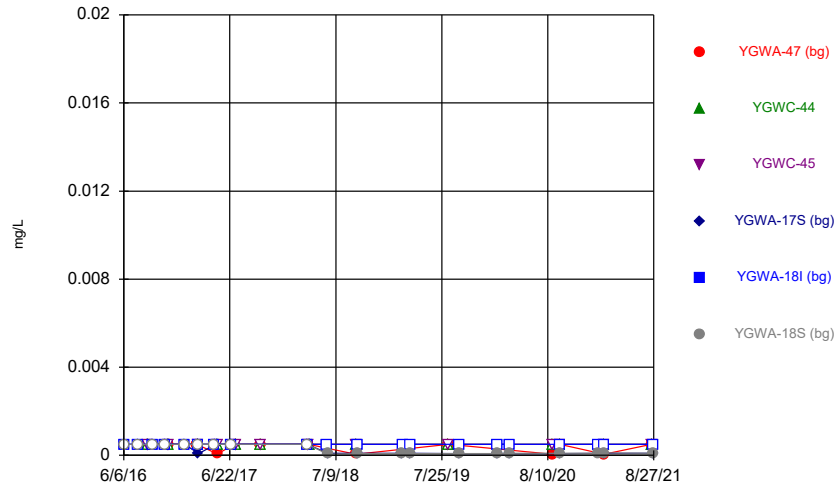
Constituent: Barium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



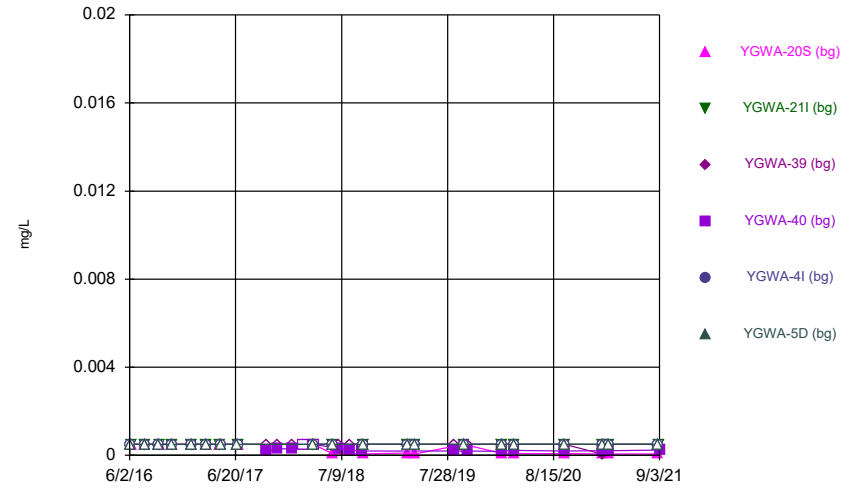
Constituent: Barium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



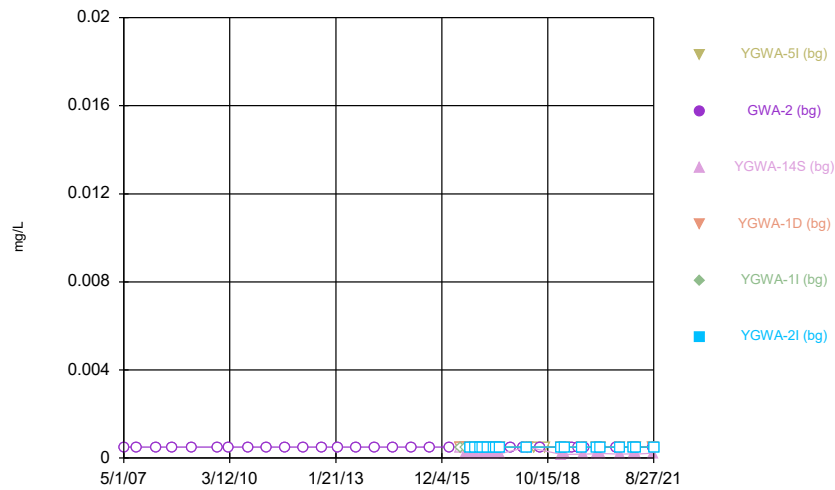
Constituent: Beryllium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



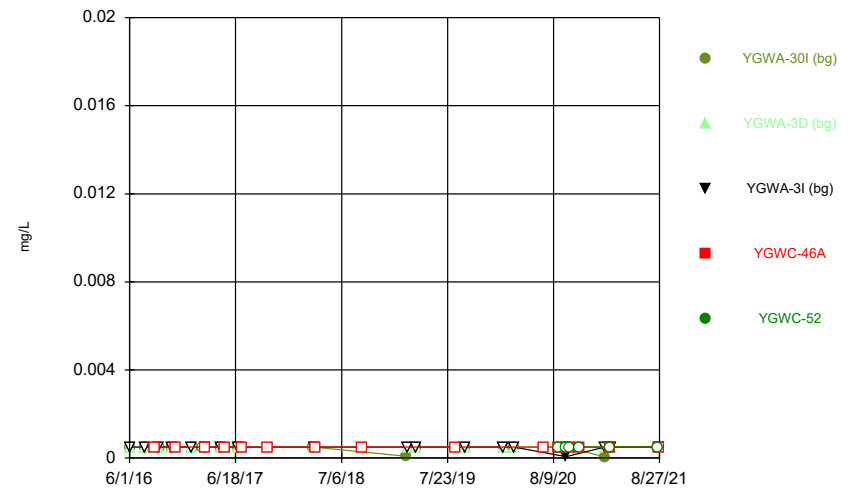
Constituent: Beryllium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



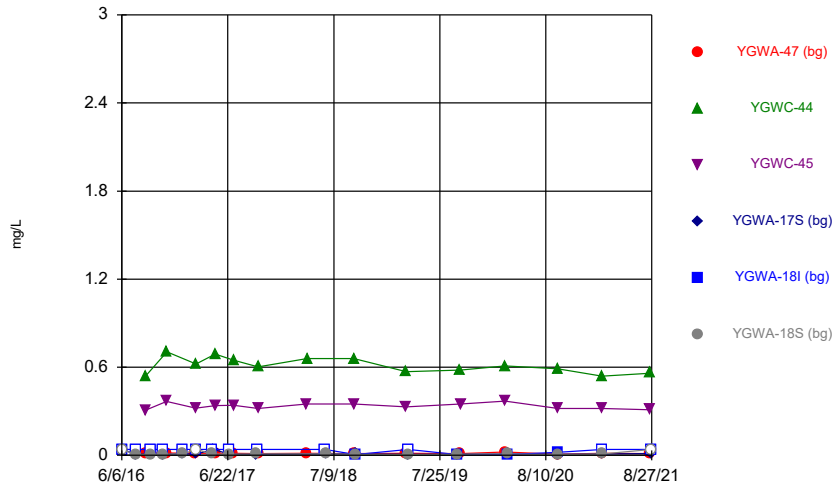
Constituent: Beryllium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



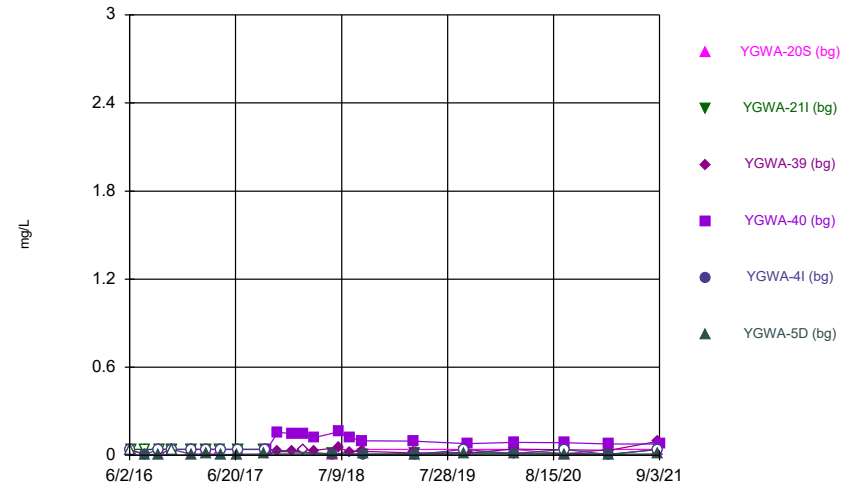
Constituent: Beryllium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



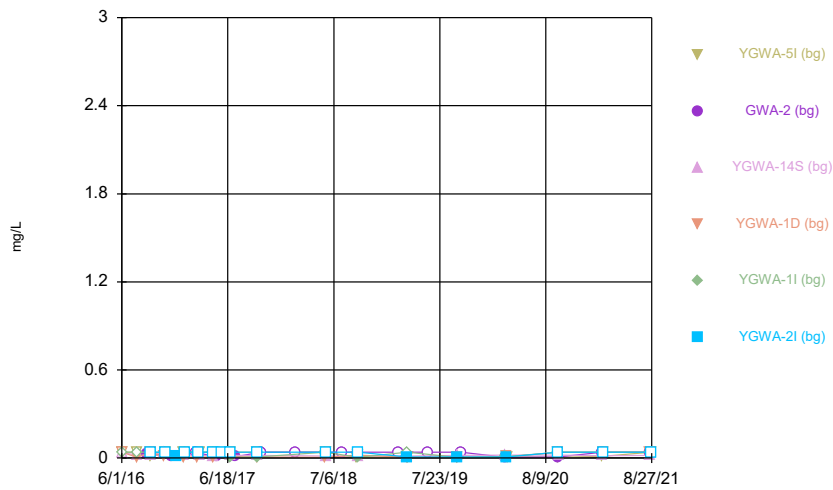
Constituent: Boron, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



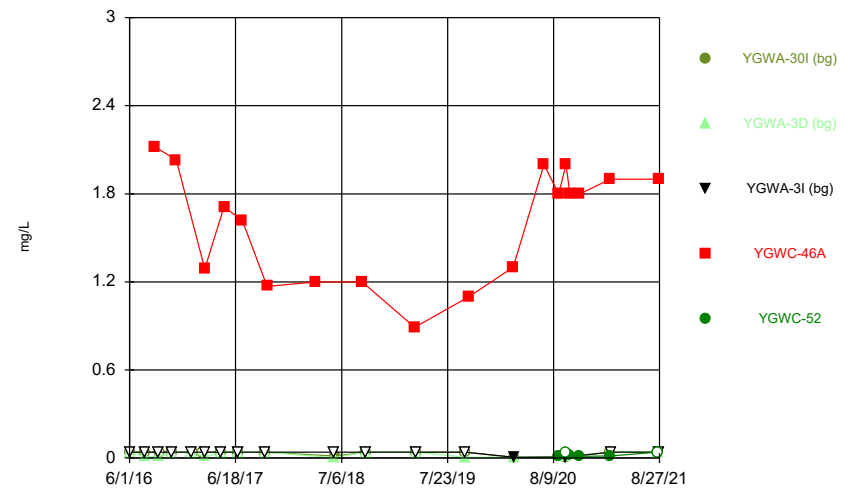
Constituent: Boron, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



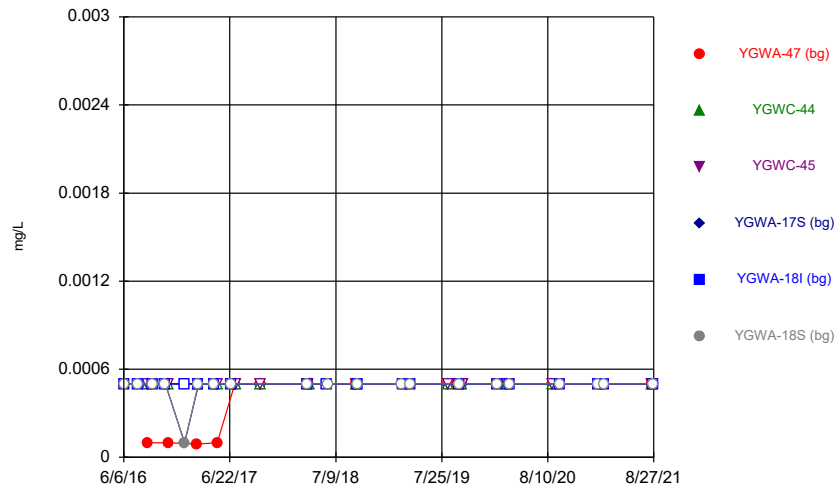
Constituent: Boron, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



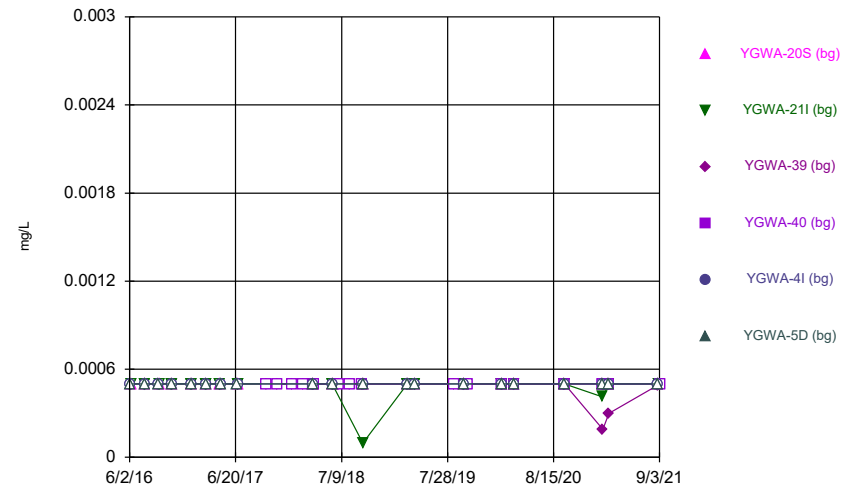
Constituent: Boron, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



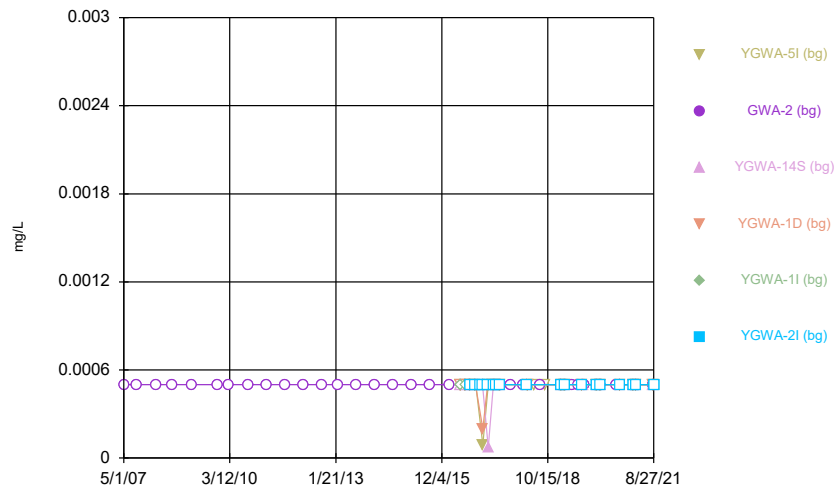
Constituent: Cadmium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



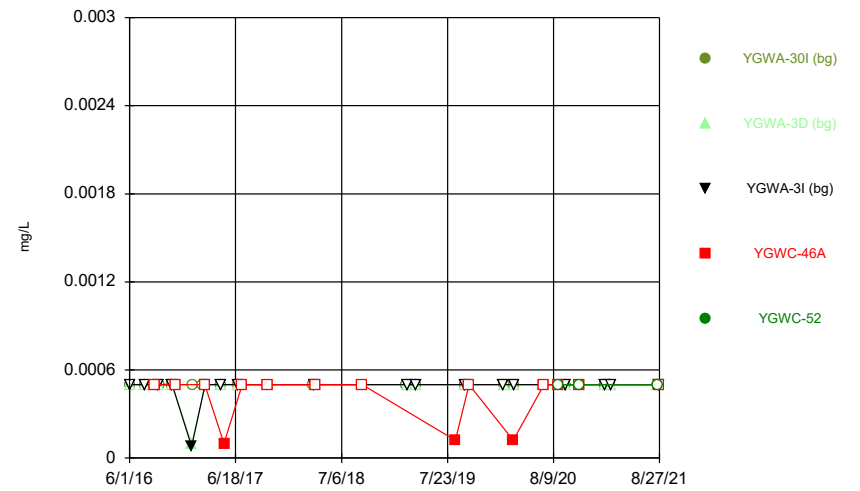
Constituent: Cadmium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



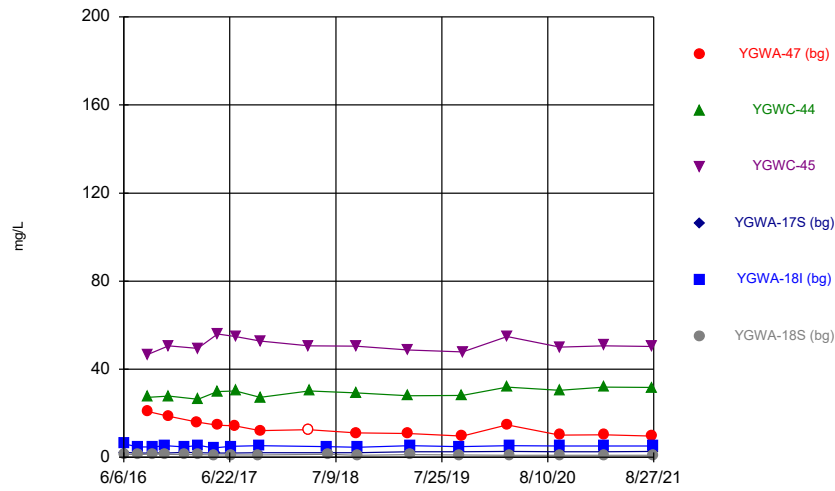
Constituent: Cadmium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



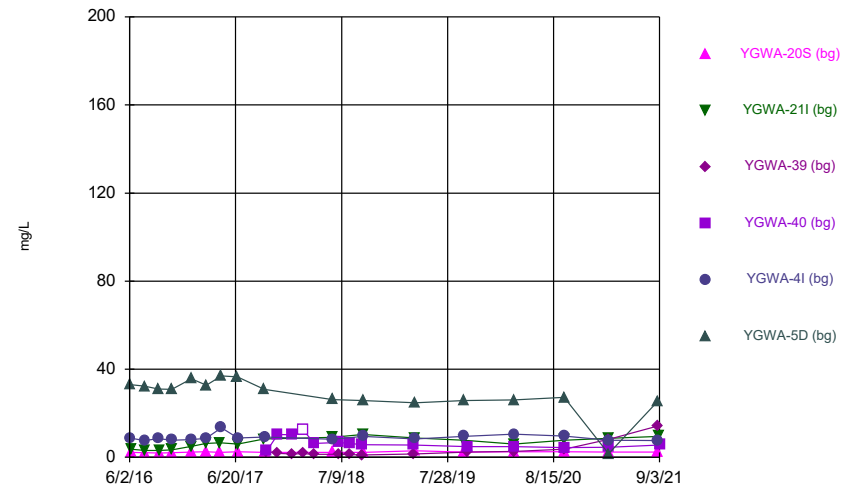
Constituent: Cadmium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



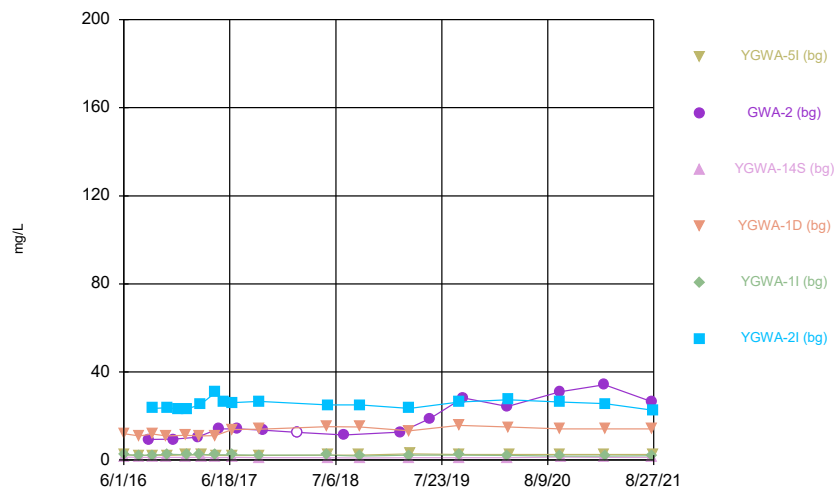
Constituent: Calcium, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



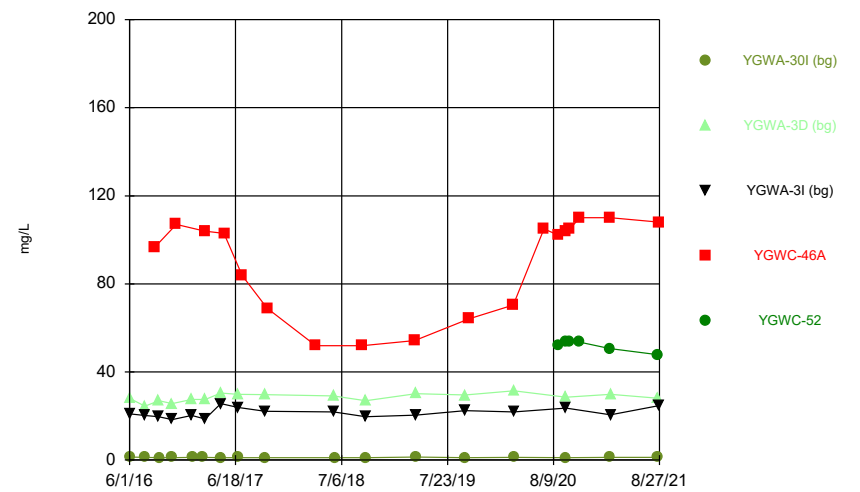
Constituent: Calcium, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



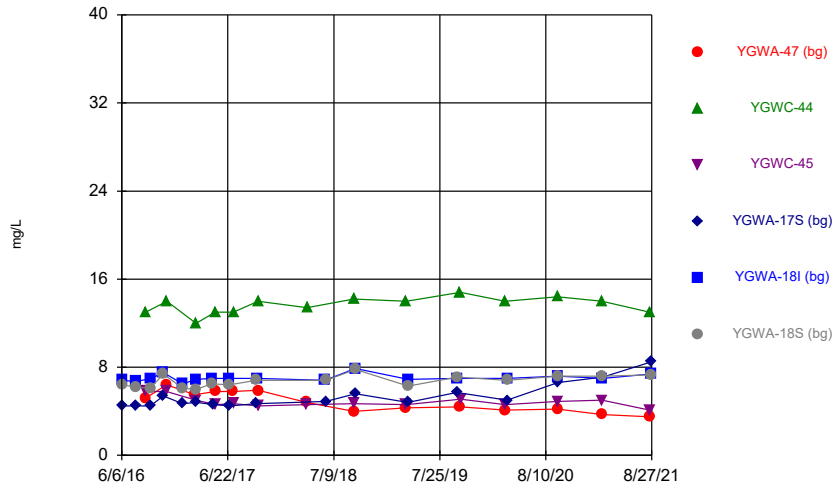
Constituent: Calcium, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



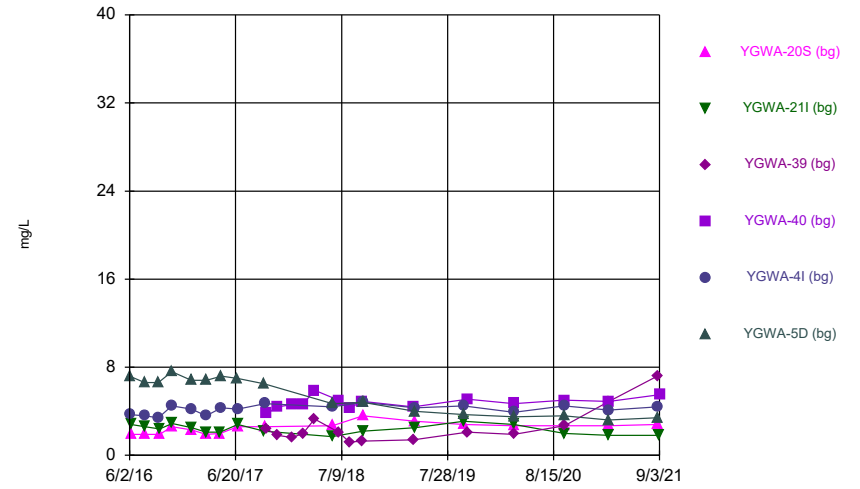
Constituent: Calcium, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



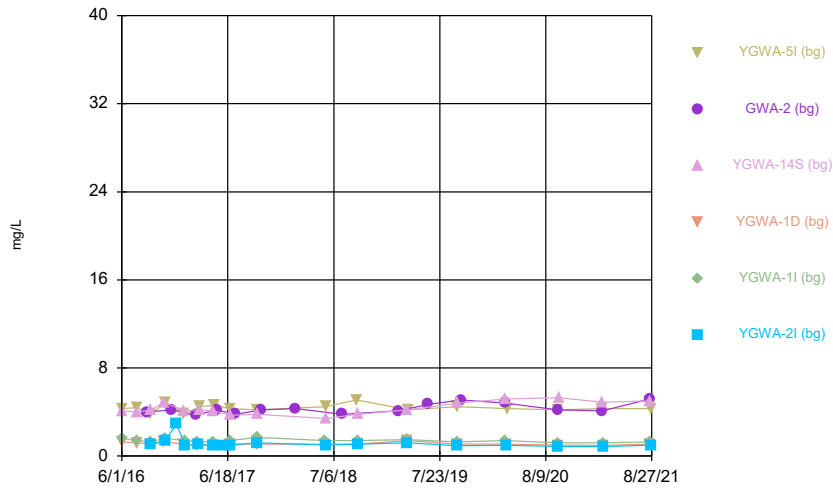
Constituent: Chloride, Total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



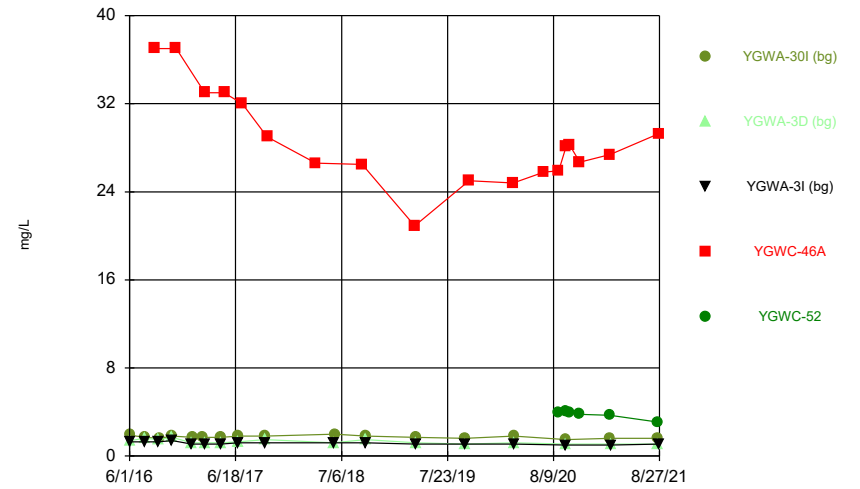
Constituent: Chloride, Total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



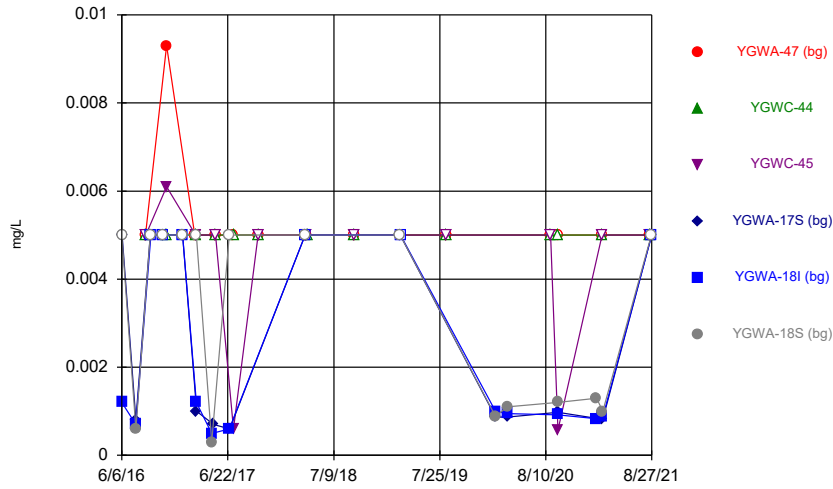
Constituent: Chloride, Total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



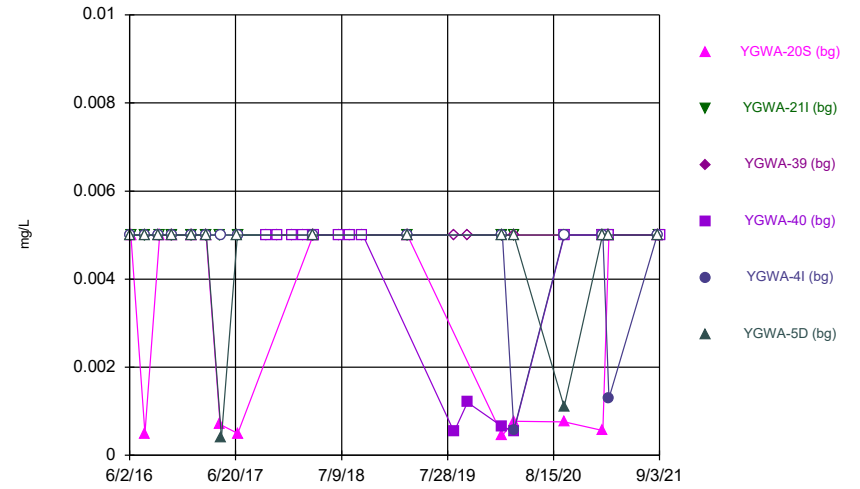
Constituent: Chloride, Total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



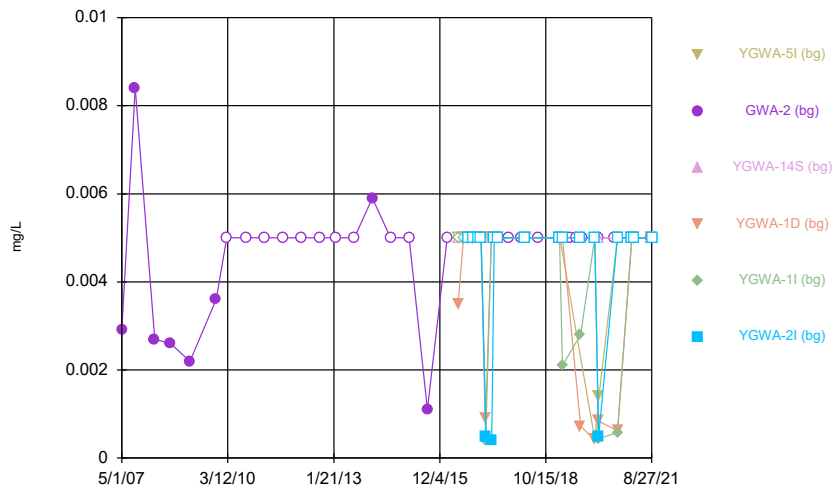
Constituent: Chromium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



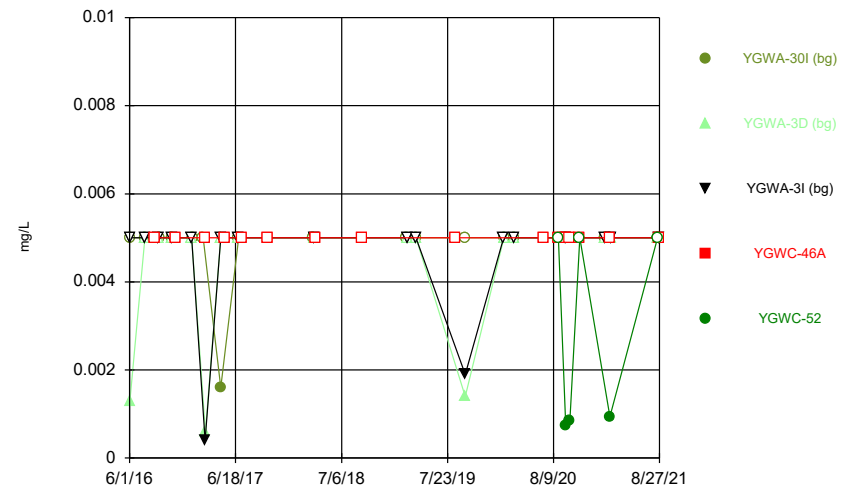
Constituent: Chromium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



Constituent: Chromium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

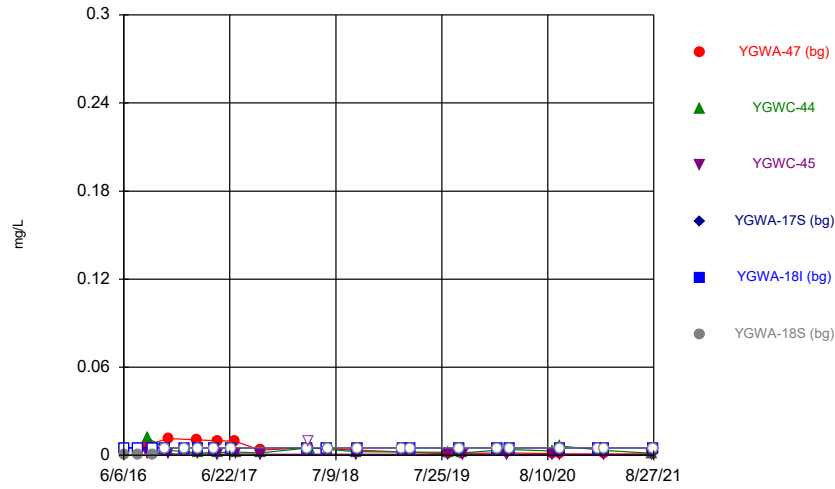
Time Series



Constituent: Chromium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

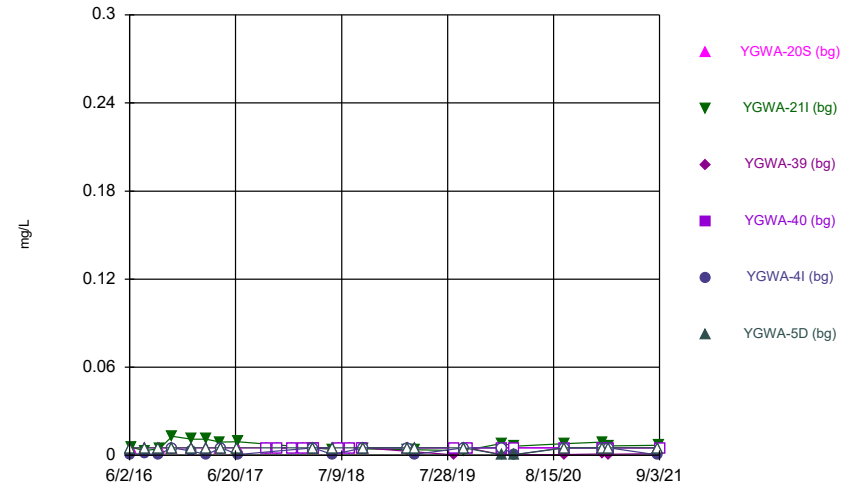


### Time Series



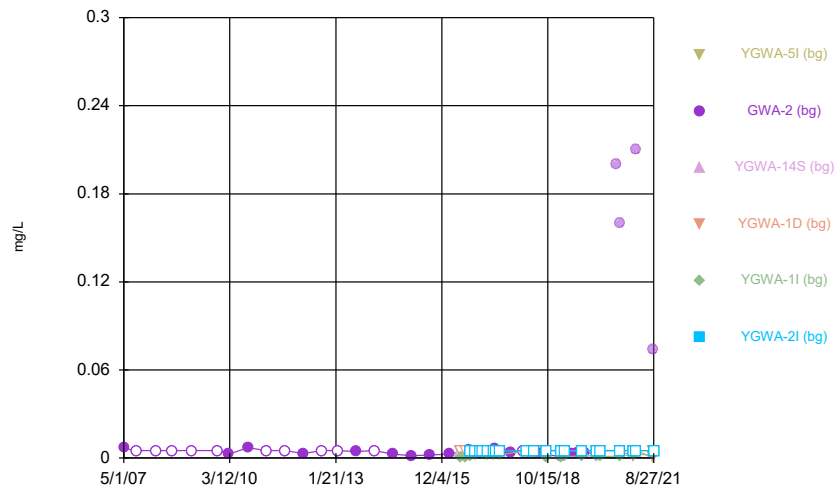
Constituent: Cobalt Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



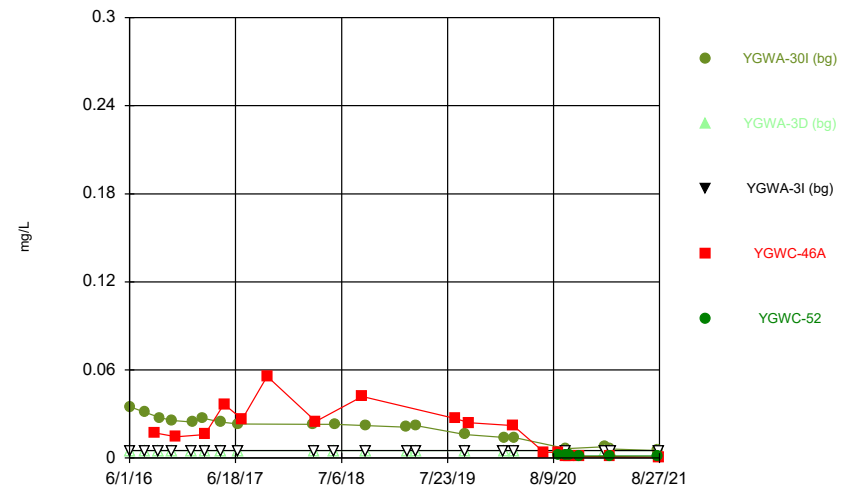
Constituent: Cobalt Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



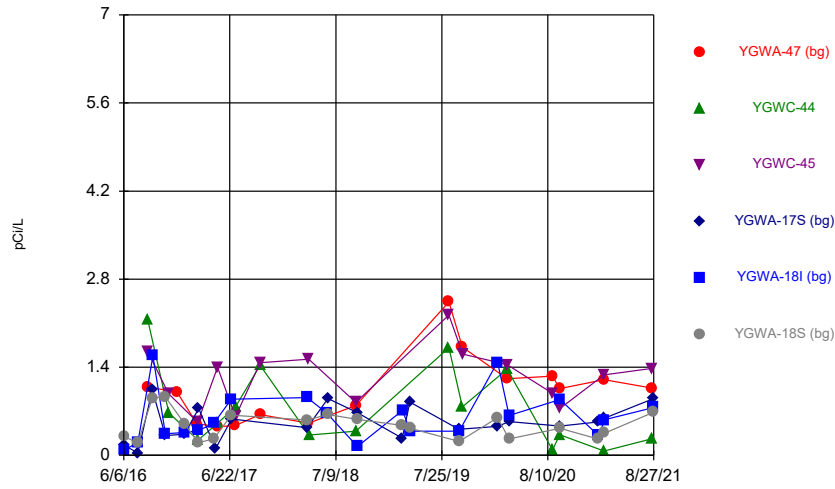
Constituent: Cobalt Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



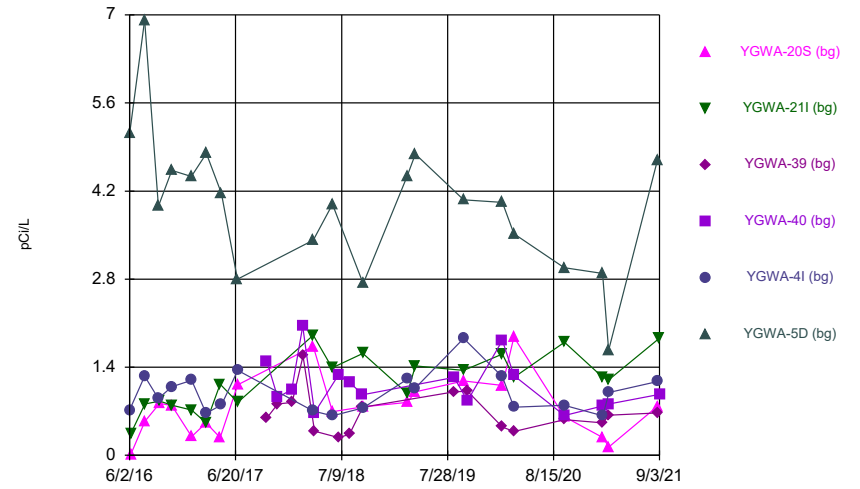
Constituent: Cobalt Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



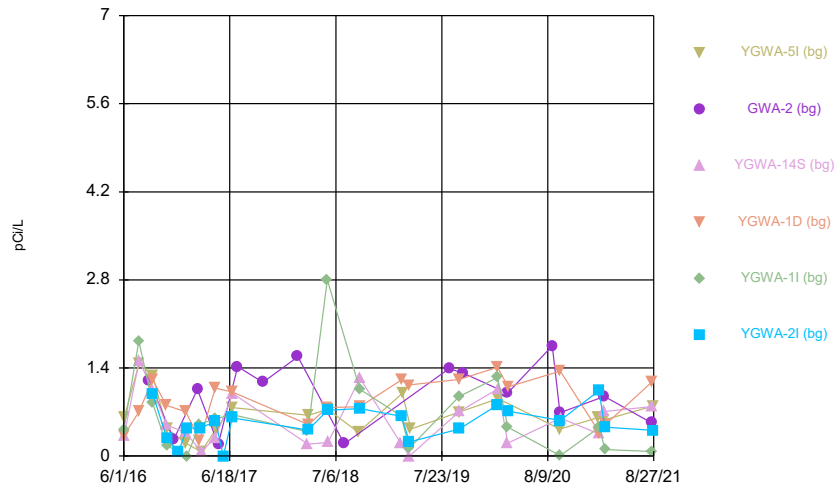
Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



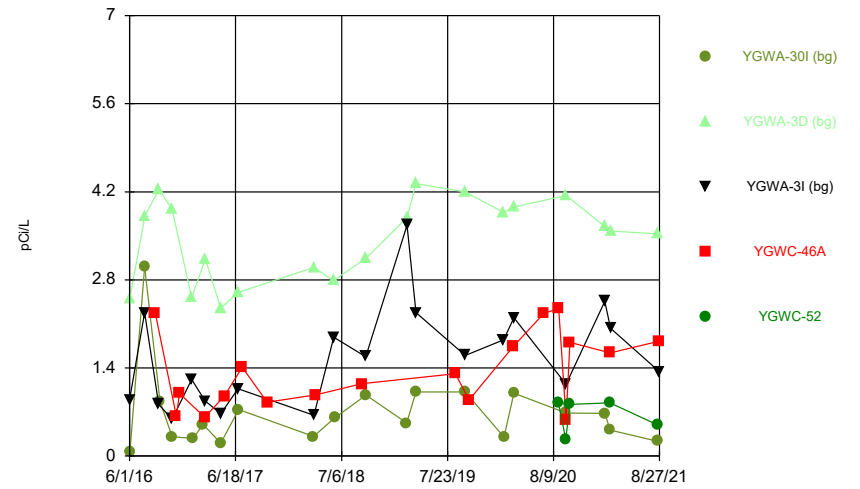
Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



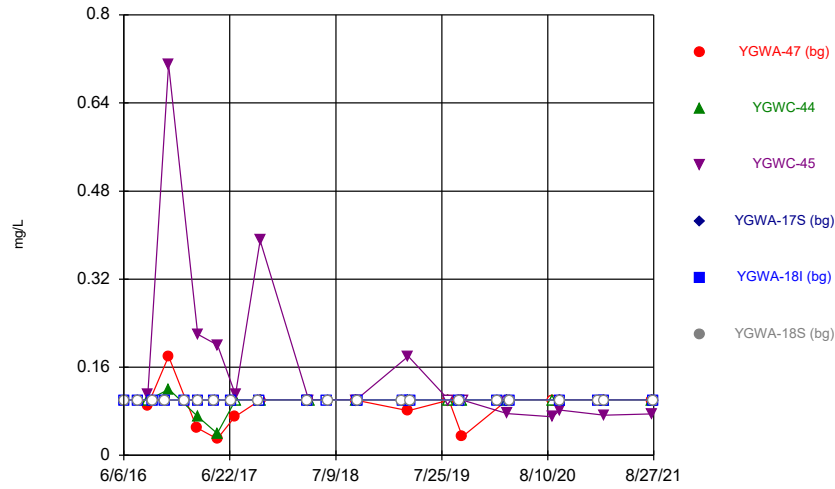
Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



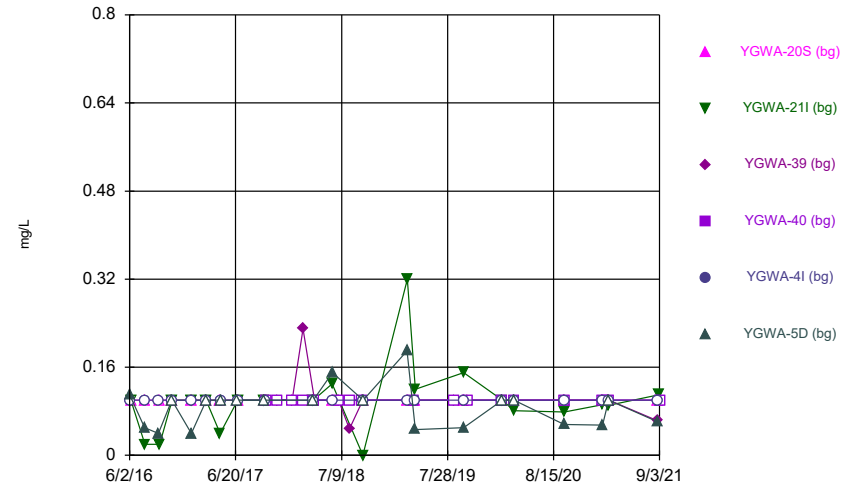
Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



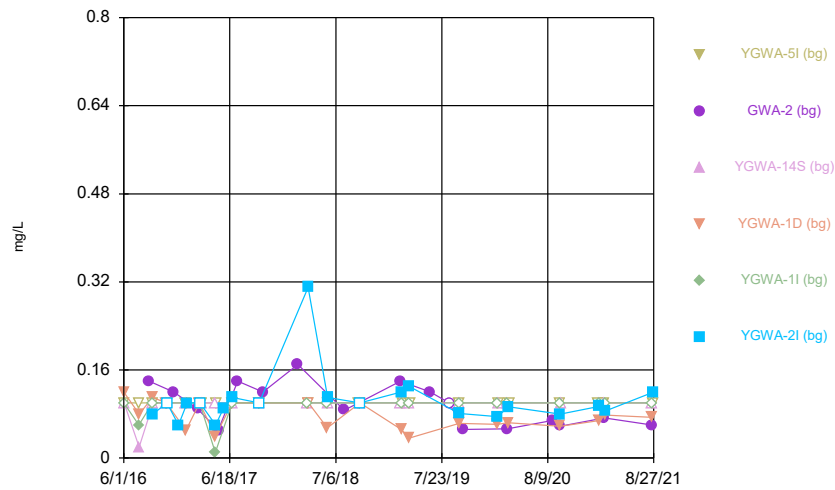
Constituent: Fluoride, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



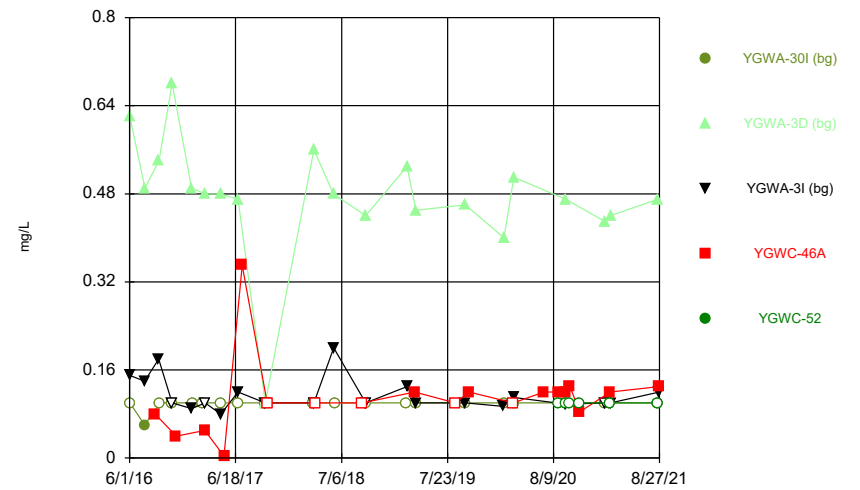
Constituent: Fluoride, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



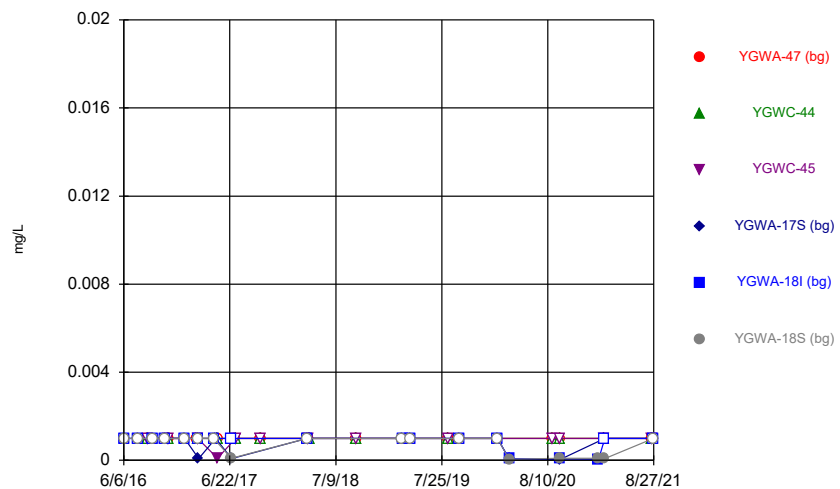
Constituent: Fluoride, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



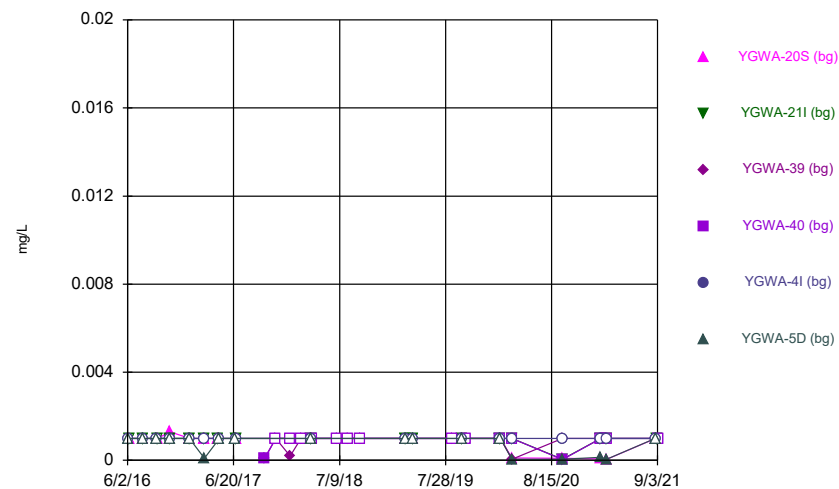
Constituent: Fluoride, total Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



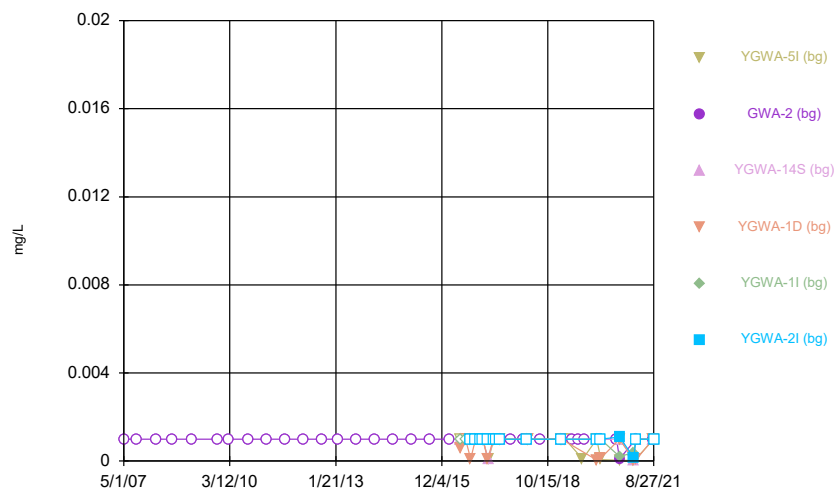
Constituent: Lead Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



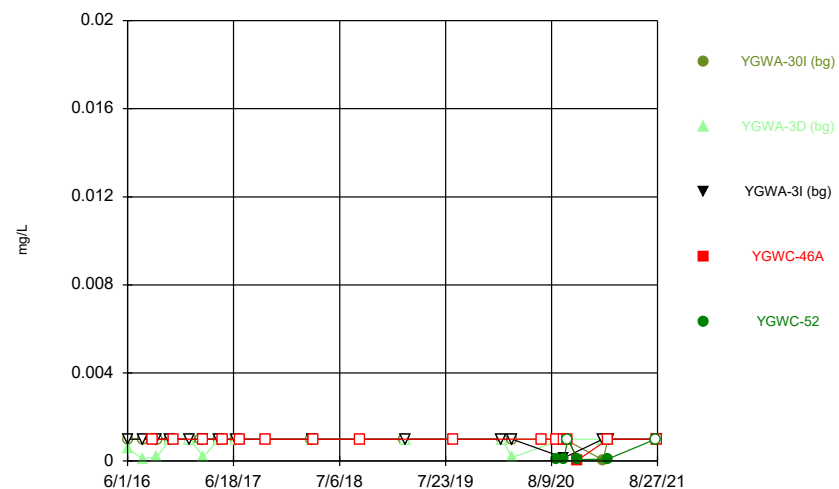
Constituent: Lead Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



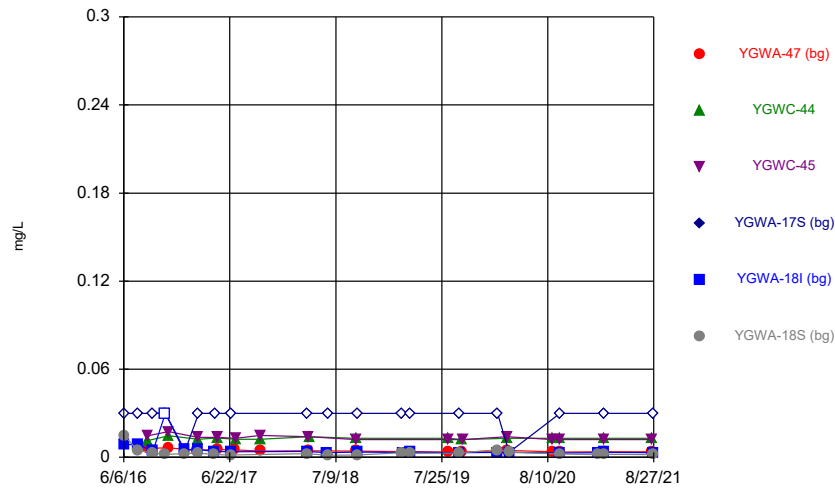
Constituent: Lead Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



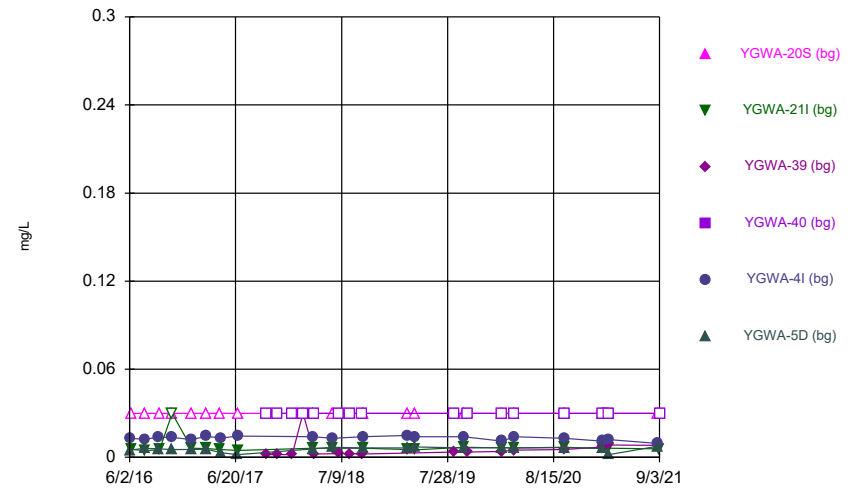
Constituent: Lead Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



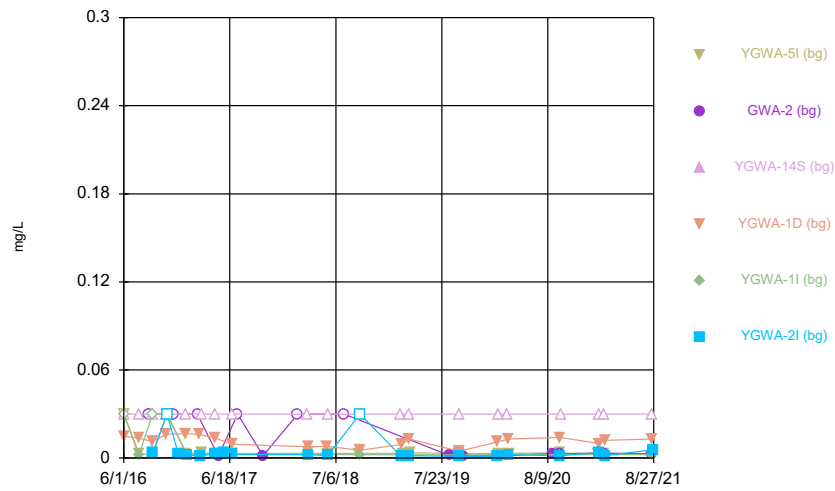
Constituent: Lithium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



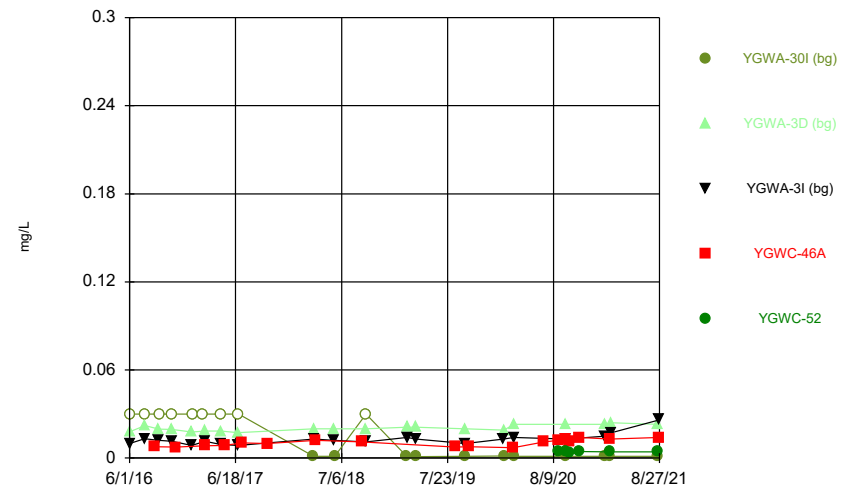
Constituent: Lithium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



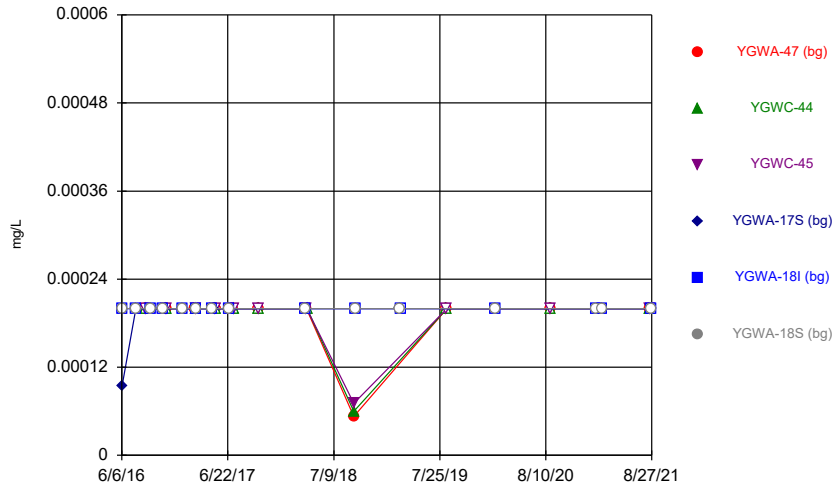
Constituent: Lithium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



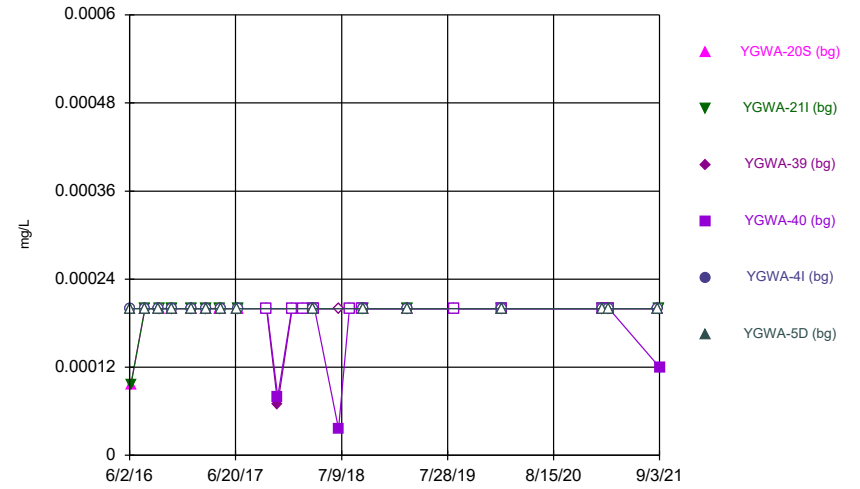
Constituent: Lithium Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



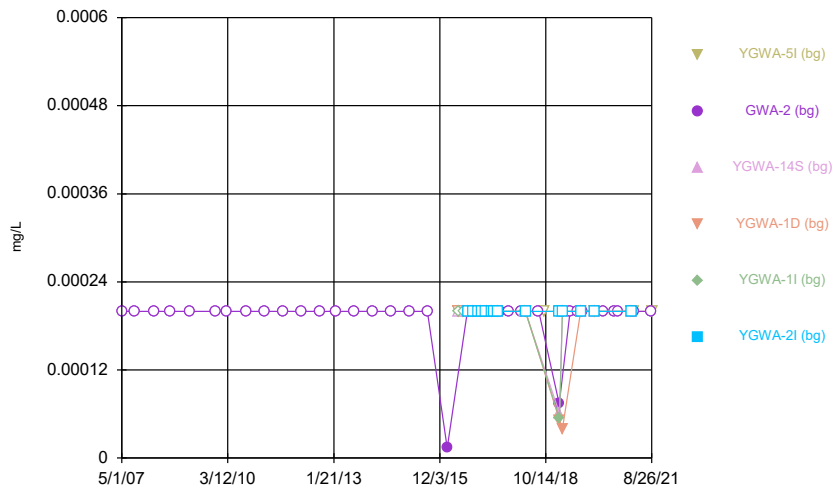
Constituent: Mercury Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



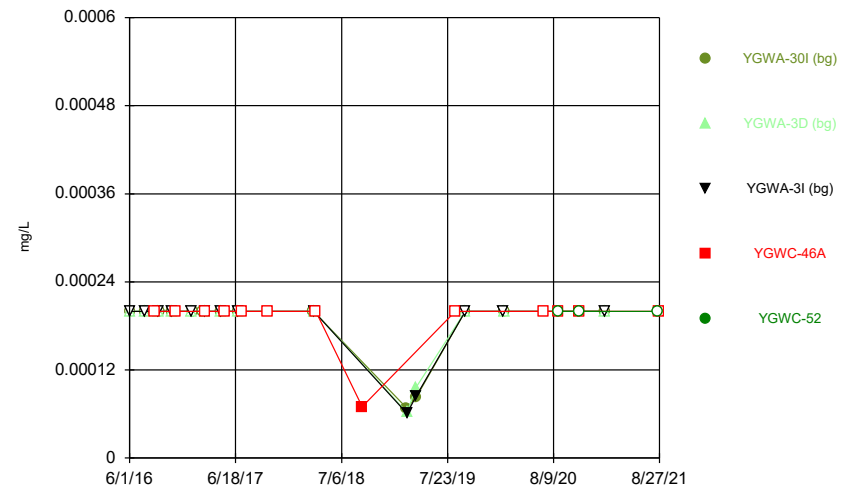
Constituent: Mercury Analysis Run 11/2/2021 4:36 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



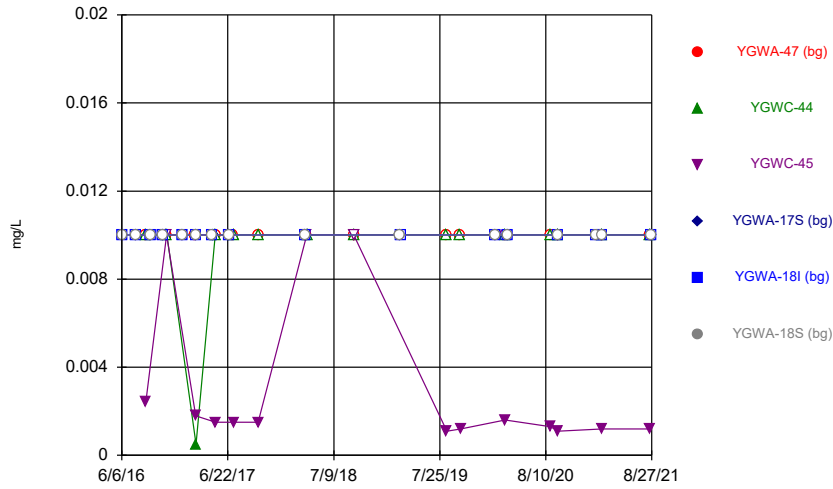
Constituent: Mercury Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



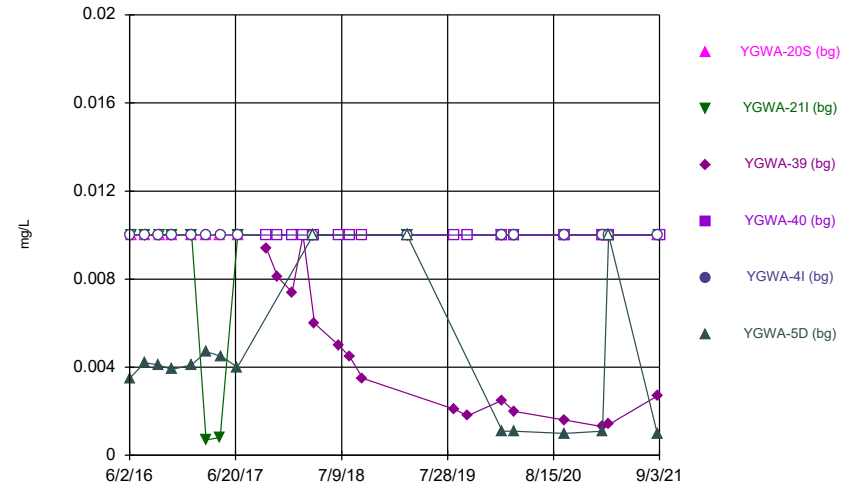
Constituent: Mercury Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



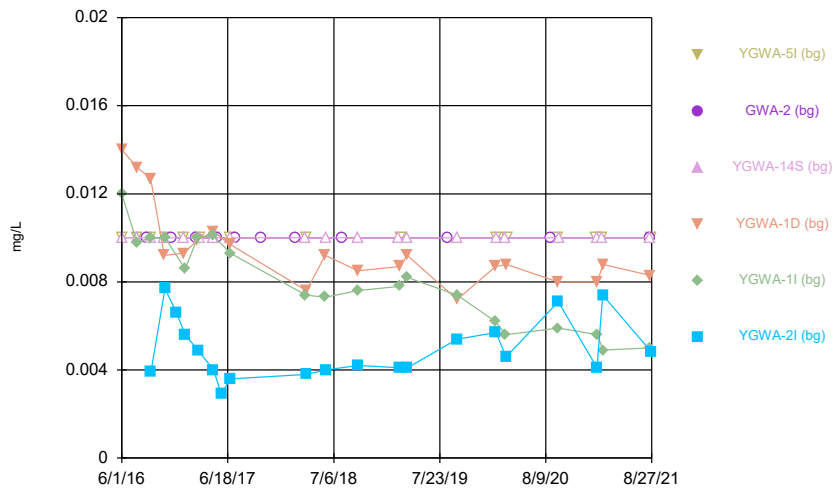
Constituent: Molybdenum Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



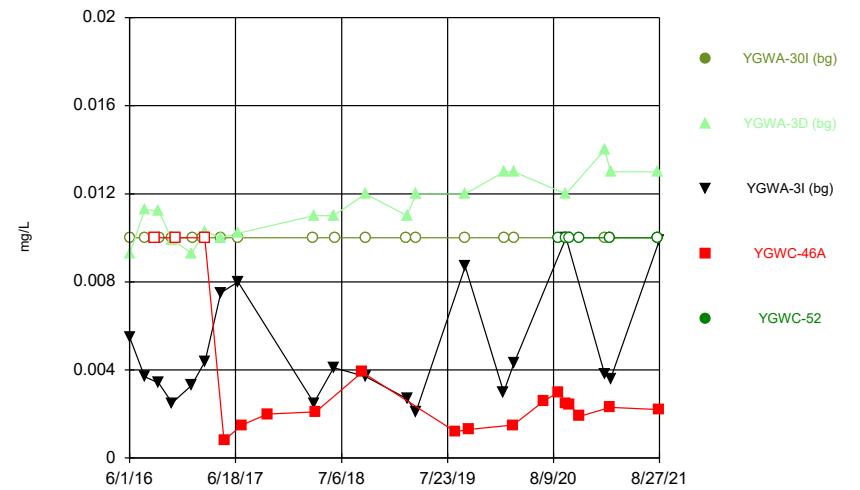
Constituent: Molybdenum Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



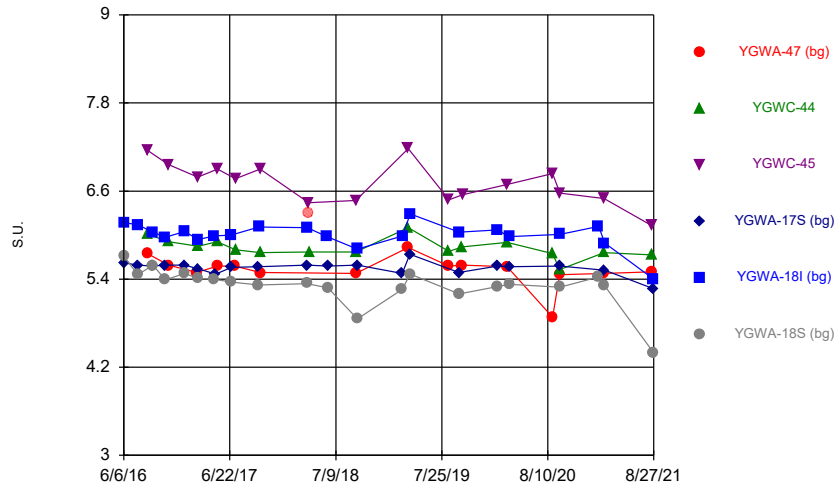
Constituent: Molybdenum Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



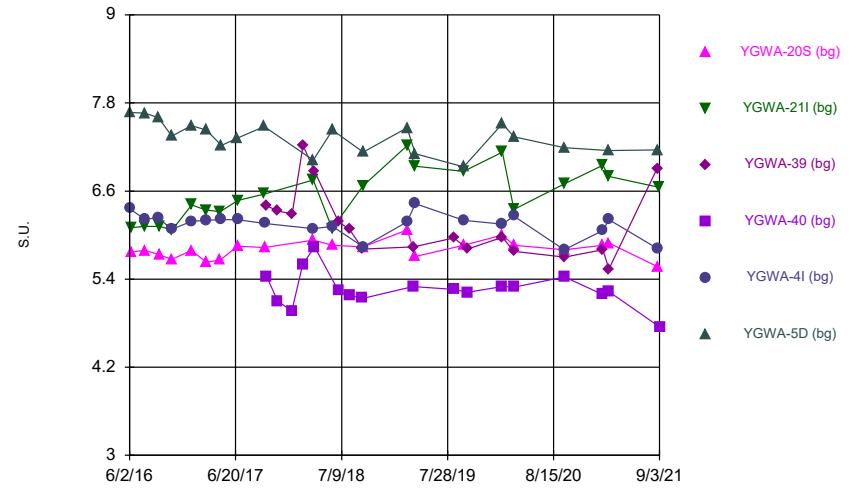
Constituent: Molybdenum Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



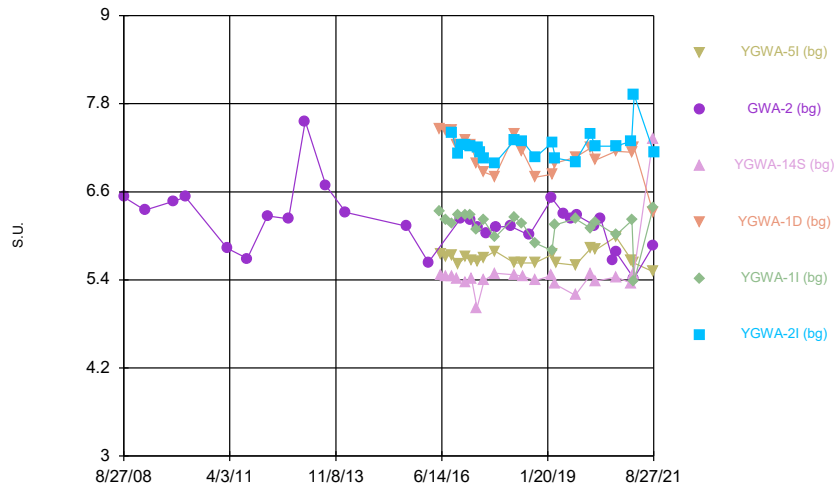
Constituent: pH, Field Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



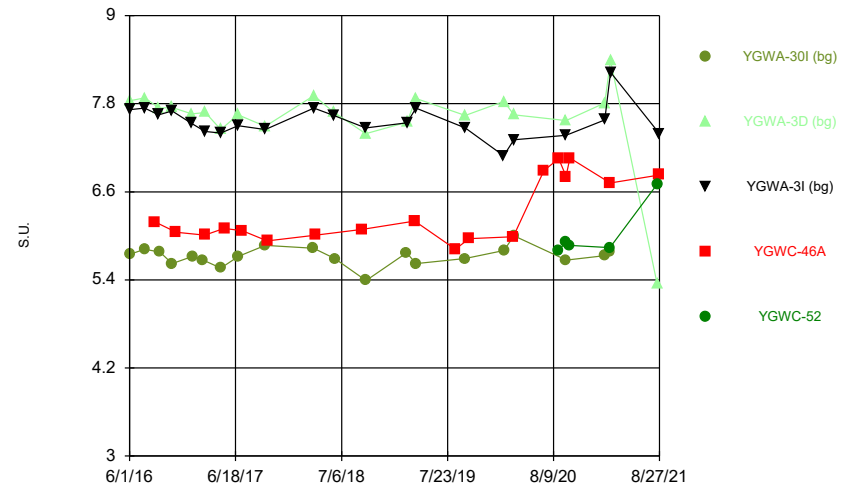
Constituent: pH, Field Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



Constituent: pH, Field Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

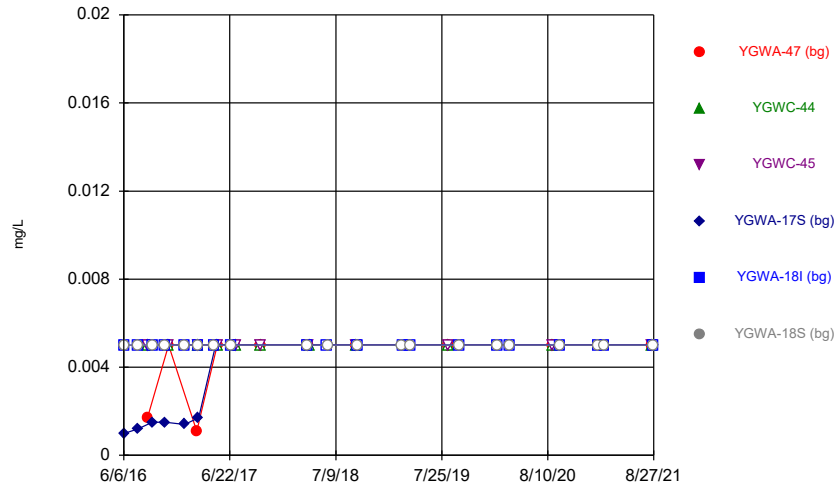
### Time Series



Constituent: pH, Field Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

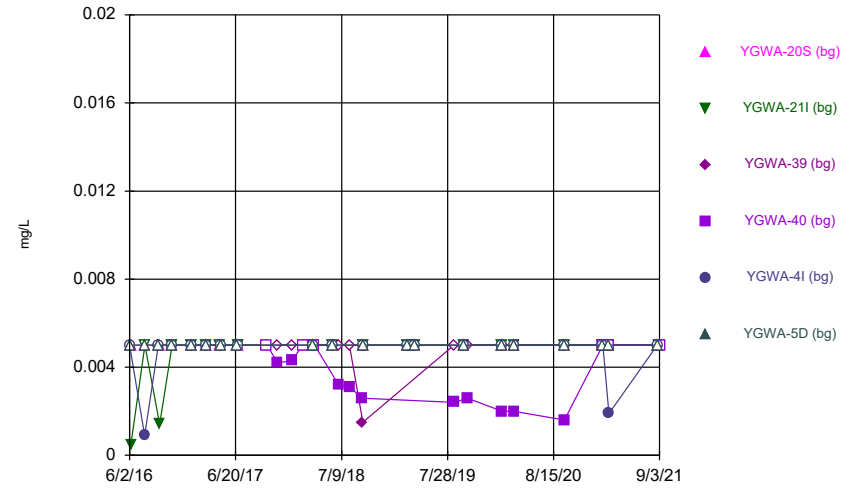


Time Series



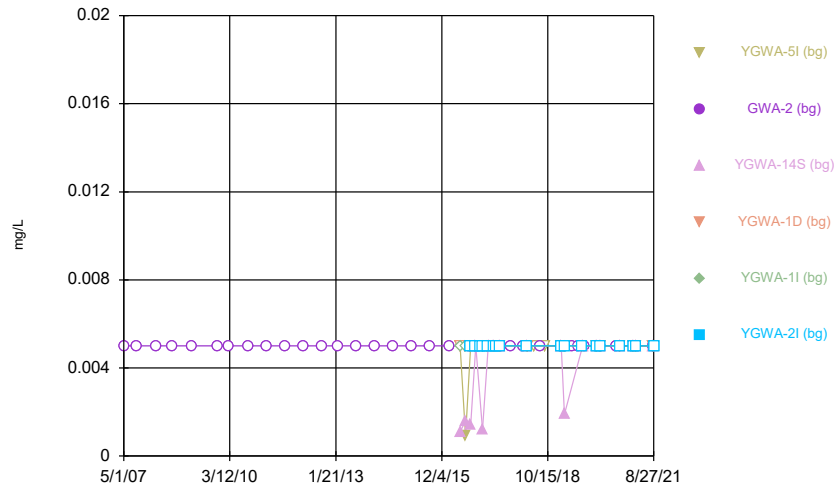
Constituent: Seleniun Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



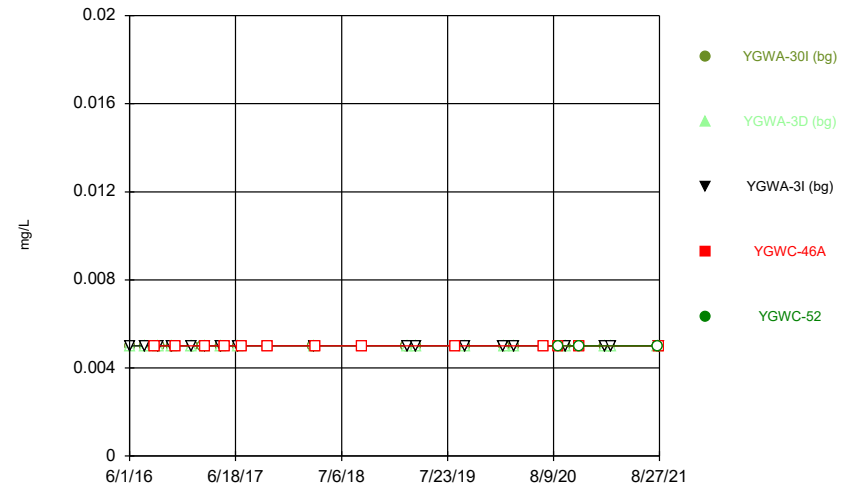
Constituent: Seleniun Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



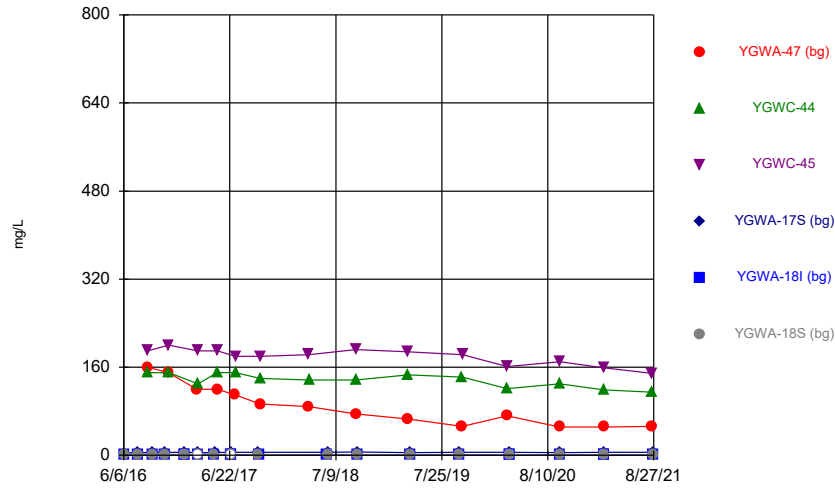
Constituent: Seleniun Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



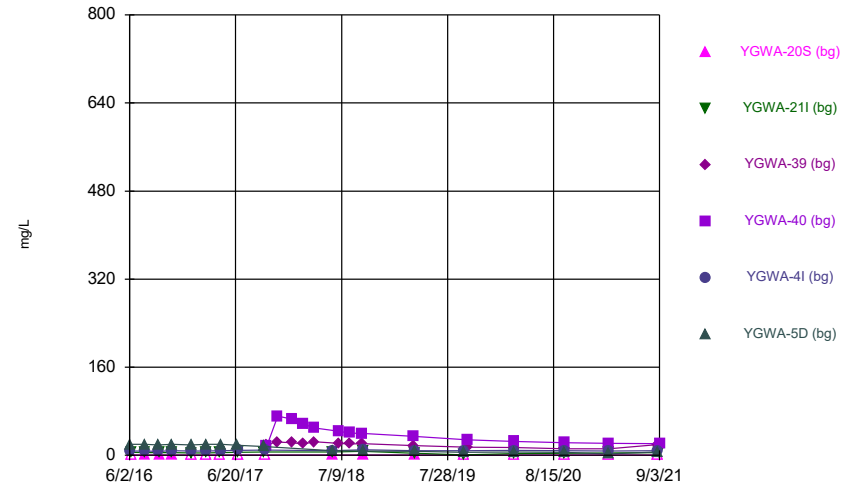
Constituent: Seleniun Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



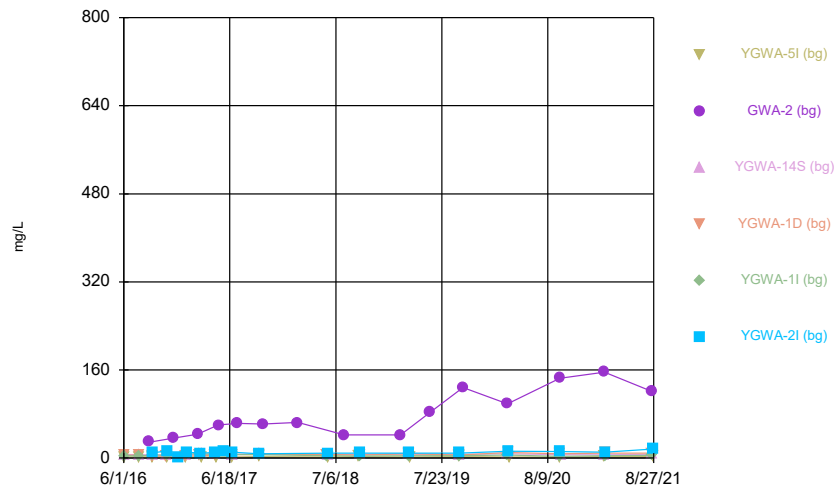
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



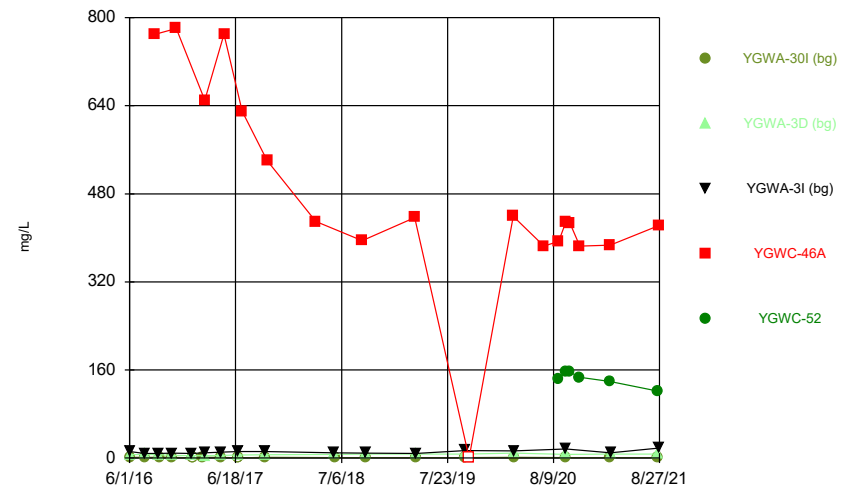
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



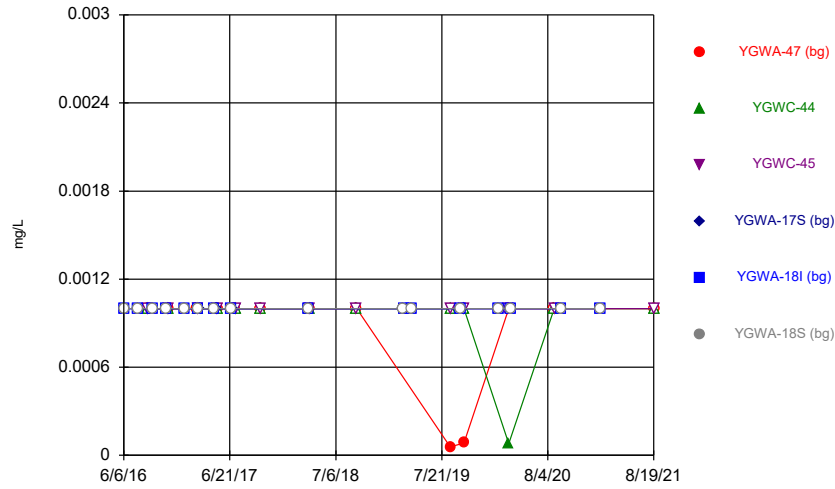
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



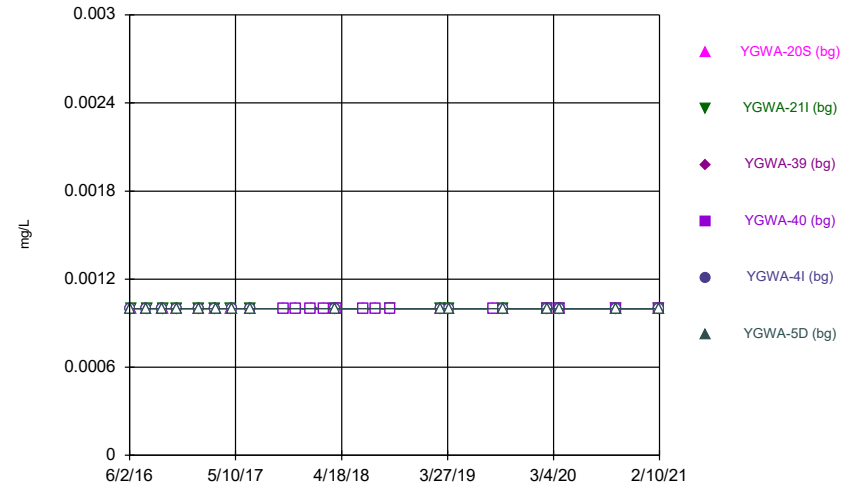
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



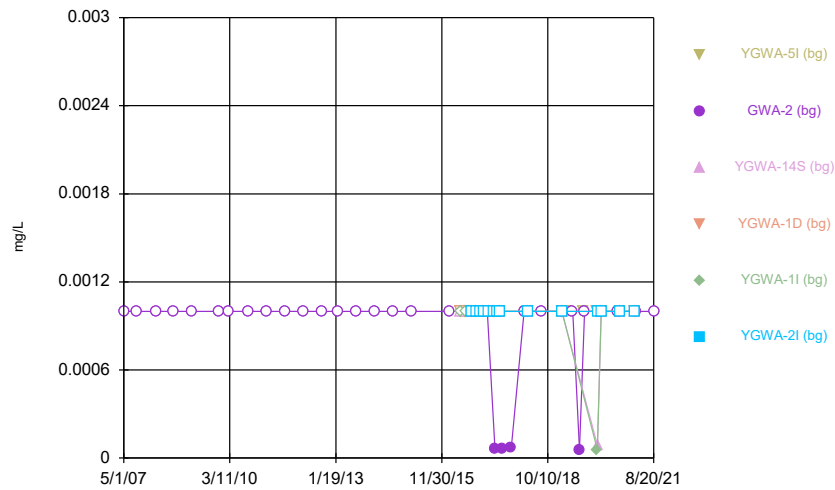
Constituent: Thallium Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



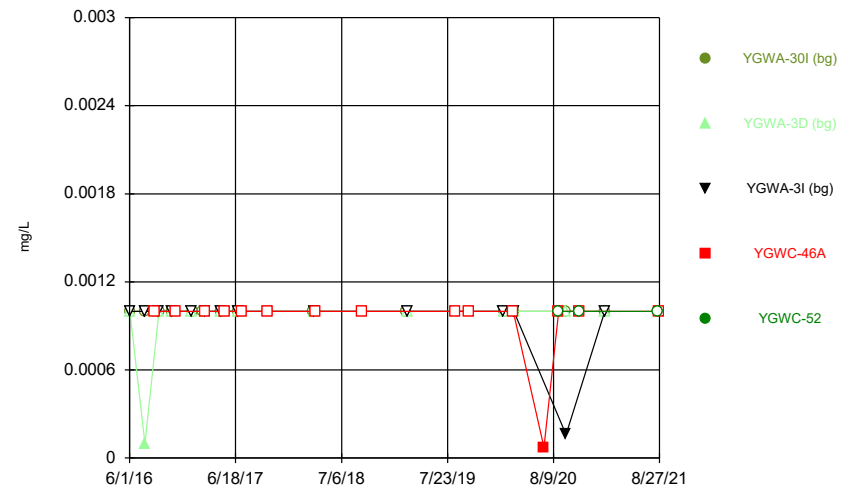
Constituent: Thallium Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



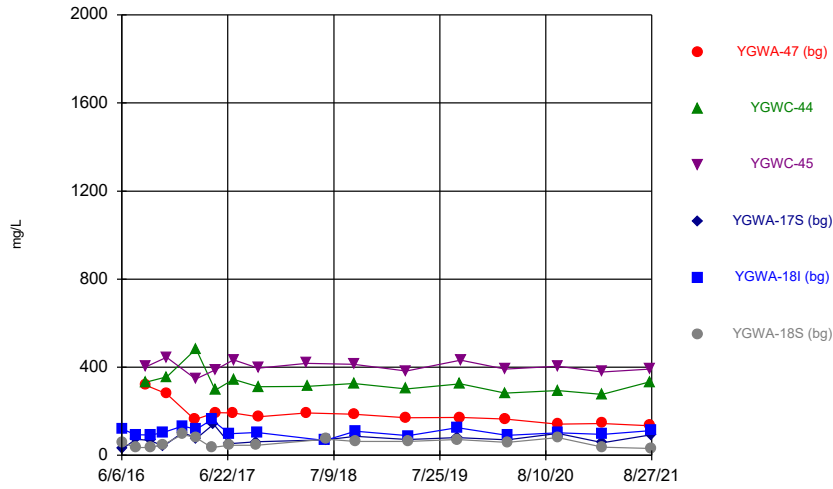
Constituent: Thallium Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



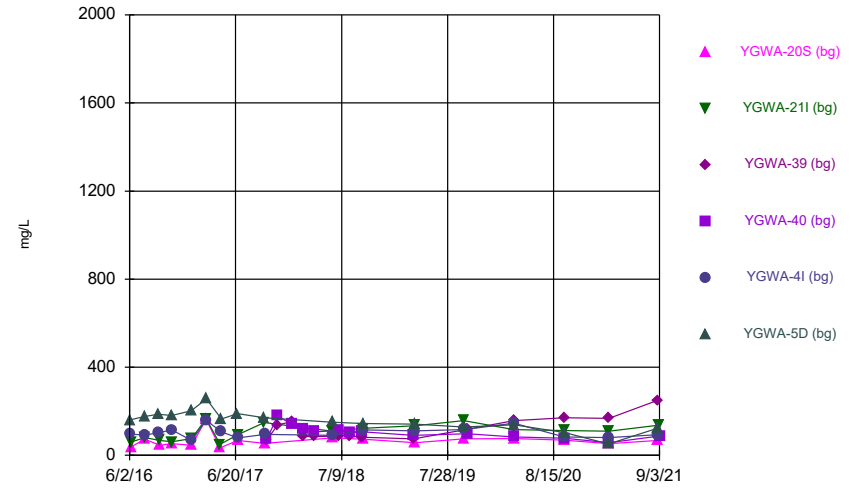
Constituent: Thallium Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



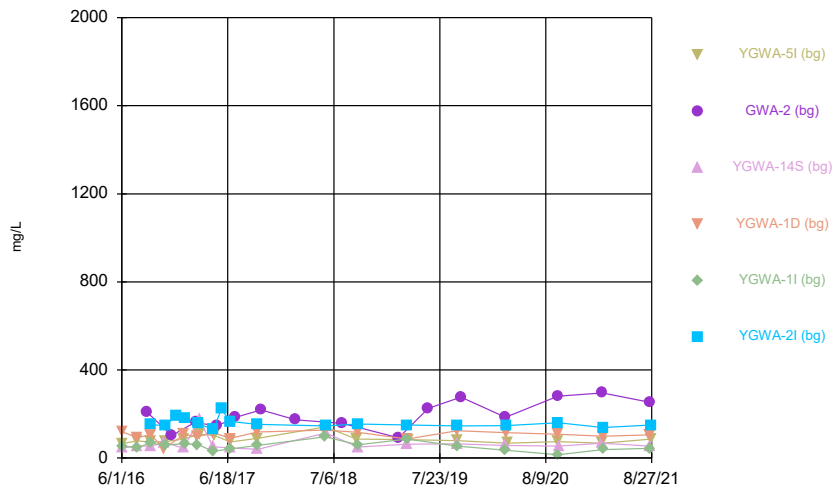
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



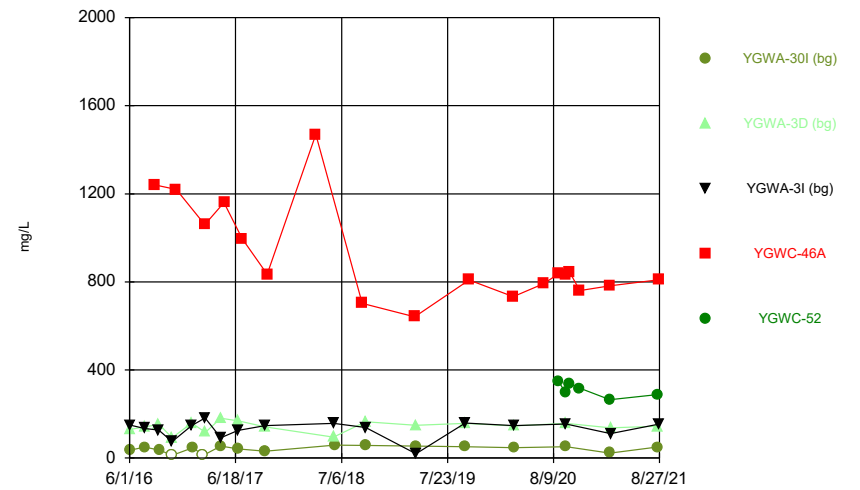
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.003	<0.003
6/7/2016				<0.003		
7/27/2016				<0.003	0.0005 (J)	<0.003
8/30/2016	0.0028 (J)					
8/31/2016		<0.003	<0.003			
9/16/2016				<0.003		<0.003
9/19/2016					<0.003	
11/3/2016				<0.003	<0.003	<0.003
11/14/2016	<0.003		<0.003			
11/15/2016		<0.003				
1/11/2017				<0.003	<0.003	<0.003
2/24/2017	<0.003					
2/27/2017			<0.003			
2/28/2017		<0.003				
3/1/2017					<0.003	<0.003
3/2/2017				<0.003		
4/26/2017					<0.003	<0.003
5/2/2017				<0.003		
5/8/2017	0.0004 (J)	<0.003				
5/9/2017			<0.003			
6/28/2017					<0.003	<0.003
6/29/2017				<0.003		
7/11/2017	0.0006 (J)					
7/13/2017		<0.003	<0.003			
10/10/2017	<0.003	<0.003	<0.003			
3/28/2018				<0.003	<0.003	<0.003
4/2/2018	<0.003					
4/3/2018			<0.003			
4/4/2018		<0.003				
9/19/2018	<0.003	<0.003	<0.003			
3/5/2019				<0.003		<0.003
3/6/2019					<0.003	
4/2/2019				<0.003		
4/3/2019					<0.003	<0.003
8/20/2019	<0.003	<0.003	<0.003			
9/25/2019				<0.003		
9/26/2019					0.00056 (J)	<0.003
2/11/2020				<0.003	<0.003	<0.003
3/24/2020				<0.003	<0.003	<0.003
8/27/2020	0.00048 (J)	<0.003				
8/28/2020			0.0017 (J)			
9/22/2020	<0.003	<0.003				
9/23/2020			<0.003	<0.003	<0.003	<0.003
2/9/2021					<0.003	<0.003
3/1/2021	0.00048 (J)	<0.003	<0.003			
3/3/2021				<0.003	<0.003	0.00067 (J)
8/19/2021	<0.003	<0.003	<0.003			
8/26/2021						<0.003
8/27/2021				<0.003	<0.003	

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.003	<0.003
6/7/2016	<0.003	<0.003				
7/26/2016					0.0003 (J)	<0.003
7/27/2016	<0.003					
7/28/2016		<0.003				
9/14/2016					<0.003	<0.003
9/19/2016	<0.003	0.001 (J)				
11/2/2016	<0.003				<0.003	<0.003
11/3/2016		<0.003				
1/12/2017						<0.003
1/13/2017	<0.003	<0.003			<0.003	
3/6/2017	<0.003	0.0005 (J)			<0.003	
3/7/2017						<0.003
4/26/2017	<0.003	<0.003				
5/1/2017					<0.003	<0.003
6/27/2017						<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			
3/29/2018	<0.003	<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	<0.003
3/5/2019	<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				<0.003
9/25/2019	<0.003				<0.003	
2/12/2020	<0.003	0.0015 (J)	<0.003	<0.003	<0.003	<0.003
3/24/2020	<0.003	0.0017 (J)		<0.003		<0.003
3/25/2020			0.0014 (J)		<0.003	
9/22/2020					<0.003	<0.003
9/24/2020	<0.003	0.0047	<0.003	<0.003		
2/8/2021						<0.003
2/9/2021	0.00032 (J)	0.0013 (J)			<0.003	
2/10/2021			<0.003	<0.003		
3/2/2021						<0.003
3/3/2021	<0.003				<0.003	
3/4/2021		0.0014 (J)	<0.003	<0.003		
8/26/2021			<0.003		<0.003	<0.003
8/27/2021	<0.003	<0.003				
9/1/2021		<0.003				
9/3/2021				<0.003		

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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			
7/25/2016					<0.003	
7/26/2016	<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			
11/4/2016	<0.003				<0.003	<0.003
11/28/2016		0.0014 (J)				
12/15/2016						0.0012 (J)
1/10/2017			<0.003			
1/11/2017				<0.003		
1/12/2017	<0.003					
1/16/2017					<0.003	<0.003
2/22/2017		<0.003				
3/2/2017				0.0004 (J)	<0.003	
3/3/2017						<0.003
3/7/2017	<0.003					
3/8/2017			<0.003			
4/26/2017			<0.003			
4/27/2017				0.0004 (J)	0.0017 (J)	
4/28/2017						0.0015 (J)
5/2/2017	<0.003					
5/8/2017		<0.003				
5/26/2017						0.0005 (J)
6/27/2017	<0.003			<0.003	<0.003	
6/28/2017						<0.003
6/30/2017			<0.003			
7/17/2017		<0.003				
10/16/2017		<0.003				

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.003				
3/27/2018			<0.003		<0.003	
3/28/2018						<0.003
3/29/2018	<0.003			<0.003		
8/6/2018		<0.003				
2/25/2019		<0.003				
2/26/2019			<0.003			
2/27/2019				<0.003	<0.003	<0.003
3/4/2019	<0.003					
4/3/2019	<0.003					
6/12/2019		<0.003				
8/19/2019		<0.003				
9/24/2019	<0.003					
10/8/2019		<0.003				
2/10/2020				0.00088 (J)	<0.003	
2/11/2020						0.00036 (J)
2/12/2020	<0.003		<0.003			
3/17/2020		<0.003				
3/18/2020			<0.003		0.0004 (J)	
3/19/2020				<0.003		0.0003 (J)
3/24/2020	<0.003					
8/26/2020		0.00042 (J)				
9/22/2020	<0.003	0.00044 (J)				
9/23/2020				<0.003	<0.003	<0.003
9/25/2020			<0.003			
2/8/2021	<0.003					
2/10/2021			<0.003			0.0013 (J)
2/12/2021				<0.003	<0.003	
3/2/2021	<0.003	<0.003	<0.003			
3/3/2021				<0.003	<0.003	<0.003
8/19/2021			<0.003	<0.003	<0.003	
8/20/2021		<0.003				
8/26/2021	<0.003					
8/27/2021						<0.003



# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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)			
9/1/2016				<0.003	
9/14/2016			<0.003		
9/15/2016		0.0027 (J)			
9/19/2016	<0.003				
11/1/2016	<0.003	<0.003	<0.003		
11/16/2016				<0.003	
1/11/2017		<0.003	<0.003		
1/16/2017	<0.003				
2/21/2017	<0.003				
2/27/2017				<0.003	
3/1/2017			<0.003		
3/2/2017		0.0008 (J)			
4/26/2017	<0.003	<0.003	<0.003		
5/8/2017				<0.003	
6/28/2017		<0.003	<0.003		
6/30/2017	<0.003				
7/13/2017				<0.003	
10/11/2017				<0.003	
3/27/2018	<0.003				
3/28/2018		<0.003	<0.003		
4/4/2018				<0.003	
9/19/2018				<0.003	
2/26/2019	<0.003				
2/27/2019		<0.003	<0.003		
8/21/2019				<0.003	
2/11/2020			<0.003		
2/12/2020	<0.003	<0.003			
3/19/2020	<0.003	0.00064 (J)	<0.003		
7/6/2020				<0.003	
8/27/2020					<0.003
8/28/2020				0.00029 (J)	
9/22/2020					<0.003
9/23/2020		<0.003	<0.003	<0.003	
9/24/2020	<0.003				
10/7/2020				<0.003	<0.003
11/12/2020				<0.003	<0.003
2/10/2021		<0.003	<0.003		
2/11/2021	<0.003				
3/1/2021	<0.003				<0.003
3/2/2021				<0.003	
3/3/2021		<0.003	<0.003		
8/19/2021	<0.003	<0.003			
8/20/2021					<0.003
8/27/2021			<0.003	<0.003	

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.005	<0.005
6/7/2016				<0.005		
7/27/2016				<0.005	<0.005	<0.005
8/30/2016	<0.005					
8/31/2016		<0.005	<0.005			
9/16/2016				<0.005		<0.005
9/19/2016					<0.005	
11/3/2016				<0.005	<0.005	<0.005
11/14/2016	<0.005		<0.005			
11/15/2016		<0.005				
1/11/2017				<0.005	<0.005	<0.005
2/24/2017	<0.005					
2/27/2017			<0.005			
2/28/2017		0.0005 (J)				
3/1/2017					<0.005	<0.005
3/2/2017				<0.005		
4/26/2017					<0.005	<0.005
5/2/2017				<0.005		
5/8/2017	<0.005	0.0006 (J)				
5/9/2017			<0.005			
6/28/2017					<0.005	<0.005
6/29/2017				<0.005		
7/11/2017	<0.005					
7/13/2017		<0.005	<0.005			
10/10/2017	0.0007 (J)	0.0007 (J)	0.0006 (J)			
3/28/2018				<0.005	<0.005	0.00061 (J)
4/2/2018	<0.005					
4/3/2018			0.00061 (J)			
4/4/2018		<0.005				
6/7/2018					0.00066 (J)	
6/11/2018				<0.005		<0.005
9/19/2018	0.00072 (J)	0.00086 (J)	0.00072 (J)			
9/25/2018				<0.005	<0.005	<0.005
3/5/2019				<0.005		<0.005
3/6/2019					<0.005	
4/2/2019				<0.005		
4/3/2019					<0.005	<0.005
8/20/2019	<0.005	0.00097 (J)	0.00078 (J)			
9/25/2019				<0.005		
9/26/2019					<0.005	<0.005
10/8/2019	<0.005	<0.005				
10/9/2019			<0.005			
2/11/2020				0.0022 (J)	0.0014 (J)	0.0026 (J)
3/17/2020	<0.005	<0.005	<0.005			
3/24/2020				<0.005	<0.005	<0.005
8/27/2020	<0.005	<0.005				
8/28/2020			<0.005			
9/22/2020	<0.005	<0.005				
9/23/2020			<0.005	<0.005	<0.005	<0.005
2/9/2021					<0.005	<0.005
3/1/2021	<0.005	<0.005	<0.005			
3/3/2021				<0.005	<0.005	<0.005

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	<0.005	<0.005	<0.005			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.005	0.00071 (J)
6/7/2016	<0.005	<0.005				
7/26/2016					<0.005	0.001 (J)
7/27/2016	<0.005					
7/28/2016		<0.005				
9/14/2016					<0.005	<0.005
9/19/2016	<0.005	<0.005				
11/2/2016	<0.005				<0.005	<0.005
11/3/2016		<0.005				
1/12/2017						<0.005
1/13/2017	<0.005	<0.005			<0.005	
3/6/2017	<0.005	0.0017 (J)			<0.005	
3/7/2017						0.0012 (J)
4/26/2017	<0.005	<0.005				
5/1/2017					<0.005	<0.005
6/27/2017						0.0019 (J)
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			
3/29/2018	<0.005	0.0015 (J)			<0.005	0.0006 (J)
4/3/2018			<0.005	<0.005		
6/5/2018		0.0013 (J)				
6/6/2018	<0.005					0.0013 (J)
6/7/2018					0.00059 (J)	
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	0.0022 (J)				
9/26/2018					<0.005	0.0014 (J)
3/4/2019					<0.005	<0.005
3/5/2019	<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)				0.00043 (J)
9/25/2019	<0.005				<0.005	
10/9/2019			0.00063 (J)	<0.005		
2/12/2020	<0.005	0.0025 (J)	0.00058 (J)	0.0034 (J)	<0.005	0.0046 (J)
3/24/2020	<0.005	0.0013 (J)		<0.005		0.00065 (J)
3/25/2020			0.0012 (J)		<0.005	
9/22/2020					<0.005	0.001 (J)
9/24/2020	<0.005	0.0014 (J)	<0.005	<0.005		
2/8/2021						<0.005
2/9/2021	<0.005	0.001 (J)			<0.005	
2/10/2021			<0.005	<0.005		
3/2/2021						<0.005
3/3/2021	<0.005				<0.005	

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.00078 (J)	<0.005	<0.005		
8/26/2021			<0.005		<0.005	0.0016 (J)
8/27/2021	<0.005					
9/1/2021		<0.005				
9/3/2021				<0.005		

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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	<0.005		<0.005			
7/25/2016					<0.005	
7/26/2016	<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			
11/4/2016	<0.005				<0.005	0.0017 (J)
11/28/2016		<0.005				
12/15/2016						0.0023 (J)
1/10/2017			<0.005			
1/11/2017				0.0017 (J)		
1/12/2017	<0.005					
1/16/2017					<0.005	0.0018 (J)
2/22/2017		<0.005				
3/2/2017				0.0014 (J)	<0.005	
3/3/2017						0.0016 (J)
3/7/2017	<0.005					
3/8/2017			<0.005			
4/26/2017			<0.005			
4/27/2017				0.0018 (J)	<0.005	
4/28/2017						0.002 (J)
5/2/2017	<0.005					
5/8/2017		<0.005				
5/26/2017						0.0005 (J)
6/27/2017	<0.005			0.0018 (J)	<0.005	
6/28/2017						0.0016 (J)
6/30/2017			<0.005			
7/17/2017		<0.005				
10/16/2017		<0.005				

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						0.0013 (J)
3/29/2018	<0.005			0.0017 (J)		
6/5/2018				0.0013 (J)		
6/6/2018					<0.005	
6/7/2018	<0.005					0.00082 (J)
6/8/2018			<0.005			
8/6/2018		<0.005				
9/26/2018	<0.005					
10/1/2018			<0.005	0.0016 (J)	<0.005	0.0011 (J)
2/25/2019		<0.005				
2/26/2019			<0.005			
2/27/2019				0.0015 (J)	<0.005	0.001 (J)
3/4/2019	<0.005					
3/28/2019				0.00072 (J)	<0.005	
3/29/2019			<0.005			0.00063 (J)
4/3/2019	<0.005					
6/12/2019		0.00038 (J)				
8/19/2019		0.00095 (J)				
9/24/2019	<0.005			0.0014 (J)	<0.005	<0.005
9/25/2019			<0.005			
10/8/2019		<0.005				
2/10/2020				0.0026 (J)	0.0005 (J)	
2/11/2020						0.0044 (J)
2/12/2020	0.002 (J)		<0.005			
3/17/2020		<0.005				
3/18/2020			<0.005		<0.005	
3/19/2020				0.00095 (J)		0.00066 (J)
3/24/2020	<0.005					
8/26/2020		<0.005				
9/22/2020	<0.005	<0.005				
9/23/2020				0.0011 (J)	<0.005	0.001 (J)
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				<0.005	<0.005	
3/2/2021	<0.005	<0.005	<0.005			
3/3/2021				<0.005	<0.005	0.00098 (J)
8/19/2021			<0.005	<0.005	<0.005	
8/20/2021		<0.005				
8/26/2021	<0.005					
8/27/2021						<0.005

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.005		
6/2/2016	<0.005	<0.005			
7/25/2016	<0.005		<0.005		
7/26/2016		<0.005			
9/1/2016				<0.005	
9/14/2016			<0.005		
9/15/2016		<0.005			
9/19/2016	<0.005				
11/1/2016	<0.005	<0.005	<0.005		
11/16/2016				<0.005	
1/11/2017		<0.005	<0.005		
1/16/2017	<0.005				
2/21/2017	<0.005				
2/27/2017				<0.005	
3/1/2017			0.0004 (J)		
3/2/2017		<0.005			
4/26/2017	<0.005	<0.005	<0.005		
5/8/2017				0.0007 (J)	
6/28/2017		0.0007 (J)	0.0011 (J)		
6/30/2017	<0.005				
7/13/2017				0.0011 (J)	
10/11/2017				0.0011 (J)	
3/27/2018	<0.005				
3/28/2018		<0.005	<0.005		
4/4/2018				0.00087 (J)	
6/7/2018		<0.005			
6/8/2018			<0.005		
6/11/2018	<0.005				
9/19/2018				0.0012 (J)	
10/1/2018		<0.005	<0.005		
10/2/2018	<0.005				
2/26/2019	<0.005				
2/27/2019		<0.005	<0.005		
4/1/2019	<0.005	<0.005	<0.005		
8/21/2019				0.00074 (J)	
9/25/2019	<0.005	<0.005	<0.005		
10/9/2019				<0.005	
2/11/2020			0.0041 (J)		
2/12/2020	0.0032 (J)	0.0038 (J)			
3/17/2020				<0.005	
3/19/2020	<0.005	<0.005	<0.005		
7/6/2020				0.00079 (J)	
8/27/2020					<0.005
8/28/2020				0.0015 (J)	
9/22/2020					<0.005
9/23/2020		<0.005	<0.005	0.00091 (J)	
9/24/2020	<0.005				
10/7/2020				0.001 (J)	<0.005
11/12/2020				0.0014 (J)	<0.005
2/10/2021		0.00094 (J)	0.00078 (J)		
2/11/2021	<0.005				
3/1/2021	<0.005				<0.005



# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.0016 (J)	
3/3/2021		<0.005	<0.005		
8/19/2021	<0.005	<0.005			
8/20/2021					<0.005
8/27/2021			<0.005	0.0022 (J)	

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					0.028	0.019
6/7/2016				0.012		
7/27/2016				0.0126	0.0294	0.0167
8/30/2016	0.0413					
8/31/2016		0.126	0.0754			
9/16/2016				0.0127		0.0168
9/19/2016					0.0247	
11/3/2016				0.0128	0.0248	0.0159
11/14/2016	0.0383		0.0701			
11/15/2016		0.115				
1/11/2017				0.0142	0.0266	0.0162
2/24/2017	0.0351					
2/27/2017			0.0834			
2/28/2017		0.121				
3/1/2017					0.0275	0.0195
3/2/2017				0.0155		
4/26/2017					0.024	0.0182
5/2/2017				0.0138		
5/8/2017	0.0251	0.125				
5/9/2017			0.0779			
6/28/2017					0.0237	0.018
6/29/2017				0.0128		
7/11/2017	0.0233					
7/13/2017		0.106	0.0719			
10/10/2017	0.0207	0.112	0.0708			
3/28/2018				0.014	0.024	0.021
4/2/2018	0.022					
4/3/2018			0.068			
4/4/2018		0.12				
6/7/2018					0.023	
6/11/2018				0.013		0.019
9/19/2018	0.023	0.11	0.064			
9/25/2018				0.014	0.023	0.019
3/5/2019				0.015		0.02
3/6/2019					0.024	
4/2/2019				0.016		
4/3/2019					0.025	0.017
8/20/2019	0.024	0.1	0.057			
9/25/2019				0.015		
9/26/2019					0.021	0.017
10/8/2019	0.025	0.098				
10/9/2019			0.058			
2/11/2020				0.015	0.022	0.019
3/17/2020	0.035	0.099	0.061			
3/24/2020				0.015	0.021	0.017
8/27/2020	0.027	0.086				
8/28/2020			0.053			
9/22/2020	0.026	0.096				
9/23/2020			0.052	0.015	0.021	0.016
2/9/2021					0.023	0.017
3/1/2021	0.029	0.087	0.055			
3/3/2021				0.017	0.023	0.017

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	0.029	0.089	0.055			
8/26/2021						0.015
8/27/2021				0.016	0.02	

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					0.013	0.0084
6/7/2016	0.014	0.0058				
7/26/2016					0.0158	0.01
7/27/2016	0.0141					
7/28/2016		0.0068 (J)				
9/14/2016					0.0143	0.0085 (J)
9/19/2016	0.0155	0.0071 (J)				
11/2/2016	0.0157				0.0148	0.0091 (J)
11/3/2016		0.0092 (J)				
1/12/2017						0.0089 (J)
1/13/2017	0.0158	0.0105			0.0146	
3/6/2017	0.0163	0.0105			0.0141	
3/7/2017						0.009 (J)
4/26/2017	0.0177	0.011				
5/1/2017					0.0149	0.0083 (J)
6/27/2017						0.0074 (J)
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			
3/29/2018	0.014	<0.01			0.014	<0.01
4/3/2018			<0.01	0.045		
6/5/2018		0.011				
6/6/2018	0.015					0.008 (J)
6/7/2018					0.014	
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	0.015	0.011				
9/26/2018					0.02	0.0075 (J)
3/4/2019					0.016	0.0077 (J)
3/5/2019	0.016	0.011				
4/2/2019		0.011				
4/3/2019	0.018				0.017	0.0087 (J)
8/21/2019			0.015	0.035		
9/24/2019		0.011				0.0075 (J)
9/25/2019	0.014				0.015	
10/9/2019			0.013	0.036		
2/12/2020	0.014	0.011	0.011	0.035	0.012	0.0079 (J)
3/24/2020	0.015	0.011		0.033		0.0076 (J)
3/25/2020			0.014		0.016	
9/22/2020					0.013	0.0076 (J)
9/24/2020	0.015	0.01	0.016	0.028		
2/8/2021						0.0079 (J)
2/9/2021	0.015	0.011			0.013	
2/10/2021			0.027	0.032		
3/2/2021						0.014
3/3/2021	0.015				0.014	

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.011	0.028	0.032		
8/26/2021			0.038		0.012	0.0092
8/27/2021	0.013					
9/1/2021		0.0099				
9/3/2021				0.035		

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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	0.019		0.0081			
7/25/2016					0.0091 (J)	
7/26/2016	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	0.0181					0.0037 (J)
9/15/2016			0.0087 (J)			
11/1/2016				0.0062 (J)		
11/2/2016			0.0082 (J)			
11/4/2016	0.0165				0.0067 (J)	0.0059 (J)
11/28/2016		0.0529				
12/15/2016						0.0056 (J)
1/10/2017			0.0086 (J)			
1/11/2017				0.0069 (J)		
1/12/2017	0.0199					
1/16/2017					0.0096 (J)	0.0049 (J)
2/22/2017		0.0607				
3/2/2017				0.0071 (J)	0.0112	
3/3/2017						0.0046 (J)
3/7/2017	0.0196					
3/8/2017			0.0088 (J)			
4/26/2017			0.0085 (J)			
4/27/2017				0.0064 (J)	0.0106	
4/28/2017						0.0039 (J)
5/2/2017	0.0202					
5/8/2017		0.065				
5/26/2017						0.0034 (J)
6/27/2017	0.0184			0.0054 (J)	0.0092 (J)	
6/28/2017						0.003 (J)
6/30/2017			0.0081 (J)			
7/17/2017		0.06				
10/16/2017		0.0542				

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		0.0533				
3/27/2018			<0.01		<0.01	
3/28/2018						<0.01
3/29/2018	0.021			<0.01		
6/5/2018				0.0069 (J)		
6/6/2018					0.0082 (J)	
6/7/2018	0.019					0.0037 (J)
6/8/2018			0.007 (J)			
8/6/2018		0.044				
9/26/2018	0.019					
10/1/2018			0.007 (J)	0.0062 (J)	0.0084 (J)	0.0038 (J)
2/25/2019		0.045				
2/26/2019			0.0067 (J)			
2/27/2019				0.0074 (J)	0.008 (J)	0.0035 (J)
3/4/2019	0.019					
3/28/2019				0.0082 (J)	0.0082 (J)	
3/29/2019			0.0066 (J)			0.0039 (J)
4/3/2019	0.023					
6/12/2019		0.063				
8/19/2019		0.065				
9/24/2019	0.019			0.0072 (J)	0.0086 (J)	0.0038 (J)
9/25/2019			0.0071 (J)			
10/8/2019		0.058				
2/10/2020				0.0066 (J)	0.0091 (J)	
2/11/2020						0.0036 (J)
2/12/2020	0.021		0.007 (J)			
3/17/2020		0.047				
3/18/2020			0.0076 (J)		0.0084 (J)	
3/19/2020				0.0076 (J)		0.0036 (J)
3/24/2020	0.021					
8/26/2020		0.044				
9/22/2020	0.019	0.045				
9/23/2020				0.0068 (J)	0.0079 (J)	0.0039 (J)
9/25/2020			0.0073 (J)			
2/8/2021	0.02					
2/10/2021			0.0078 (J)			0.0032 (J)
2/12/2021				0.0057 (J)	0.009 (J)	
3/2/2021	0.019	0.039	0.0076			
3/3/2021				0.0068	0.0094	0.0041 (J)
8/19/2021			0.0077	0.0065	0.0079	
8/20/2021		0.036				
8/26/2021	0.019					
8/27/2021						0.003 (J)

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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)			
9/1/2016				0.0414	
9/14/2016			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)		
11/16/2016				0.0365	
1/11/2017		0.0075 (J)	0.0036 (J)		
1/16/2017	0.0071 (J)				
2/21/2017	0.0077 (J)				
2/27/2017				0.0326	
3/1/2017			0.0036 (J)		
3/2/2017		0.009 (J)			
4/26/2017	0.0074 (J)	0.0078 (J)	0.0038 (J)		
5/8/2017				0.0332	
6/28/2017		0.0071 (J)	0.004 (J)		
6/30/2017	0.0076 (J)				
7/13/2017				0.0365	
10/11/2017				0.0288	
3/27/2018	<0.01				
3/28/2018		<0.01	<0.01		
4/4/2018				0.025	
6/7/2018		0.0068 (J)			
6/8/2018			0.0034 (J)		
6/11/2018	0.007 (J)				
9/19/2018				0.03	
10/1/2018		0.0065 (J)	0.0034 (J)		
10/2/2018	0.0069 (J)				
2/26/2019	0.007 (J)				
2/27/2019		0.0059 (J)	0.0034 (J)		
4/1/2019	0.0072 (J)	0.0064 (J)	0.003 (J)		
8/21/2019				0.023	
9/25/2019	0.0066 (J)	0.0059 (J)	0.005 (J)		
10/9/2019				0.024	
2/11/2020			0.0031 (J)		
2/12/2020	0.0073 (J)	0.0062 (J)			
3/17/2020				0.022	
3/19/2020	0.0074 (J)	0.0072 (J)	0.0029 (J)		
7/6/2020				0.048	
8/27/2020					0.021
8/28/2020				0.05	
9/22/2020					0.021
9/23/2020		0.0051 (J)	0.0039 (J)	0.045	
9/24/2020	0.0062 (J)				
10/7/2020				0.042	0.019
11/12/2020				0.042	0.019
2/10/2021		0.0059 (J)	0.0029 (J)		
2/11/2021	0.0077 (J)				
3/1/2021	0.007				0.019



# Time Series

Constituent: Barium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.044	
3/3/2021		0.0064	0.0031 (J)		
8/19/2021	0.0071	0.0052			
8/20/2021					0.019
8/27/2021			0.0039 (J)	0.043	

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.0005	<0.0005
6/7/2016				<0.0005		
7/27/2016				<0.0005	<0.0005	<0.0005
8/30/2016	<0.0005					
8/31/2016		<0.0005	<0.0005			
9/16/2016				<0.0005		<0.0005
9/19/2016					<0.0005	
11/3/2016				<0.0005	<0.0005	<0.0005
11/14/2016	<0.0005		<0.0005			
11/15/2016		<0.0005				
1/11/2017				<0.0005	<0.0005	<0.0005
2/24/2017	<0.0005					
2/27/2017			<0.0005			
2/28/2017		<0.0005				
3/1/2017					<0.0005	<0.0005
3/2/2017				8E-05 (J)		
4/26/2017					<0.0005	<0.0005
5/2/2017				<0.0005		
5/8/2017	7E-05 (J)	<0.0005				
5/9/2017			<0.0005			
6/28/2017					<0.0005	<0.0005
6/29/2017				<0.0005		
7/11/2017	<0.0005					
7/13/2017		<0.0005	<0.0005			
10/10/2017	<0.0005	<0.0005	<0.0005			
3/28/2018				<0.0005	<0.0005	<0.0005
4/2/2018	<0.0005					
4/3/2018			<0.0005			
4/4/2018		<0.0005				
6/7/2018					<0.0005	
6/11/2018				9E-05 (J)		5.7E-05 (J)
9/19/2018	5.7E-05 (J)	<0.0005	<0.0005			
9/25/2018				8.9E-05 (J)	<0.0005	8.2E-05 (J)
3/5/2019				9.1E-05 (J)		7.9E-05 (J)
3/6/2019					<0.0005	
4/2/2019				9E-05 (J)		
4/3/2019					<0.0005	7.5E-05 (J)
8/20/2019	<0.0005	<0.0005	<0.0005			
9/25/2019				8.1E-05 (J)		
9/26/2019					<0.0005	8.4E-05 (J)
2/11/2020				7.8E-05 (J)	<0.0005	7.6E-05 (J)
3/24/2020				8E-05 (J)	<0.0005	8.9E-05 (J)
8/27/2020	4.7E-05 (J)	<0.0005				
8/28/2020			<0.0005			
9/22/2020	<0.0005	<0.0005				
9/23/2020			<0.0005	8.1E-05 (J)	<0.0005	8.8E-05 (J)
2/9/2021					<0.0005	9.8E-05 (J)
3/1/2021	5.5E-05 (J)	<0.0005	<0.0005			
3/3/2021				9.9E-05 (J)	<0.0005	0.00011 (J)
8/19/2021	<0.0005	<0.0005	<0.0005			
8/26/2021						9.3E-05 (J)
8/27/2021				0.0001 (J)	<0.0005	

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.0005	<0.0005
6/7/2016	<0.0005	<0.0005				
7/26/2016					<0.0005	<0.0005
7/27/2016	<0.0005					
7/28/2016		<0.0005				
9/14/2016					<0.0005	<0.0005
9/19/2016	<0.0005	<0.0005				
11/2/2016	<0.0005				<0.0005	<0.0005
11/3/2016		<0.0005				
1/12/2017						<0.0005
1/13/2017	<0.0005	<0.0005			<0.0005	
3/6/2017	<0.0005	<0.0005			<0.0005	
3/7/2017						<0.0005
4/26/2017	<0.0005	<0.0005				
5/1/2017					<0.0005	<0.0005
6/27/2017						<0.0005
6/29/2017	<0.0005	<0.0005			<0.0005	
10/11/2017			<0.0005			
10/12/2017				0.0002 (J)		
11/20/2017			<0.0005	0.0003 (J)		
1/10/2018				0.0003 (J)		
1/11/2018			<0.0005			
2/19/2018				<0.0005		
2/20/2018			<0.0005			
3/29/2018	<0.0005	<0.0005			<0.0005	<0.0005
4/3/2018			<0.0005	<0.0005		
6/5/2018		<0.0005				
6/6/2018	8E-05 (J)					<0.0005
6/7/2018					<0.0005	
6/28/2018			<0.0005	0.00029 (J)		
8/7/2018			<0.0005	0.00024 (J)		
9/24/2018			<0.0005	0.00019 (J)		
9/25/2018	6.1E-05 (J)	<0.0005				
9/26/2018					<0.0005	<0.0005
3/4/2019					<0.0005	<0.0005
3/5/2019	0.00011 (J)	<0.0005				
4/2/2019		<0.0005				
4/3/2019	6.4E-05 (J)				<0.0005	<0.0005
8/21/2019			<0.0005	0.0002 (J)		
9/24/2019		<0.0005				<0.0005
9/25/2019	<0.0005				<0.0005	
10/9/2019			<0.0005	0.0002 (J)		
2/12/2020	7.8E-05 (J)	<0.0005	<0.0005	0.00018 (J)	<0.0005	<0.0005
3/24/2020	7.6E-05 (J)	<0.0005		0.00022 (J)		<0.0005
3/25/2020			<0.0005		<0.0005	
9/22/2020					<0.0005	<0.0005
9/24/2020	8.3E-05 (J)	<0.0005	<0.0005	0.0002 (J)		
2/8/2021						<0.0005
2/9/2021	6.8E-05 (J)	<0.0005			<0.0005	
2/10/2021			5.1E-05 (J)	0.00021 (J)		
3/2/2021						<0.0005
3/3/2021	6.8E-05 (J)				<0.0005	

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		<0.0005	<0.0005	0.00021 (J)		
8/26/2021			<0.0005		<0.0005	<0.0005
8/27/2021	5.9E-05 (J)					
9/1/2021		<0.0005				
9/3/2021				0.00024 (J)		

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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		<0.0005				
6/1/2016				<0.0005	<0.0005	
6/2/2016	<0.0005		<0.0005			
7/25/2016					<0.0005	
7/26/2016	<0.0005		0.0002 (J)	<0.0005		
8/31/2016		<0.0005				
9/13/2016				<0.0005	<0.0005	
9/14/2016	<0.0005					<0.0005
9/15/2016			0.0002 (J)			
11/1/2016				<0.0005		
11/2/2016			0.0002 (J)			
11/4/2016	<0.0005				<0.0005	<0.0005
11/28/2016		<0.0005				
12/15/2016						<0.0005
1/10/2017			0.0002 (J)			
1/11/2017				<0.0005		
1/12/2017	<0.0005					
1/16/2017					<0.0005	<0.0005
2/22/2017		<0.0005				
3/2/2017				<0.0005	<0.0005	
3/3/2017						<0.0005
3/7/2017	<0.0005					
3/8/2017			0.0002 (J)			
4/26/2017			0.0002 (J)			
4/27/2017				<0.0005	<0.0005	
4/28/2017						<0.0005
5/2/2017	<0.0005					
5/8/2017		<0.0005				
5/26/2017						<0.0005
6/27/2017	<0.0005			<0.0005	<0.0005	
6/28/2017						<0.0005
6/30/2017			0.0002 (J)			
7/17/2017		<0.0005				
10/16/2017		<0.0005				

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.0005				
3/27/2018			<0.0005		<0.0005	
3/28/2018						<0.0005
3/29/2018	<0.0005			<0.0005		
6/7/2018	<0.0005					
8/6/2018		<0.0005				
9/26/2018	<0.0005					
2/25/2019		<0.0005				
2/26/2019			0.00016 (J)			
2/27/2019				<0.0005	<0.0005	<0.0005
3/4/2019	<0.0005					
3/28/2019				<0.0005	<0.0005	
3/29/2019			0.00017 (J)			<0.0005
4/3/2019	<0.0005					
6/12/2019		<0.0005				
8/19/2019		<0.0005				
9/24/2019	<0.0005			<0.0005	<0.0005	<0.0005
9/25/2019			0.00018 (J)			
10/8/2019		<0.0005				
2/10/2020				<0.0005	<0.0005	
2/11/2020						<0.0005
2/12/2020	<0.0005		0.00019 (J)			
3/17/2020		<0.0005				
3/18/2020			0.00021 (J)		<0.0005	
3/19/2020				<0.0005		<0.0005
3/24/2020	<0.0005					
8/26/2020		<0.0005				
9/22/2020	<0.0005	<0.0005				
9/23/2020				<0.0005	<0.0005	<0.0005
9/25/2020			0.00018 (J)			
2/8/2021	<0.0005					
2/10/2021			0.00019 (J)			<0.0005
2/12/2021				<0.0005	<0.0005	
3/2/2021	<0.0005	<0.0005	0.00018 (J)			
3/3/2021				<0.0005	<0.0005	<0.0005
8/19/2021			0.00022 (J)	<0.0005	<0.0005	
8/20/2021		<0.0005				
8/26/2021	<0.0005					
8/27/2021						<0.0005

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.0005		
6/2/2016	<0.0005	<0.0005			
7/25/2016	<0.0005		<0.0005		
7/26/2016		<0.0005			
9/1/2016				<0.0005	
9/14/2016			<0.0005		
9/15/2016		<0.0005			
9/19/2016	<0.0005				
11/1/2016	<0.0005	<0.0005	<0.0005		
11/16/2016				<0.0005	
1/11/2017		<0.0005	<0.0005		
1/16/2017	<0.0005				
2/21/2017	<0.0005				
2/27/2017				<0.0005	
3/1/2017			<0.0005		
3/2/2017		<0.0005			
4/26/2017	<0.0005	<0.0005	<0.0005		
5/8/2017				<0.0005	
6/28/2017		<0.0005	<0.0005		
6/30/2017	<0.0005				
7/13/2017				<0.0005	
10/11/2017				<0.0005	
3/27/2018	<0.0005				
3/28/2018		<0.0005	<0.0005		
4/4/2018				<0.0005	
9/19/2018				<0.0005	
2/26/2019	7.2E-05 (J)				
2/27/2019		<0.0005	<0.0005		
4/1/2019	<0.0005	<0.0005	<0.0005		
8/21/2019				<0.0005	
9/25/2019	<0.0005	<0.0005	<0.0005		
2/11/2020			<0.0005		
2/12/2020	<0.0005	<0.0005			
3/19/2020	<0.0005	<0.0005	<0.0005		
7/6/2020				<0.0005	
8/27/2020					<0.0005
8/28/2020				<0.0005	
9/22/2020					<0.0005
9/23/2020		<0.0005	5.9E-05 (J)	<0.0005	
9/24/2020	<0.0005				
10/7/2020				<0.0005	<0.0005
11/12/2020				<0.0005	<0.0005
2/10/2021		<0.0005	<0.0005		
2/11/2021	4.7E-05 (J)				
3/1/2021	<0.0005				<0.0005
3/2/2021				<0.0005	
3/3/2021		<0.0005	<0.0005		
8/19/2021	<0.0005	<0.0005			
8/20/2021					<0.0005
8/27/2021			<0.0005	<0.0005	

# Time Series

Constituent: Boron, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.04	<0.04
6/7/2016				<0.04		
7/27/2016				0.008 (J)	<0.04	0.0059 (J)
8/30/2016	0.0166 (J)					
8/31/2016		0.541	0.308			
9/16/2016				0.0086 (J)		0.0079 (J)
9/19/2016					<0.04	
11/3/2016				0.0077 (J)	<0.04	0.0082 (J)
11/14/2016	0.0166 (J)		0.368			
11/15/2016		0.706				
1/11/2017				0.0092 (J)	<0.04	0.0096 (J)
2/24/2017	0.0145 (J)					
2/27/2017			0.321			
2/28/2017		0.623				
3/1/2017					<0.04	<0.04
3/2/2017				0.0095 (J)		
4/26/2017					<0.04	0.0091 (J)
5/2/2017				<0.04		
5/8/2017	0.0141 (J)	0.69				
5/9/2017			0.338			
6/28/2017					<0.04	0.0079 (J)
6/29/2017				0.0074 (J)		
7/11/2017	0.0131 (J)					
7/13/2017		0.649	0.34			
10/4/2017				0.0077 (J)		0.009 (J)
10/5/2017					<0.04	
10/10/2017	0.0124 (J)	0.603	0.319			
4/2/2018	0.013 (J)					
4/3/2018			0.35			
4/4/2018		0.66				
6/7/2018					<0.04	
6/11/2018				0.01 (J)		0.0093 (J)
9/19/2018	0.012 (J)	0.66	0.35			
9/25/2018				0.0096 (J)	0.0046 (J)	0.007 (J)
3/27/2019	0.013 (J)	0.57	0.33			
4/2/2019				0.0066 (J)		
4/3/2019					<0.04	0.0053 (J)
9/25/2019				0.0081 (J)		
9/26/2019					0.0062 (J)	0.0072 (J)
10/8/2019	0.012 (J)	0.58				
10/9/2019			0.35			
3/17/2020	0.023 (J)	0.61	0.37			
3/24/2020				0.0092 (J)	0.0054 (J)	0.01 (J)
9/22/2020	0.0076 (J)	0.59				
9/23/2020			0.32	0.0066 (J)	0.021 (J)	0.006 (J)
3/1/2021	0.013 (J)	0.54	0.32			
3/3/2021				0.01 (J)	<0.04	0.0094 (J)
8/19/2021	0.011 (J)	0.56	0.31			
8/26/2021						<0.04
8/27/2021				0.011 (J)	<0.04	



# Time Series

Constituent: Boron, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.04	<0.04
6/7/2016	<0.04	<0.04				
7/26/2016					0.0047 (J)	0.0052 (J)
7/27/2016	<0.04					
7/28/2016		<0.04				
9/14/2016					<0.04	0.0071 (J)
9/19/2016	<0.04	<0.04				
11/2/2016	<0.04				<0.04	<0.04
11/3/2016		<0.04				
1/12/2017						0.0076 (J)
1/13/2017	<0.04	<0.04			<0.04	
3/6/2017	<0.04	<0.04			<0.04	
3/7/2017						0.0089 (J)
4/26/2017	<0.04	<0.04				
5/1/2017					<0.04	0.0061 (J)
6/27/2017						0.0079 (J)
6/29/2017	<0.04	<0.04			<0.04	
10/3/2017		<0.04				0.0094 (J)
10/4/2017	<0.04					
10/5/2017					<0.04	
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			<0.04			
4/3/2018			0.033 (J)	0.12		
6/5/2018		0.0092 (J)				
6/6/2018	0.0049 (J)					0.0098 (J)
6/7/2018					0.0045 (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	<0.04	0.0054 (J)				
9/26/2018					0.005 (J)	0.01 (J)
3/26/2019				0.096		
3/27/2019			0.017 (J)			
4/2/2019		0.011 (J)				
4/3/2019	<0.04				0.0055 (J)	0.0076 (J)
9/24/2019		0.018 (J)				0.01 (J)
9/25/2019	<0.04				<0.04	
10/9/2019			0.017 (J)	0.079		
3/24/2020	<0.04	0.016 (J)		0.088 (J)		0.011 (J)
3/25/2020			0.043 (J)		0.011 (J)	
9/22/2020					<0.04	0.0079 (J)
9/24/2020	0.0094 (J)	0.013 (J)	0.037 (J)	0.087 (J)		
3/2/2021						0.0068 (J)
3/3/2021	<0.04				0.0056 (J)	
3/4/2021		0.0079 (J)	0.033 (J)	0.078		
8/26/2021			0.095		<0.04	0.009 (J)
8/27/2021	<0.04					

# Time Series

Constituent: Boron, total (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		<0.04				
9/3/2021				0.077		

# Time Series

Constituent: Boron, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				<0.04	<0.04	
6/2/2016	<0.04		<0.04			
7/25/2016					<0.04	
7/26/2016	<0.04		0.0177 (J)	0.0055 (J)		
8/31/2016		0.0315 (J)				
9/13/2016				<0.04	<0.04	
9/14/2016	0.01 (J)					<0.04
9/15/2016			0.0214 (J)			
11/1/2016				0.0086 (J)		
11/2/2016			<0.04			
11/4/2016	<0.04				<0.04	<0.04
11/28/2016		0.0095 (J)				
12/15/2016						0.0107 (J)
1/10/2017			0.0198 (J)			
1/11/2017				0.0074 (J)		
1/12/2017	<0.04					
1/16/2017					<0.04	<0.04
2/22/2017		<0.04				
3/2/2017				0.008 (J)	<0.04	
3/3/2017						<0.04
3/7/2017	<0.04					
3/8/2017			0.0189 (J)			
4/26/2017			0.0161 (J)			
4/27/2017				0.0066 (J)	<0.04	
4/28/2017						<0.04
5/2/2017	<0.04					
5/8/2017		0.0084 (J)				
5/26/2017						<0.04
6/27/2017	<0.04			0.0087 (J)	0.006 (J)	
6/28/2017						<0.04
6/30/2017			0.0173 (J)			
7/17/2017		0.0092 (J)				
10/3/2017	<0.04			0.0072 (J)	0.0071 (J)	<0.04
10/5/2017			0.0173 (J)			
10/16/2017		<0.04				
2/19/2018		<0.04				
6/5/2018				0.0052 (J)		
6/6/2018					<0.04	
6/7/2018	<0.04					<0.04
6/8/2018			0.013 (J)			
8/6/2018		<0.04				
9/26/2018	0.0057 (J)					
10/1/2018			0.015 (J)	0.021 (J)	0.0049 (J)	<0.04
2/25/2019		<0.04				
3/28/2019				0.005 (J)	<0.04	
3/29/2019			0.014 (J)			0.0065 (J)
4/3/2019	0.0044 (J)					
6/12/2019		<0.04				
9/24/2019	0.0049 (J)			0.0064 (J)	0.0055 (J)	0.0076 (J)
9/25/2019			0.018 (J)			
10/8/2019		<0.04				
3/17/2020		0.0051 (J)				

# Time Series

Constituent: Boron, total (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			0.02 (J)		0.0087 (J)	
3/19/2020				0.0085 (J)		0.0073 (J)
3/24/2020	0.0068 (J)					
9/22/2020	0.0053 (J)	0.0079 (J)				
9/23/2020				<0.04	<0.04	<0.04
9/25/2020			0.02 (J)			
3/2/2021	0.011 (J)	<0.04	0.017 (J)			
3/3/2021				<0.04	<0.04	<0.04
8/19/2021			0.018 (J)	<0.04	<0.04	
8/20/2021		<0.04				
8/26/2021	<0.04					
8/27/2021						<0.04

# Time Series

Constituent: Boron, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.04		
6/2/2016	<0.04	<0.04			
7/25/2016	<0.04		<0.04		
7/26/2016		0.0097 (J)			
9/1/2016				2.12	
9/14/2016			<0.04		
9/15/2016		0.0102 (J)			
9/19/2016	<0.04				
11/1/2016	<0.04	<0.04	<0.04		
11/16/2016				2.03	
1/11/2017		<0.04	<0.04		
1/16/2017	<0.04				
2/21/2017	<0.04				
2/27/2017				1.29	
3/1/2017			<0.04		
3/2/2017		0.0084 (J)			
4/26/2017	<0.04	<0.04	<0.04		
5/8/2017				1.71	
6/28/2017		<0.04	<0.04		
6/30/2017	<0.04				
7/13/2017				1.62	
10/4/2017	<0.04	<0.04	<0.04		
10/11/2017				1.17	
4/4/2018				1.2	
6/7/2018		0.004 (J)			
6/8/2018			<0.04		
6/11/2018	0.014 (J)				
9/19/2018				1.2	
10/1/2018		<0.04	<0.04		
10/2/2018	<0.04				
3/27/2019				0.89	
4/1/2019	<0.04	<0.04	<0.04		
9/25/2019	<0.04	0.0054 (J)	<0.04		
10/9/2019				1.1	
3/17/2020				1.3	
3/19/2020	0.0052 (J)	0.0073 (J)	0.0053 (J)		
7/6/2020				2	
8/27/2020					0.014 (J)
8/28/2020				1.8	
9/22/2020					<0.04
9/23/2020		0.012 (J)	0.0073 (J)	2	
9/24/2020	0.0075 (J)				
10/7/2020				1.8	0.018 (J)
11/12/2020				1.8	0.012 (J)
3/1/2021	<0.04				0.015 (J)
3/2/2021				1.9	
3/3/2021		<0.04	<0.04		
8/19/2021	<0.04	<0.04			
8/20/2021					<0.04
8/27/2021			<0.04	1.9	

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.0005	<0.0005
6/7/2016				<0.0005		
7/27/2016				<0.0005	<0.0005	<0.0005
8/30/2016	0.0001 (J)					
8/31/2016		<0.0005	<0.0005			
9/16/2016				<0.0005		<0.0005
9/19/2016					<0.0005	
11/3/2016				<0.0005	<0.0005	<0.0005
11/14/2016	0.0001 (J)		<0.0005			
11/15/2016		<0.0005				
1/11/2017				0.0001 (J)	<0.0005	0.0001 (J)
2/24/2017	9E-05 (J)					
2/27/2017			<0.0005			
2/28/2017		<0.0005				
3/1/2017					<0.0005	<0.0005
3/2/2017				<0.0005		
4/26/2017					<0.0005	<0.0005
5/2/2017				<0.0005		
5/8/2017	0.0001 (J)	<0.0005				
5/9/2017			<0.0005			
6/28/2017					<0.0005	<0.0005
6/29/2017				<0.0005		
7/11/2017	<0.0005					
7/13/2017		<0.0005	<0.0005			
10/10/2017	<0.0005	<0.0005	<0.0005			
3/28/2018				<0.0005	<0.0005	<0.0005
4/2/2018	<0.0005					
4/3/2018			<0.0005			
4/4/2018		<0.0005				
6/7/2018					<0.0005	
6/11/2018				<0.0005		<0.0005
9/19/2018	<0.0005	<0.0005	<0.0005			
9/25/2018				<0.0005	<0.0005	<0.0005
3/5/2019				<0.0005		<0.0005
3/6/2019					<0.0005	
4/2/2019				<0.0005		
4/3/2019					<0.0005	<0.0005
8/20/2019	<0.0005	<0.0005	<0.0005			
9/25/2019				<0.0005		
9/26/2019					<0.0005	<0.0005
10/8/2019	<0.0005	<0.0005				
10/9/2019			<0.0005			
2/11/2020				<0.0005	<0.0005	<0.0005
3/17/2020	<0.0005	<0.0005	<0.0005			
3/24/2020				<0.0005	<0.0005	<0.0005
8/27/2020	<0.0005	<0.0005				
8/28/2020			<0.0005			
9/23/2020				<0.0005	<0.0005	<0.0005
2/9/2021					<0.0005	<0.0005
3/3/2021				<0.0005	<0.0005	<0.0005
8/19/2021	<0.0005	<0.0005	<0.0005			
8/26/2021						<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/27/2021				<0.0005	<0.0005	

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.0005	<0.0005
6/7/2016	<0.0005	<0.0005				
7/26/2016					<0.0005	<0.0005
7/27/2016	<0.0005					
7/28/2016		<0.0005				
9/14/2016					<0.0005	<0.0005
9/19/2016	<0.0005	<0.0005				
11/2/2016	<0.0005				<0.0005	<0.0005
11/3/2016		<0.0005				
1/12/2017						<0.0005
1/13/2017	<0.0005	<0.0005			<0.0005	
3/6/2017	<0.0005	<0.0005			<0.0005	
3/7/2017						<0.0005
4/26/2017	<0.0005	<0.0005				
5/1/2017					<0.0005	<0.0005
6/27/2017						<0.0005
6/29/2017	<0.0005	<0.0005			<0.0005	
10/11/2017			<0.0005			
10/12/2017				<0.0005		
11/20/2017			<0.0005	<0.0005		
1/10/2018				<0.0005		
1/11/2018			<0.0005			
2/19/2018				<0.0005		
2/20/2018			<0.0005			
3/29/2018	<0.0005	<0.0005			<0.0005	<0.0005
4/3/2018			<0.0005	<0.0005		
6/5/2018		<0.0005				
6/6/2018	<0.0005					<0.0005
6/7/2018					<0.0005	
6/28/2018			<0.0005	<0.0005		
8/7/2018			<0.0005	<0.0005		
9/24/2018			<0.0005	<0.0005		
9/25/2018	<0.0005	9.6E-05 (J)				
9/26/2018					<0.0005	<0.0005
3/4/2019					<0.0005	<0.0005
3/5/2019	<0.0005	<0.0005				
4/2/2019		<0.0005				
4/3/2019	<0.0005				<0.0005	<0.0005
8/21/2019			<0.0005	<0.0005		
9/24/2019		<0.0005				<0.0005
9/25/2019	<0.0005				<0.0005	
10/9/2019			<0.0005	<0.0005		
2/12/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/24/2020	<0.0005	<0.0005		<0.0005		<0.0005
3/25/2020			<0.0005		<0.0005	
9/22/2020					<0.0005	<0.0005
9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005		
2/8/2021						<0.0005
2/9/2021	<0.0005	0.00041 (J)			<0.0005	
2/10/2021			0.00019 (J)	<0.0005		
3/2/2021						<0.0005
3/3/2021	<0.0005				<0.0005	



# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		<0.0005	0.0003 (J)	<0.0005		
8/26/2021			0.00049 (J)		<0.0005	<0.0005
8/27/2021	<0.0005					
9/1/2021		<0.0005				
9/3/2021				<0.0005		

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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		<0.0005				
6/1/2016				<0.0005	<0.0005	
6/2/2016	<0.0005		<0.0005			
7/25/2016					<0.0005	
7/26/2016	<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			
11/4/2016	<0.0005				<0.0005	<0.0005
11/28/2016		<0.0005				
12/15/2016						<0.0005
1/10/2017			<0.0005			
1/11/2017				0.0002 (J)		
1/12/2017	9E-05 (J)					
1/16/2017					<0.0005	<0.0005
2/22/2017		<0.0005				
3/2/2017				<0.0005	<0.0005	
3/3/2017						<0.0005
3/7/2017	<0.0005					
3/8/2017			7E-05 (J)			
4/26/2017			<0.0005			
4/27/2017				<0.0005	<0.0005	
4/28/2017						<0.0005
5/2/2017	<0.0005					
5/8/2017		<0.0005				
5/26/2017						<0.0005
6/27/2017	<0.0005			<0.0005	<0.0005	
6/28/2017						<0.0005
6/30/2017			<0.0005			
7/17/2017		<0.0005				
10/16/2017		<0.0005				

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.0005				
3/27/2018			<0.0005		<0.0005	
3/28/2018						<0.0005
3/29/2018	<0.0005			<0.0005		
6/7/2018	<0.0005					
8/6/2018		<0.0005				
9/26/2018	<0.0005					
2/25/2019		<0.0005				
2/26/2019			<0.0005			
2/27/2019				<0.0005	<0.0005	<0.0005
3/4/2019	<0.0005					
3/28/2019				<0.0005	<0.0005	
3/29/2019			<0.0005			<0.0005
4/3/2019	<0.0005					
6/12/2019		<0.0005				
8/19/2019		<0.0005				
9/24/2019	<0.0005			<0.0005	<0.0005	<0.0005
9/25/2019			<0.0005			
10/8/2019		<0.0005				
2/10/2020				<0.0005	<0.0005	
2/11/2020						<0.0005
2/12/2020	<0.0005		<0.0005			
3/17/2020		<0.0005				
3/18/2020			<0.0005		<0.0005	
3/19/2020				<0.0005		<0.0005
3/24/2020	<0.0005					
8/26/2020		<0.0005				
9/22/2020	<0.0005	<0.0005				
9/23/2020				<0.0005	<0.0005	<0.0005
9/25/2020			<0.0005			
2/8/2021	<0.0005					
2/10/2021			<0.0005			<0.0005
2/12/2021				<0.0005	<0.0005	
3/2/2021	<0.0005	<0.0005	<0.0005			
3/3/2021				<0.0005	<0.0005	<0.0005
8/19/2021			<0.0005	<0.0005	<0.0005	
8/20/2021		<0.0005				
8/26/2021	<0.0005					
8/27/2021						<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.0005		
6/2/2016	<0.0005	<0.0005			
7/25/2016	<0.0005		<0.0005		
7/26/2016		<0.0005			
9/1/2016				<0.0005	
9/14/2016			<0.0005		
9/15/2016		<0.0005			
9/19/2016	<0.0005				
11/1/2016	<0.0005	<0.0005	<0.0005		
11/16/2016				<0.0005	
1/11/2017		0.0001 (J)	8E-05 (J)		
1/16/2017	<0.0005				
2/21/2017	<0.0005				
2/27/2017				<0.0005	
3/1/2017			<0.0005		
3/2/2017		<0.0005			
4/26/2017	<0.0005	<0.0005	<0.0005		
5/8/2017				0.0001 (J)	
6/28/2017		<0.0005	<0.0005		
6/30/2017	<0.0005				
7/13/2017				<0.0005	
10/11/2017				<0.0005	
3/27/2018	<0.0005				
3/28/2018		<0.0005	<0.0005		
4/4/2018				<0.0005	
9/19/2018				<0.0005	
2/26/2019	<0.0005				
2/27/2019		<0.0005	<0.0005		
4/1/2019	<0.0005	<0.0005	<0.0005		
8/21/2019				0.00012 (J)	
9/25/2019	<0.0005	<0.0005	<0.0005		
10/9/2019				<0.0005	
2/11/2020			<0.0005		
2/12/2020	<0.0005	<0.0005			
3/17/2020				0.00012 (J)	
3/19/2020	<0.0005	<0.0005	<0.0005		
7/6/2020				<0.0005	
8/27/2020					<0.0005
8/28/2020				<0.0005	
9/23/2020		<0.0005	<0.0005		
9/24/2020	<0.0005				
11/12/2020				<0.0005	<0.0005
2/10/2021		<0.0005	<0.0005		
2/11/2021	<0.0005				
3/1/2021	<0.0005				
3/3/2021		<0.0005	<0.0005		
8/19/2021	<0.0005	<0.0005			
8/20/2021					<0.0005
8/27/2021			<0.0005	<0.0005	

# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					6.2	1.4
6/7/2016				2.2		
7/27/2016				2	4.73	1.19
8/30/2016	20.9					
8/31/2016		27.3	46.7			
9/16/2016				1.97		1.5
9/19/2016					4.76	
11/3/2016				1.99	5.25	1.31
11/14/2016	18.6		50.6			
11/15/2016		27.8				
1/11/2017				2.28	4.74	1.25
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		
4/26/2017					4.28	1.05
5/2/2017				1.95		
5/8/2017	14.6	29.9				
5/9/2017			56			
6/28/2017					4.95	1.06
6/29/2017				2.02		
7/11/2017	14.3					
7/13/2017		30.2	54.8			
10/4/2017				2.03		1.1
10/5/2017					5.28	
10/10/2017	12.1	27.2	52.8			
4/2/2018	<25					
4/3/2018			50.6			
4/4/2018		30.1				
6/7/2018					4.8	
6/11/2018				2.1		1.4
9/19/2018	11.1 (J)	29.2	50.5			
9/25/2018				2.1	4.6	1
3/27/2019	10.8 (J)	27.9	48.8			
4/2/2019				2.5		
4/3/2019					5.3	1.2
9/25/2019				2.6		
9/26/2019					4.9	1.1
10/8/2019	9.7	28.1				
10/9/2019			47.9			
3/17/2020	14.8	31.9	54.8			
3/24/2020				2.7	5.3	1
9/22/2020	10.1	30.4				
9/23/2020			50	2.6	5.2	0.91 (J)
3/1/2021	10.3	31.9	50.7			
3/3/2021				2.5	5.2	0.96 (J)
8/19/2021	9.6	31.7	50.4			
8/26/2021						0.98 (J)
8/27/2021				2.7	5.1	

# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					8.8	33
6/7/2016	2.3	3.7				
7/26/2016					7.69	32.3
7/27/2016	2.08					
7/28/2016		3.15				
9/14/2016					8.49	31
9/19/2016	1.97	3.17				
11/2/2016	2.13				7.83	30.9
11/3/2016		3.4				
1/12/2017						35.7
1/13/2017	2.45	4.98			8.08	
3/6/2017	2.48	6.28			8.64	
3/7/2017						32.7
4/26/2017	2.3	6.65				
5/1/2017					13.4	37
6/27/2017						36.5
6/29/2017	2.54	6.04			8.81	
10/3/2017		8.28				30.9
10/4/2017	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					26.2
6/7/2018					8.2	
6/28/2018			1.4	6.7		
8/7/2018			1.2	6.3		
9/24/2018			1.1	5.7		
9/25/2018	2.3	10.4 (J)				
9/26/2018					9.5 (J)	25.8
3/26/2019				5.6		
3/27/2019			1.5			
4/2/2019		8.8				
4/3/2019	2.9				8.4	24.7 (J)
9/24/2019		7.7				25.8
9/25/2019	2.4				9.5	
10/9/2019			2.4	4.9		
3/24/2020	2.6	6		4.8		26.1
3/25/2020			2.7		10.5	
9/22/2020					9.6	27.2
9/24/2020	2.6	7.8	3.7	4.4		
3/2/2021						1.6
3/3/2021	2.4				7.7	
3/4/2021		8.7	8.2	4.6		
8/26/2021			14.1		7.6	25.2
8/27/2021	2.4					

# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		9.5				
9/3/2021				5.6		

# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				12	2.5	
6/2/2016	2.4		1.3			
7/25/2016					2.16	
7/26/2016	2.12		1.24	11		
8/31/2016		9.31				
9/13/2016				11.8	2.21	
9/14/2016	2.18					23.5
9/15/2016			1.17			
11/1/2016				11		
11/2/2016			1.23			
11/4/2016	2.17 (J)				2.67	23.7
11/28/2016		9.47 (B)				
12/15/2016						23.1
1/10/2017			1.24			
1/11/2017				11.2		
1/12/2017	2.37					
1/16/2017					2.45	23.3
2/22/2017		10.4				
3/2/2017				11	2.57	
3/3/2017						25.1
3/7/2017	2.34					
3/8/2017			1.21			
4/26/2017			1.14			
4/27/2017				11.1	2.38	
4/28/2017						30.7
5/2/2017	2.17					
5/8/2017		14.2				
5/26/2017						26.2
6/27/2017	2.13			13.8	2.36	
6/28/2017						26.1
6/30/2017			1.24			
7/17/2017		14.1				
10/3/2017	2.15			14	2.21	26.7
10/5/2017			1.11			
10/16/2017		13.6				
2/19/2018		<25				
6/5/2018				15.2 (J)		
6/6/2018					2.3	
6/7/2018	2.3					25
6/8/2018			1.1			
8/6/2018		11.4 (J)				
9/26/2018	2.3					
10/1/2018			0.99	15.1	1.8	25
2/25/2019		12.7 (J)				
3/28/2019				13.3 (J)	2.2	
3/29/2019			1.1			23.5 (J)
4/3/2019	2.8					
6/12/2019		18.9				
9/24/2019	2.5			15.8	2.3	26.4
9/25/2019			1.1			
10/8/2019		28.3				
3/17/2020		24.3				



# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			1.1		2.1	
3/19/2020				15		27.4
3/24/2020	2.5					
9/22/2020	2.6	31				
9/23/2020				14.1	1.8	26.3
9/25/2020			1.3			
3/2/2021	2.6	34.2	1.2			
3/3/2021				14.1	1.8	25.6
8/19/2021			1.2	14.2	2	
8/20/2021		26.5				
8/26/2021	2.5					
8/27/2021						22.6

# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			21		
6/2/2016	1.3	28			
7/25/2016	1.17		20.3		
7/26/2016		24.5			
9/1/2016				96.8	
9/14/2016			19.7		
9/15/2016		27			
9/19/2016	1.05				
11/1/2016	1.14	25.6	18.4		
11/16/2016				107	
1/11/2017		27.5	20.3		
1/16/2017	1.23				
2/21/2017	1.25				
2/27/2017				104	
3/1/2017			18.6		
3/2/2017		27.5			
4/26/2017	1.03	30.4	25.6		
5/8/2017				103	
6/28/2017		29.8	23.9		
6/30/2017	1.13				
7/13/2017				83.7	
10/4/2017	1.09	29.7	22.1		
10/11/2017				69	
4/4/2018				51.9	
6/7/2018		29.1			
6/8/2018			21.9 (J)		
6/11/2018	1.1				
9/19/2018				51.9	
10/1/2018		26.9	19.7		
10/2/2018	1.1				
3/27/2019				54.2	
4/1/2019	1.3	30.1	20.4 (J)		
9/25/2019	1.1	29.5	22.4		
10/9/2019				64.2	
3/17/2020				70.4	
3/19/2020	1.2	31.5	21.9		
7/6/2020				105	
8/27/2020					52.3
8/28/2020				102	
9/22/2020					53.5
9/23/2020		28.6	23.6	104	
9/24/2020	1.1				
10/7/2020				105	53.8
11/12/2020				110	53.6
3/1/2021	1.2				50.6
3/2/2021				110	
3/3/2021		29.8	20.6		
8/19/2021	1.2	28.1			
8/20/2021					47.9
8/27/2021			24.7	108	

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					6.8	6.4
6/7/2016				4.5		
7/27/2016				4.5	6.7	6.2
8/30/2016	5.2					
8/31/2016		13	5.8			
9/16/2016				4.5		6.1
9/19/2016					7	
11/3/2016				5.4	7.5	7.4
11/14/2016	6.4		5.8			
11/15/2016		14				
1/11/2017				4.7	6.5	6.1
2/24/2017	5.5					
2/27/2017			5			
2/28/2017		12				
3/1/2017					6.9	6
3/2/2017				4.8		
4/26/2017					7	6.5
5/2/2017				4.6		
5/8/2017	5.8	13				
5/9/2017			4.6			
6/28/2017					7	6.4
6/29/2017				4.5		
7/11/2017	5.8					
7/13/2017		13	4.7			
10/4/2017				4.7		6.8
10/5/2017					7	
10/10/2017	5.9	14	4.5			
4/2/2018	4.8					
4/3/2018			4.6			
4/4/2018		13.4				
6/7/2018					6.8	
6/11/2018				4.9		6.8
9/19/2018	4	14.2	4.7			
9/25/2018				5.6	7.9	7.8
3/27/2019	4.3	14	4.6			
4/2/2019				4.8		
4/3/2019					6.9	6.3
9/25/2019				5.7		
9/26/2019					7	7.1
10/8/2019	4.4	14.8				
10/9/2019			5.1			
3/17/2020	4.1	14	4.6			
3/24/2020				5	7	6.8
9/22/2020	4.2	14.4				
9/23/2020			4.9	6.6	7.2	7.2
3/1/2021	3.7	14	5			
3/3/2021				7.1	7	7.2
8/19/2021	3.5	13	4.1			
8/26/2021						7.3
8/27/2021				8.5	7.4	

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					3.7	7.2
6/7/2016	1.9	2.8				
7/26/2016					3.6	6.6
7/27/2016	1.9					
7/28/2016		2.6				
9/14/2016					3.4	6.6
9/19/2016	1.9	2.4				
11/2/2016	2.6				4.5	7.6
11/3/2016		2.9				
1/12/2017						6.8
1/13/2017	2.3	2.5			4.2	
3/6/2017	1.9	2.1			3.6	
3/7/2017						6.8
4/26/2017	2	2.1				
5/1/2017					4.3	7.2
6/27/2017						7
6/29/2017	2.6	2.8			4.2	
10/3/2017		2.2				6.5
10/4/2017	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					4.7
6/7/2018					4.4	
6/28/2018			2.1	5		
8/7/2018			1.2	4.3		
9/24/2018			1.3	4.9		
9/25/2018	3.6	2.2				
9/26/2018					4.8	4.8
3/26/2019				4.4		
3/27/2019			1.4			
4/2/2019		2.5				
4/3/2019	3.1				4.3	4
9/24/2019		3.1				3.7
9/25/2019	2.8				4.5	
10/9/2019			2.1	5.1		
3/24/2020	2.7	2.8		4.7		3.5
3/25/2020			1.9		3.9	
9/22/2020					4.5	3.6
9/24/2020	2.7	2	2.7	5		
3/2/2021						3.2
3/3/2021	2.7				4.1	
3/4/2021		1.8	4.9	4.9		
8/26/2021			7.2		4.4	3.4
8/27/2021	2.8					

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		1.8				
9/3/2021				5.5		

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				1.3	1.6	
6/2/2016	4.3		4.1			
7/25/2016					1.4	
7/26/2016	4.4		4	1.2		
8/31/2016		4				
9/13/2016				1.1	1.3	
9/14/2016	3.8					1.1
9/15/2016			4.2			
11/1/2016				1.3		
11/2/2016			4.9			
11/4/2016	4.8				1.6	1.4
11/28/2016		4.2				
12/15/2016						2.9
1/10/2017			4.1			
1/11/2017				1.1		
1/12/2017	3.8					
1/16/2017					1.4	0.98
2/22/2017		3.7				
3/2/2017				1	1.3	
3/3/2017						1.1
3/7/2017	4.5					
3/8/2017			4.2			
4/26/2017			4.1			
4/27/2017				1	1.3	
4/28/2017						0.91
5/2/2017	4.6					
5/8/2017		4.2				
5/26/2017						0.93
6/27/2017	4.3			1.1	1.4	
6/28/2017						1
6/30/2017			3.7			
7/17/2017		3.8				
10/3/2017	4.2			1.1	1.7	1.2
10/5/2017			3.8			
10/16/2017		4.2				
2/19/2018		4.3				
6/5/2018				1.1		
6/6/2018					1.4	
6/7/2018	4.5					1
6/8/2018			3.4			
8/6/2018		3.8				
9/26/2018	5.1					
10/1/2018			3.8	1.1	1.4	1.1
2/25/2019		4.1				
3/28/2019				1.4	1.5	
3/29/2019			4.2			1.2
4/3/2019	4.2					
6/12/2019		4.7				
9/24/2019	4.5			1.1	1.3	0.95 (J)
9/25/2019			4.8			
10/8/2019		5.1				
3/17/2020		4.8				

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			5.2		1.4	
3/19/2020				1.1		0.97 (J)
3/24/2020	4.3					
9/22/2020	4.2	4.2				
9/23/2020				0.99 (J)	1.2	0.88 (J)
9/25/2020			5.3			
3/2/2021	4.3	4.1	4.9			
3/3/2021				0.96 (J)	1.2	0.86 (J)
8/19/2021			5	1.1	1.3	
8/20/2021		5.2				
8/26/2021	4.3					
8/27/2021						0.99 (J)

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			1.3		
6/2/2016	1.9	1.4			
7/25/2016	1.7		1.3		
7/26/2016		1.6			
9/1/2016				37	
9/14/2016			1.3		
9/15/2016		1.5			
9/19/2016	1.6				
11/1/2016	1.8	1.7	1.4		
11/16/2016				37	
1/11/2017		1.2	1.1		
1/16/2017	1.7				
2/21/2017	1.7				
2/27/2017				33	
3/1/2017			1.1		
3/2/2017		1.2			
4/26/2017	1.7	1.2	1.1		
5/8/2017				33	
6/28/2017		1.3	1.2		
6/30/2017	1.8				
7/13/2017				32	
10/4/2017	1.8	1.5	1.2		
10/11/2017				29	
4/4/2018				26.6	
6/7/2018		1.2			
6/8/2018			1.2		
6/11/2018	2				
9/19/2018				26.5	
10/1/2018		1.5	1.2		
10/2/2018	1.8				
3/27/2019				20.9	
4/1/2019	1.7	1.2	1.1		
9/25/2019	1.6	1.1	1.1		
10/9/2019				25	
3/17/2020				24.8	
3/19/2020	1.8	1.2	1.1		
7/6/2020				25.8	
8/27/2020					3.9
8/28/2020				25.9	
9/22/2020					4.1
9/23/2020		1.1	1	28.1	
9/24/2020	1.5				
10/7/2020				28.2	4
11/12/2020				26.7	3.8
3/1/2021	1.6				3.7
3/2/2021				27.4	
3/3/2021		1.1	0.99 (J)		
8/19/2021	1.6	1.1			
8/20/2021					3.1
8/27/2021			1.1	29.3	



# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					0.0012 (J)	<0.005
6/7/2016				<0.005		
7/27/2016				0.0008 (J)	0.0007 (J)	0.0006 (J)
8/30/2016	<0.005					
8/31/2016		<0.005	<0.005			
9/16/2016				<0.005		<0.005
9/19/2016					<0.005	
11/3/2016				<0.005	<0.005	<0.005
11/14/2016	0.0093 (J)		0.0061 (J)			
11/15/2016		<0.005				
1/11/2017				<0.005	<0.005	<0.005
2/24/2017	<0.005					
2/27/2017			<0.005			
2/28/2017		<0.005				
3/1/2017					0.0012 (J)	<0.005
3/2/2017				0.001 (J)		
4/26/2017					0.0005 (J)	0.0003 (J)
5/2/2017				0.0007 (J)		
5/8/2017	<0.005	<0.005				
5/9/2017			<0.005			
6/28/2017					0.0006 (J)	<0.005
6/29/2017				0.0006 (J)		
7/11/2017	<0.005					
7/13/2017		<0.005	0.0006 (J)			
10/10/2017	<0.005	<0.005	<0.005			
3/28/2018				<0.005	<0.005	<0.005
4/2/2018	<0.005					
4/3/2018			<0.005			
4/4/2018		<0.005				
9/19/2018	<0.005	<0.005	<0.005			
3/5/2019				<0.005		<0.005
3/6/2019					<0.005	
8/20/2019	<0.005	<0.005	<0.005			
2/11/2020				0.00087 (J)	0.001 (J)	0.00088 (J)
3/24/2020				0.00087 (J)	0.00095 (J)	0.0011 (J)
8/27/2020	<0.005	<0.005				
8/28/2020			<0.005			
9/22/2020	<0.005	<0.005				
9/23/2020			0.00058 (J)	0.00098 (J)	0.00092 (J)	0.0012 (J)
2/9/2021					0.00083 (J)	0.0013 (J)
3/1/2021	<0.005	<0.005	<0.005			
3/3/2021				0.00082 (J)	0.00087 (J)	0.001 (J)
8/19/2021	<0.005	<0.005	<0.005			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.005	<0.005
6/7/2016	<0.005	<0.005				
7/26/2016					<0.005	<0.005
7/27/2016	0.0005 (J)					
7/28/2016		<0.005				
9/14/2016					<0.005	<0.005
9/19/2016	<0.005	<0.005				
11/2/2016	<0.005				<0.005	<0.005
11/3/2016		<0.005				
1/12/2017						<0.005
1/13/2017	<0.005	<0.005			<0.005	
3/6/2017	<0.005	<0.005			<0.005	
3/7/2017						<0.005
4/26/2017	0.0007 (J)	<0.005				
5/1/2017					<0.005	0.0004 (J)
6/27/2017						<0.005
6/29/2017	0.0005 (J)	<0.005			<0.005	
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			
3/29/2018	<0.005	<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	<0.005
3/5/2019	<0.005	<0.005				
8/21/2019			<0.005	0.00053 (J)		
10/9/2019			<0.005	0.0012 (J)		
2/12/2020	0.00045 (J)	<0.005	<0.005	0.00065 (J)	<0.005	<0.005
3/24/2020	0.00077 (J)	<0.005		0.00055 (J)		<0.005
3/25/2020			<0.005		0.00058 (J)	
9/22/2020					<0.005	0.0011 (J)
9/24/2020	0.00076 (J)	<0.005	<0.005	<0.005		
2/8/2021						<0.005
2/9/2021	0.00056 (J)	<0.005			<0.005	
2/10/2021			<0.005	<0.005		
3/2/2021						<0.005
3/3/2021	<0.005				0.0013 (J)	
3/4/2021		<0.005	<0.005	<0.005		
8/26/2021			<0.005		<0.005	<0.005
8/27/2021	<0.005					
9/1/2021		<0.005				
9/3/2021				<0.005		

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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		<0.005				
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		0.0059				
8/5/2014		<0.005				
2/4/2015		<0.005				
8/3/2015		0.0011 (J)				
2/16/2016		<0.005				
6/1/2016				0.0035	<0.005	
6/2/2016	<0.005		<0.005			
7/25/2016					<0.005	
7/26/2016	<0.005		<0.005	<0.005		
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			
11/4/2016	<0.005				<0.005	<0.005
11/28/2016		<0.005				
12/15/2016						<0.005
1/10/2017			<0.005			
1/11/2017				<0.005		
1/12/2017	<0.005					
1/16/2017					<0.005	<0.005
2/22/2017		<0.005				
3/2/2017				0.0009 (J)	0.0004 (J)	
3/3/2017						0.0005 (J)
3/7/2017	<0.005					
3/8/2017			<0.005			
4/26/2017			<0.005			
4/27/2017				<0.005	<0.005	
4/28/2017						0.0004 (J)
5/2/2017	<0.005					
5/8/2017		<0.005				
5/26/2017						<0.005
6/27/2017	<0.005			<0.005	<0.005	
6/28/2017						<0.005
6/30/2017			<0.005			
7/17/2017		<0.005				
10/16/2017		<0.005				

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						<0.005
3/29/2018	<0.005			<0.005		
8/6/2018		<0.005				
2/25/2019		<0.005				
2/26/2019			<0.005			
2/27/2019				<0.005	<0.005	<0.005
3/4/2019	<0.005					
3/28/2019				<0.005	0.0021 (J)	
3/29/2019			<0.005			<0.005
6/12/2019		<0.005				
8/19/2019		<0.005				
9/24/2019				0.00072 (J)	0.0028 (J)	<0.005
9/25/2019			<0.005			
10/8/2019		<0.005				
2/10/2020				0.00042 (J)	<0.005	
2/11/2020						<0.005
2/12/2020	0.00043 (J)		<0.005			
3/17/2020		<0.005				
3/18/2020			<0.005		0.00044 (J)	
3/19/2020				0.00084 (J)		0.00048 (J)
3/24/2020	0.0014 (J)					
8/26/2020		<0.005				
9/22/2020	<0.005	<0.005				
9/23/2020				0.00062 (J)	0.00058 (J)	<0.005
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				<0.005	<0.005	
3/2/2021	<0.005	<0.005	<0.005			
3/3/2021				<0.005	<0.005	<0.005
8/19/2021			<0.005	<0.005	<0.005	
8/20/2021		<0.005				
8/26/2021	<0.005					
8/27/2021						<0.005

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.005		
6/2/2016	<0.005	0.0013 (J)			
7/25/2016	<0.005		<0.005		
7/26/2016		<0.005			
9/1/2016				<0.005	
9/14/2016			<0.005		
9/15/2016		<0.005			
9/19/2016	<0.005				
11/1/2016	<0.005	<0.005	<0.005		
11/16/2016				<0.005	
1/11/2017		<0.005	<0.005		
1/16/2017	<0.005				
2/21/2017	<0.005				
2/27/2017				<0.005	
3/1/2017			0.0004 (J)		
3/2/2017		0.0006 (J)			
4/26/2017	0.0016 (J)	<0.005	<0.005		
5/8/2017				<0.005	
6/28/2017		<0.005	<0.005		
6/30/2017	<0.005				
7/13/2017				<0.005	
10/11/2017				<0.005	
3/27/2018	<0.005				
3/28/2018		<0.005	<0.005		
4/4/2018				<0.005	
9/19/2018				<0.005	
2/26/2019	<0.005				
2/27/2019		<0.005	<0.005		
4/1/2019	<0.005	<0.005	<0.005		
8/21/2019				<0.005	
9/25/2019	<0.005	0.0014 (J)	0.0019 (J)		
2/11/2020			<0.005		
2/12/2020	<0.005	<0.005			
3/19/2020	<0.005	<0.005	<0.005		
7/6/2020				<0.005	
8/27/2020					<0.005
8/28/2020				<0.005	
9/22/2020					0.00073 (J)
9/23/2020		<0.005	<0.005	<0.005	
9/24/2020	<0.005				
10/7/2020				<0.005	0.00086 (J)
11/12/2020				<0.005	<0.005
2/10/2021		<0.005	<0.005		
2/11/2021	<0.005				
3/1/2021	<0.005				0.00094 (J)
3/2/2021				<0.005	
3/3/2021		<0.005	<0.005		
8/19/2021	<0.005	<0.005			
8/20/2021					<0.005
8/27/2021			<0.005	<0.005	

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.005	0.00061 (J)
6/7/2016				<0.005		
7/27/2016				<0.005	<0.005	0.0004 (J)
8/30/2016	0.0073 (J)					
8/31/2016		0.0119	0.0009 (J)			
9/16/2016				<0.005		0.0008 (J)
9/19/2016					<0.005	
11/3/2016				<0.005	<0.005	<0.005
11/14/2016	0.0115		0.0009 (J)			
11/15/2016		0.0033 (J)				
1/11/2017				<0.005	<0.005	<0.005
2/24/2017	0.0106					
2/27/2017			0.001 (J)			
2/28/2017		0.0017 (J)				
3/1/2017					<0.005	<0.005
3/2/2017				<0.005		
4/26/2017					<0.005	<0.005
5/2/2017				<0.005		
5/8/2017	0.0099 (J)	0.0018 (J)				
5/9/2017			0.0008 (J)			
6/28/2017					<0.005	<0.005
6/29/2017				<0.005		
7/11/2017	0.0096 (J)					
7/13/2017		0.0022 (J)	0.0009 (J)			
10/10/2017	0.0036 (J)	0.0017 (J)	0.0008 (J)			
3/28/2018				<0.005	<0.005	<0.005
4/2/2018	<0.005					
4/3/2018			<0.01 (O)			
4/4/2018		<0.005				
6/7/2018					<0.005	
6/11/2018				<0.005		<0.005
9/19/2018	0.0036 (J)	0.0025 (J)	0.00081 (J)			
9/25/2018				<0.005	<0.005	<0.005
3/5/2019				<0.005		<0.005
3/6/2019					<0.005	
4/2/2019				<0.005		
4/3/2019					<0.005	<0.005
8/20/2019	0.00092 (J)	0.002 (J)	0.00071 (J)			
9/25/2019				<0.005		
9/26/2019					<0.005	<0.005
10/8/2019	0.0014 (J)	0.0017 (J)				
10/9/2019			0.0007 (J)			
2/11/2020				<0.005	<0.005	<0.005
3/17/2020	0.0017 (J)	0.004 (J)	0.00081 (J)			
3/24/2020				<0.005	<0.005	<0.005
8/27/2020	0.0011 (J)	0.003 (J)				
8/28/2020			0.00055 (J)			
9/22/2020	0.00097 (J)	0.0065				
9/23/2020			0.00053 (J)	<0.005	<0.005	<0.005
2/9/2021					<0.005	<0.005
3/1/2021	0.001 (J)	0.0033 (J)	0.00062 (J)			
3/3/2021				<0.005	<0.005	<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	0.00099 (J)	0.0014 (J)	0.00048 (J)			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					0.00082 (J)	<0.005
6/7/2016	<0.005	0.0056				
7/26/2016					0.0012 (J)	<0.005
7/27/2016	<0.005					
7/28/2016		0.0032 (J)				
9/14/2016					0.0006 (J)	<0.005
9/19/2016	<0.005	0.0047 (J)				
11/2/2016	<0.005				<0.005	<0.005
11/3/2016		0.013				
1/12/2017						<0.005
1/13/2017	<0.005	0.011			0.0029 (J)	
3/6/2017	<0.005	0.011			0.0006 (J)	
3/7/2017						<0.005
4/26/2017	<0.005	0.009 (J)				
5/1/2017					<0.005	<0.005
6/27/2017						<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			
3/29/2018	<0.005	<0.005			<0.005	<0.005
4/3/2018			<0.005	<0.005		
6/5/2018		0.0041 (J)				
6/6/2018	<0.005					<0.005
6/7/2018					0.00058 (J)	
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	0.0044 (J)				
9/26/2018					<0.005	<0.005
3/4/2019					<0.005	<0.005
3/5/2019	<0.005	0.0039 (J)				
4/2/2019		0.0039 (J)				
4/3/2019	<0.005				0.00083 (J)	<0.005
8/21/2019			0.00034 (J)	<0.005		
9/24/2019		0.0032 (J)				<0.005
9/25/2019	<0.005				<0.005	
10/9/2019			<0.005	<0.005		
2/12/2020	<0.005	0.0081	0.00034 (J)	<0.005	<0.005	0.00037 (J)
3/24/2020	<0.005	0.0061		<0.005		0.00035 (J)
3/25/2020			0.00034 (J)		0.00056 (J)	
9/22/2020					<0.005	<0.005
9/24/2020	<0.005	0.0079	0.00053 (J)	<0.005		
2/8/2021						<0.005
2/9/2021	<0.005	0.009			<0.005	
2/10/2021			0.00098 (J)	<0.005		
3/2/2021						<0.005
3/3/2021	<0.005				<0.005	



# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.0065	0.00071 (J)	<0.005		
8/26/2021			0.0011 (J)		0.00042 (J)	<0.005
8/27/2021	<0.005					
9/1/2021		0.0068				
9/3/2021				<0.005		

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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			
7/25/2016					0.0008 (J)	
7/26/2016	<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			
11/4/2016	<0.005				0.0025 (J)	<0.005
11/28/2016		0.0036 (J)				
12/15/2016						<0.005
1/10/2017			<0.005			
1/11/2017				<0.005		
1/12/2017	<0.005					
1/16/2017					0.0027 (J)	<0.005
2/22/2017		0.0049 (J)				
3/2/2017				<0.005	0.0022 (J)	
3/3/2017						<0.005
3/7/2017	<0.005					
3/8/2017			<0.005			
4/26/2017			<0.005			
4/27/2017				<0.005	0.0018 (J)	
4/28/2017						<0.005
5/2/2017	<0.005					
5/8/2017		0.0059 (J)				
5/26/2017						<0.005
6/27/2017	<0.005			<0.005	0.0023 (J)	
6/28/2017						<0.005
6/30/2017			<0.005			
7/17/2017		0.0046 (J)				
10/16/2017		0.0034 (J)				

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						<0.005
3/29/2018	<0.005			<0.005		
6/5/2018				<0.005		
6/6/2018					<0.005	
6/7/2018	<0.005					<0.005
6/8/2018			<0.005			
8/6/2018		0.003 (J)				
9/26/2018	<0.005					
10/1/2018			<0.005	<0.005	0.00059 (J)	<0.005
2/25/2019		0.001 (J)				
2/26/2019			<0.005			
2/27/2019				<0.005	0.00064 (J)	<0.005
3/4/2019	<0.005					
3/28/2019				<0.005	0.00091 (J)	
3/29/2019			<0.005			<0.005
4/3/2019	<0.005					
6/12/2019		0.003 (J)				
8/19/2019		0.0035 (J)				
9/24/2019	<0.005			<0.005	0.0013 (J)	<0.005
9/25/2019			<0.005			
10/8/2019		0.0039 (J)				
2/10/2020				<0.005	0.0016 (J)	
2/11/2020						<0.005
2/12/2020	<0.005		<0.005			
3/17/2020		0.003 (J)				
3/18/2020			<0.005		0.00087 (J)	
3/19/2020				<0.005		<0.005
3/24/2020	<0.005					
8/26/2020		0.2 (O)				
9/22/2020	<0.005	0.16 (O)				
9/23/2020				<0.005	0.0013 (J)	<0.005
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				0.00086 (J)	0.0028 (J)	
3/2/2021	<0.005	0.21 (O)	<0.005			
3/3/2021				<0.005	0.003 (J)	<0.005
8/19/2021			<0.005	0.00055 (J)	0.0017 (J)	
8/20/2021		0.074 (O)				
8/26/2021	<0.005					
8/27/2021						<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.005		
6/2/2016	0.035	<0.005			
7/25/2016	0.0312		<0.005		
7/26/2016		<0.005			
9/1/2016				0.0171	
9/14/2016			<0.005		
9/15/2016		<0.005			
9/19/2016	0.0275				
11/1/2016	0.0255	<0.005	<0.005		
11/16/2016				0.0145	
1/11/2017		<0.005	<0.005		
1/16/2017	0.0245				
2/21/2017	0.0272				
2/27/2017				0.0161	
3/1/2017			<0.005		
3/2/2017		<0.005			
4/26/2017	0.0244	<0.005	<0.005		
5/8/2017				0.0367	
6/28/2017		<0.005	<0.005		
6/30/2017	0.0233				
7/13/2017				0.0265	
10/11/2017				0.0556	
3/27/2018	0.023				
3/28/2018		<0.005	<0.005		
4/4/2018				0.025	
6/7/2018		<0.005			
6/8/2018			<0.005		
6/11/2018	0.023				
9/19/2018				0.042	
10/1/2018		<0.005	<0.005		
10/2/2018	0.022				
2/26/2019	0.021				
2/27/2019		<0.005	<0.005		
4/1/2019	0.022	<0.005	<0.005		
8/21/2019				0.027	
9/25/2019	0.016	<0.005	<0.005		
10/9/2019				0.024	
2/11/2020			<0.005		
2/12/2020	0.014	<0.005			
3/17/2020				0.022	
3/19/2020	0.014	<0.005	<0.005		
7/6/2020				0.0041 (J)	
8/27/2020					0.0022 (J)
8/28/2020				0.0038 (J)	
9/22/2020					0.0019 (J)
9/23/2020		<0.005	<0.005	0.0015 (J)	
9/24/2020	0.0064				
10/7/2020				0.0014 (J)	0.0019 (J)
11/12/2020				0.001 (J)	0.0015 (J)
2/10/2021		<0.005	<0.005		
2/11/2021	0.0078				
3/1/2021	0.0061				0.0013 (J)

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.00096 (J)	
3/3/2021		<0.005	<0.005		
8/19/2021	0.0052	<0.005			
8/20/2021					0.0013 (J)
8/27/2021			<0.005	0.00056 (J)	

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					0.0804 (U)	0.301 (U)
6/7/2016				0.158 (U)		
7/27/2016				0.0354 (U)	0.206 (U)	0.196 (U)
8/30/2016	1.09					
8/31/2016		2.15	1.65			
9/16/2016				1.04		0.915 (U)
9/19/2016					1.58	
11/3/2016				0.314 (U)	0.342 (U)	0.928 (U)
11/14/2016			0.981 (U)			
11/15/2016		0.676 (U)				
12/15/2016	1 (U)					
1/11/2017				0.34 (U)	0.365 (U)	0.502 (U)
2/24/2017	0.504 (U)					
2/27/2017			0.528 (U)			
2/28/2017		0.241 (U)				
3/1/2017					0.395 (U)	0.202 (U)
3/2/2017				0.746 (U)		
4/26/2017					0.507 (U)	0.264 (U)
5/2/2017				0.111 (U)		
5/8/2017	0.455 (U)	0.508 (U)				
5/9/2017			1.4			
6/28/2017					0.892	0.636 (U)
6/29/2017				0.576 (U)		
7/11/2017	0.471 (U)					
7/13/2017		0.77 (U)	0.611 (U)			
10/10/2017	0.649 (U)	1.43	1.47			
3/28/2018				0.438 (U)	0.92 (U)	0.56 (U)
4/2/2018	0.512 (U)					
4/3/2018			1.53			
4/4/2018		0.325 (U)				
6/7/2018					0.668 (U)	
6/11/2018				0.901 (U)		0.649 (U)
9/19/2018	0.789 (U)	0.386 (U)	0.839 (U)			
9/25/2018				0.68 (U)	0.141 (U)	0.574 (U)
3/5/2019				0.272 (U)		0.474 (U)
3/6/2019					0.714 (U)	
4/2/2019				0.847 (U)		
4/3/2019					0.385 (U)	0.429 (U)
8/20/2019	2.44	1.71	2.23			
9/25/2019				0.412 (U)		
9/26/2019					0.386 (U)	0.222 (U)
10/8/2019	1.72	0.769 (U)				
10/9/2019			1.61			
2/11/2020				0.461 (U)	1.48	0.597 (U)
3/17/2020	1.22 (U)	1.37	1.44			
3/24/2020				0.534 (U)	0.632 (U)	0.262 (U)
8/27/2020	1.26 (U)	0.0859 (U)				
8/28/2020			0.983 (U)			
9/22/2020	1.06 (U)	0.327 (U)				
9/23/2020			0.746 (U)	0.466 (U)	0.887 (U)	0.43 (U)
2/9/2021				0.529 (U)	0.314 (U)	0.259 (U)
3/1/2021	1.2	0.0694 (U)	1.28			

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
3/3/2021				0.59 (U)	0.565 (U)	0.352 (U)
8/19/2021	1.07 (U)	0.261 (U)	1.38			
8/26/2021						0.686 (U)
8/27/2021				0.9 (U)	0.761 (U)	

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					0.721	5.11
6/7/2016	0.0191 (U)	0.347				
7/26/2016					1.26	6.92
7/27/2016	0.541 (U)					
7/28/2016		0.815 (U)				
9/14/2016					0.901 (U)	3.96
9/19/2016	0.826 (U)	0.862 (U)				
11/2/2016	0.791 (U)				1.09 (U)	4.53
11/3/2016		0.797 (U)				
1/12/2017						4.43
1/13/2017	0.296 (U)	0.72 (U)			1.19	
3/6/2017	0.518 (U)	0.518 (U)			0.669 (U)	
3/7/2017						4.8
4/26/2017	0.282 (U)	1.13 (U)				
5/1/2017					0.803 (U)	4.16
6/27/2017						2.8
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			
3/29/2018	1.73	1.91			0.703 (U)	3.42
4/3/2018			0.385 (U)	0.68 (U)		
6/5/2018		1.39				
6/6/2018	0.694 (U)					3.99
6/7/2018					0.628 (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	0.772 (U)	1.62				
9/26/2018					0.756 (U)	2.73
3/4/2019					1.21 (U)	4.43
3/5/2019	0.84 (U)	0.985 (U)				
4/2/2019		1.42				
4/3/2019	1.01				1.07 (U)	4.79
8/21/2019			1.01 (U)	1.24 (U)		
9/24/2019		1.35				4.06
9/25/2019	1.18 (U)				1.86	
10/8/2019			1.02 (U)	0.866 (U)		
2/12/2020	1.11 (U)	1.61	0.45 (U)	1.83	1.25	4.02
3/24/2020	1.88	1.24 (U)		1.27 (U)		3.52
3/25/2020			0.377 (U)		0.766 (U)	
9/22/2020					0.795 (U)	2.98
9/24/2020	0.611 (U)	1.8	0.568 (U)	0.634 (U)		
2/8/2021						2.89
2/9/2021	0.284 (U)	1.24			0.626 (U)	
2/10/2021			0.518 (U)	0.783 (U)		
3/2/2021						1.67
3/3/2021	0.133 (U)	1.2			1	



# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021			0.636 (U)	0.818 (U)		
8/26/2021			0.674 (U)		1.17 (U)	4.68
8/27/2021	0.779 (U)					
9/1/2021		1.86				
9/3/2021				0.971 (U)		

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				0.321 (U)	0.42	
6/2/2016	0.614		0.329 (U)			
7/25/2016					1.83	
7/26/2016	1.47		1.51	0.707 (U)		
8/31/2016		1.2				
9/13/2016				1.22	0.841	
9/14/2016	1.27					0.98 (U)
9/15/2016			1.04 (U)			
11/1/2016				0.805 (U)		
11/2/2016			0.496 (U)			
11/4/2016	0.434 (U)				0.166 (U)	0.277 (U)
11/28/2016		0.264 (U)				
12/15/2016						0.071 (U)
1/10/2017			0.376 (U)			
1/11/2017				0.705 (U)		
1/12/2017	0.202 (U)					
1/16/2017					0	0.44 (U)
2/22/2017		1.06 (U)				
3/2/2017				0.251 (U)	0.504 (U)	
3/3/2017						0.448 (U)
3/7/2017	0.0674 (U)					
3/8/2017			0.0745 (U)			
4/26/2017			0.282 (U)			
4/27/2017				1.08	0.593 (U)	
4/28/2017						0.548 (U)
5/2/2017	0.444 (U)					
5/8/2017		0.187 (U)				
5/26/2017						0 (U)
6/27/2017	0.77 (U)			1.02 (U)	0.657 (U)	
6/28/2017						0.608 (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)	
3/28/2018						0.412 (U)
3/29/2018	0.648 (U)			0.503 (U)		
6/5/2018				0.771 (U)		
6/6/2018					2.8	
6/7/2018	0.745 (U)					0.73 (U)
6/8/2018			0.218 (U)			
8/6/2018		0.196 (U)				
9/26/2018	0.377 (U)					
10/1/2018			1.24	0.783 (U)	1.06 (U)	0.756 (U)
2/26/2019			0.202 (U)			
2/27/2019				1.21 (U)	0.637 (U)	0.635 (U)
3/4/2019	1 (U)					
3/28/2019				1.13 (U)	0.125 (U)	
3/29/2019			0 (U)			0.224 (U)
4/3/2019	0.43 (U)					
8/19/2019		1.39				
9/24/2019	0.699 (U)			1.22 (U)	0.949 (U)	0.429 (U)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
9/25/2019			0.707 (U)			
10/8/2019		1.32 (U)				
2/10/2020				1.41	1.25 (U)	
2/11/2020						0.817 (U)
2/12/2020	0.913 (U)		1.07 (U)			
3/17/2020		1 (U)				
3/18/2020			0.207 (U)		0.458 (U)	
3/19/2020				1.1		0.715 (U)
8/26/2020		1.75				
9/22/2020	0.428 (U)	0.688 (U)				
9/23/2020				1.35 (U)	0.00884 (U)	0.565 (U)
9/25/2020			0.603 (U)			
2/8/2021	0.613 (U)					
2/10/2021			0.353 (U)			1.04 (U)
2/12/2021				0.366 (U)	0.458 (U)	
3/2/2021	0.579 (U)	0.948 (U)	0.71 (U)			
3/3/2021				0.492 (U)	0.105 (U)	0.459 (U)
8/19/2021			0.786 (U)	1.17 (U)	0.0732 (U)	
8/20/2021		0.528 (U)				
8/26/2021	0.798 (U)					
8/27/2021						0.409 (U)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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			
9/1/2016				2.28	
9/14/2016			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)		
11/16/2016				0.639 (U)	
11/28/2016				0.996	
1/11/2017		2.52	1.22		
1/16/2017	0.284 (U)				
2/21/2017	0.503 (U)				
2/27/2017				0.617 (U)	
3/1/2017			0.877 (U)		
3/2/2017		3.13			
4/26/2017	0.204 (U)	2.35	0.672 (U)		
5/8/2017				0.949	
6/28/2017		2.6	1.07 (U)		
6/30/2017	0.738 (U)				
7/13/2017				1.41	
10/11/2017				0.856 (U)	
3/27/2018	0.31 (U)				
3/28/2018		3	0.65 (U)		
4/4/2018				0.974	
6/7/2018		2.79			
6/8/2018			1.89		
6/11/2018	0.608 (U)				
9/19/2018				1.15 (U)	
10/1/2018		3.14	1.58		
10/2/2018	0.97 (U)				
2/26/2019	0.524 (U)				
2/27/2019		3.79	3.67		
4/1/2019	1.02 (U)	4.33	2.28		
8/21/2019				1.31	
9/25/2019	1.02 (U)	4.2	1.6		
10/9/2019				0.892 (U)	
2/11/2020		3.87	1.85		
2/12/2020	0.301 (U)				
3/17/2020				1.74	
3/19/2020	1	3.96	2.2		
7/6/2020				2.27	
8/27/2020					0.852 (U)
8/28/2020				2.34	
9/22/2020					0.268 (U)
9/23/2020		4.14	1.14 (U)	0.575 (U)	
9/24/2020	0.684 (U)				
10/7/2020				1.81	0.819 (U)
2/10/2021		3.65	2.46		
2/11/2021	0.678 (U)				
3/1/2021	0.412 (U)				0.846 (U)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				1.64	
3/3/2021		3.58	2.03		
8/19/2021	0.234 (U)	3.53			
8/20/2021					0.496 (U)
8/27/2021			1.34	1.83	

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.1	<0.1
6/7/2016				<0.1		
7/27/2016				<0.1	<0.1	<0.1
8/30/2016	0.09 (J)					
8/31/2016		<0.1	0.11 (J)			
9/16/2016				<0.1		<0.1
9/19/2016					<0.1	
11/3/2016				<0.1	<0.1	<0.1
11/14/2016	0.18 (J)		0.71			
11/15/2016		0.12 (J)				
1/11/2017				<0.1	<0.1	<0.1
2/24/2017	0.05 (J)					
2/27/2017			0.22 (J)			
2/28/2017		0.07 (J)				
3/1/2017					<0.1	<0.1
3/2/2017				<0.1		
4/26/2017					<0.1	<0.1
5/2/2017				<0.1		
5/8/2017	0.03 (J)	0.04 (J)				
5/9/2017			0.2 (J)			
6/28/2017					<0.1	<0.1
6/29/2017				<0.1		
7/11/2017	0.07 (J)					
7/13/2017		<0.1	0.11 (J)			
10/4/2017				<0.1		<0.1
10/5/2017					<0.1	
10/10/2017	<0.1	<0.1	0.39			
3/28/2018				<0.1	<0.1	<0.1
4/2/2018	<0.1					
4/3/2018			<0.1			
4/4/2018		<0.1				
6/7/2018					<0.1	
6/11/2018				<0.1		<0.1
9/19/2018	<0.1	<0.1	<0.1			
9/25/2018				<0.1	<0.1	<0.1
3/5/2019				<0.1		<0.1
3/6/2019					<0.1	
3/27/2019	0.081 (J)	<0.1	0.18 (J)			
4/2/2019				<0.1		
4/3/2019					<0.1	<0.1
8/20/2019	<0.1	<0.1	<0.1			
9/25/2019				<0.1		
9/26/2019					<0.1	<0.1
10/8/2019	0.034 (J)	<0.1				
10/9/2019			<0.1			
2/11/2020				<0.1	<0.1	<0.1
3/17/2020	<0.1	<0.1	0.076 (J)			
3/24/2020				<0.1	<0.1	<0.1
8/27/2020	<0.1	<0.1				
8/28/2020			0.07 (J)			
9/22/2020	<0.1	<0.1				
9/23/2020			0.082 (J)	<0.1	<0.1	<0.1

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
2/9/2021					<0.1	<0.1
3/1/2021	<0.1	<0.1	0.073 (J)			
3/3/2021				<0.1	<0.1	<0.1
8/19/2021	<0.1	<0.1	0.075 (J)			
8/26/2021						<0.1
8/27/2021				<0.1	<0.1	

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.1	0.11 (J)
6/7/2016	<0.1	<0.1				
7/26/2016					<0.1	0.05 (J)
7/27/2016	<0.1					
7/28/2016		0.02 (J)				
9/14/2016					<0.1	0.04 (J)
9/19/2016	<0.1	0.02 (J)				
11/2/2016	<0.1				<0.1	<0.1
11/3/2016		<0.1				
1/12/2017						0.04 (J)
1/13/2017	<0.1	<0.1			<0.1	
3/6/2017	<0.1	<0.1			<0.1	
3/7/2017						<0.1
4/26/2017	<0.1	0.04 (J)				
5/1/2017					<0.1	<0.1
6/27/2017						<0.1
6/29/2017	<0.1	<0.1			<0.1	
10/3/2017		<0.1				<0.1
10/4/2017	<0.1					
10/5/2017					<0.1	
10/11/2017			<0.1			
10/12/2017				<0.1		
11/20/2017			<0.1	<0.1		
1/10/2018				<0.1		
1/11/2018			<0.1			
2/19/2018				<0.1		
2/20/2018			0.23			
3/29/2018	<0.1	<0.1			<0.1	<0.1
4/3/2018			<0.1	<0.1		
6/5/2018		0.13 (J)				
6/6/2018	<0.1					0.15 (J)
6/7/2018					<0.1	
6/28/2018			<0.1	<0.1		
8/7/2018			0.048 (J)	<0.1		
9/24/2018			<0.1	<0.1		
9/25/2018	<0.1	0 (J)				
9/26/2018					<0.1	<0.1
3/4/2019					<0.1	0.19 (J)
3/5/2019	<0.1	0.32				
3/26/2019				<0.1		
3/27/2019			<0.1			
4/2/2019		0.12 (J)				
4/3/2019	<0.1				<0.1	0.047 (J)
8/21/2019			<0.1	<0.1		
9/24/2019		0.15 (J)				0.05 (J)
9/25/2019	<0.1				<0.1	
10/9/2019			<0.1	<0.1		
2/12/2020	<0.1	0.1 (J)	<0.1	<0.1	<0.1	<0.1
3/24/2020	<0.1	0.081 (J)		<0.1		<0.1
3/25/2020			<0.1		<0.1	
9/22/2020					<0.1	0.056 (J)
9/24/2020	<0.1	0.079 (J)	<0.1	<0.1		



# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
2/8/2021						0.055 (J)
2/9/2021	<0.1	0.092 (J)			<0.1	
2/10/2021			<0.1	<0.1		
3/2/2021						<0.1
3/3/2021	<0.1				<0.1	
3/4/2021		0.091 (J)	<0.1	<0.1		
8/26/2021			0.063 (J)		<0.1	0.061 (J)
8/27/2021	<0.1					
9/1/2021		0.11				
9/3/2021				<0.1		

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				0.12 (J)	<0.1	
6/2/2016	<0.1		<0.1			
7/25/2016					0.06 (J)	
7/26/2016	<0.1		0.02 (J)	0.08 (J)		
8/31/2016		0.14 (J)				
9/13/2016				0.11 (J)	<0.1	
9/14/2016	<0.1					0.08 (J)
9/15/2016			<0.1			
11/1/2016				<0.1		
11/2/2016			<0.1			
11/4/2016	<0.1				<0.1	<0.1
11/28/2016		0.12 (J)				
12/15/2016						0.06 (J)
1/10/2017			<0.1			
1/11/2017				0.05 (J)		
1/12/2017	<0.1					
1/16/2017					<0.1	0.1 (J)
2/22/2017		0.09 (J)				
3/2/2017				<0.1	<0.1	
3/3/2017						<0.1
3/7/2017	<0.1					
3/8/2017			<0.1			
4/26/2017			<0.1			
4/27/2017				0.04 (J)	0.01 (J)	
4/28/2017						0.06 (J)
5/2/2017	<0.1					
5/8/2017		0.05 (J)				
5/26/2017						0.09 (J)
6/27/2017	<0.1			<0.1	<0.1	
6/28/2017						0.11 (J)
6/30/2017			<0.1			
7/17/2017		0.14 (J)				
10/3/2017	<0.1			<0.1	<0.1	<0.1
10/5/2017			<0.1			
10/16/2017		0.12 (J)				
2/19/2018		0.17				
3/27/2018			<0.1		<0.1	
3/28/2018						0.31
3/29/2018	<0.1			<0.1		
6/5/2018				0.055 (J)		
6/6/2018					<0.1	
6/7/2018	<0.1					0.11 (J)
6/8/2018			<0.1			
8/6/2018		0.087 (J)				
9/26/2018	<0.1					
10/1/2018			<0.1	<0.1	<0.1	<0.1
2/25/2019		0.14 (J)				
2/26/2019			<0.1			
2/27/2019				0.052 (J)	<0.1	0.12 (J)
3/4/2019	<0.1					
3/28/2019				0.036 (J)	<0.1	
3/29/2019			<0.1			0.13 (J)

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
4/3/2019	<0.1					
6/12/2019		0.12 (J)				
8/19/2019		<0.1				
9/24/2019	<0.1			0.063 (J)	<0.1	0.081 (J)
9/25/2019			<0.1			
10/8/2019		0.052 (J)				
2/10/2020				0.061 (J)	<0.1	
2/11/2020						0.075 (J)
2/12/2020	<0.1		<0.1			
3/17/2020		0.053 (J)				
3/18/2020			<0.1		<0.1	
3/19/2020				0.064 (J)		0.093 (J)
3/24/2020	<0.1					
8/26/2020		0.068 (J)				
9/22/2020	<0.1	0.058 (J)				
9/23/2020				0.058 (J)	<0.1	0.08 (J)
9/25/2020			<0.1			
2/8/2021	<0.1					
2/10/2021			<0.1			0.094 (J)
2/12/2021				0.068 (J)	<0.1	
3/2/2021	<0.1	0.073 (J)	<0.1			
3/3/2021				0.078 (J)	<0.1	0.085 (J)
8/19/2021			<0.1	0.074 (J)	<0.1	
8/20/2021		0.06 (J)				
8/26/2021	<0.1					
8/27/2021						0.12

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			0.15 (J)		
6/2/2016	<0.1	0.62			
7/25/2016	0.06 (J)		0.14 (J)		
7/26/2016		0.49			
9/1/2016				0.08 (J)	
9/14/2016			0.18 (J)		
9/15/2016		0.54			
9/19/2016	<0.1				
11/1/2016	<0.1	0.68	<0.1		
11/16/2016				0.04 (J)	
1/11/2017		0.49	0.09 (J)		
1/16/2017	<0.1				
2/21/2017	<0.1				
2/27/2017				0.05 (J)	
3/1/2017			<0.1		
3/2/2017		0.48			
4/26/2017	<0.1	0.48	0.08 (J)		
5/8/2017				0.004 (J)	
6/28/2017		0.47	0.12 (J)		
6/30/2017	<0.1				
7/13/2017				0.35	
10/4/2017	<0.1	<0.1	<0.1		
10/11/2017				<0.1	
3/27/2018	<0.1				
3/28/2018		0.56	<0.1		
4/4/2018				<0.1	
6/7/2018		0.48			
6/8/2018			0.2 (J)		
6/11/2018	<0.1				
9/19/2018				<0.1	
10/1/2018		0.44	<0.1		
10/2/2018	<0.1				
2/26/2019	<0.1				
2/27/2019		0.53	0.13 (J)		
3/27/2019				0.12 (J)	
4/1/2019	<0.1	0.45	0.1 (J)		
8/21/2019				<0.1	
9/25/2019	<0.1	0.46	0.1 (J)		
10/9/2019				0.12 (J)	
2/11/2020			0.094 (J)		
2/12/2020	<0.1	0.4			
3/17/2020				<0.1	
3/19/2020	<0.1	0.51	0.11 (J)		
7/6/2020				0.12	
8/27/2020					<0.1
8/28/2020				0.12	
9/22/2020					<0.1
9/23/2020		0.47	0.098 (J)	0.12	
9/24/2020	<0.1				
10/7/2020				0.13	<0.1
11/12/2020				0.084 (J)	<0.1
2/10/2021		0.43	<0.1		

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
2/11/2021	<0.1				
3/1/2021	<0.1				<0.1
3/2/2021				0.12	
3/3/2021		0.44	0.1		
8/19/2021	<0.1	0.47			
8/20/2021					<0.1
8/27/2021			0.12	0.13	

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.001	<0.001
6/7/2016				<0.001		
7/27/2016				<0.001	<0.001	<0.001
8/30/2016	<0.001					
8/31/2016		<0.001	<0.001			
9/16/2016				<0.001		<0.001
9/19/2016					<0.001	
11/3/2016				<0.001	<0.001	<0.001
11/14/2016	<0.001		<0.001			
11/15/2016		<0.001				
1/11/2017				<0.001	<0.001	<0.001
2/24/2017	<0.001					
2/27/2017			<0.001			
2/28/2017		<0.001				
3/1/2017					<0.001	<0.001
3/2/2017				8E-05 (J)		
4/26/2017					<0.001	<0.001
5/2/2017				<0.001		
5/8/2017	<0.001	<0.001				
5/9/2017			0.0001 (J)			
6/28/2017					<0.001	0.0001 (J)
6/29/2017				8E-05 (J)		
7/11/2017	<0.001					
7/13/2017		<0.001	<0.001			
10/10/2017	<0.001	<0.001	<0.001			
3/28/2018				<0.001	<0.001	<0.001
4/2/2018	<0.001					
4/3/2018			<0.001			
4/4/2018		<0.001				
9/19/2018	<0.001	<0.001	<0.001			
3/5/2019				<0.001		<0.001
3/6/2019					<0.001	
4/2/2019				<0.001		
4/3/2019					<0.001	<0.001
8/20/2019	<0.001	<0.001	<0.001			
9/25/2019				<0.001		
9/26/2019					<0.001	<0.001
2/11/2020				<0.001	<0.001	<0.001
3/24/2020				6.4E-05 (J)	7.1E-05 (J)	5.4E-05 (J)
8/27/2020	<0.001	<0.001				
8/28/2020			<0.001			
9/22/2020	<0.001	<0.001				
9/23/2020			<0.001	4.1E-05 (J)	6E-05 (J)	9.7E-05 (J)
2/9/2021					5E-05 (J)	9.4E-05 (J)
3/1/2021	<0.001	<0.001	<0.001			
3/3/2021				<0.001	<0.001	7.6E-05 (J)
8/19/2021	<0.001	<0.001	<0.001			
8/26/2021						<0.001
8/27/2021				<0.001	<0.001	

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.001	<0.001
6/7/2016	<0.001	<0.001				
7/26/2016					<0.001	<0.001
7/27/2016	<0.001					
7/28/2016		<0.001				
9/14/2016					<0.001	<0.001
9/19/2016	<0.001	<0.001				
11/2/2016	0.0013 (J)				<0.001	<0.001
11/3/2016		<0.001				
1/12/2017						<0.001
1/13/2017	<0.001	<0.001			<0.001	
3/6/2017	<0.001	<0.001			<0.001	
3/7/2017						0.0001 (J)
4/26/2017	<0.001	<0.001				
5/1/2017					<0.001	<0.001
6/27/2017						<0.001
6/29/2017	<0.001	<0.001			<0.001	
10/11/2017			0.0001 (J)			
10/12/2017				9E-05 (J)		
11/20/2017			<0.001	<0.001		
1/10/2018				<0.001		
1/11/2018			0.0002 (J)			
2/19/2018				<0.001		
2/20/2018			<0.001			
3/29/2018	<0.001	<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		
3/4/2019					<0.001	<0.001
3/5/2019	<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				<0.001
9/25/2019	<0.001				<0.001	
10/9/2019			<0.001	<0.001		
2/12/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
3/24/2020	0.00011 (J)	<0.001		<0.001		5.4E-05 (J)
3/25/2020			5.1E-05 (J)		<0.001	
9/22/2020					<0.001	4.5E-05 (J)
9/24/2020	9.2E-05 (J)	4.6E-05 (J)	<0.001	3.8E-05 (J)		
2/8/2021						0.00013 (J)
2/9/2021	6.3E-05 (J)	<0.001			<0.001	
2/10/2021			<0.001	<0.001		
3/2/2021						5.1E-05 (J)
3/3/2021	4.5E-05 (J)				<0.001	
3/4/2021		<0.001	<0.001	<0.001		
8/26/2021			<0.001		<0.001	<0.001
8/27/2021	<0.001					
9/1/2021		<0.001				
9/3/2021				<0.001		

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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				
8/3/2015		<0.001				
2/16/2016		<0.001				
6/1/2016				0.00056 (J)	<0.001	
6/2/2016	<0.001		<0.001			
7/25/2016					<0.001	
7/26/2016	<0.001		<0.001	<0.001		
8/31/2016		<0.001				
9/13/2016				0.0001 (J)	<0.001	
9/14/2016	<0.001					<0.001
9/15/2016			<0.001			
11/1/2016				<0.001		
11/2/2016			<0.001			
11/4/2016	<0.001				<0.001	<0.001
11/28/2016		<0.001				
12/15/2016						<0.001
1/10/2017			<0.001			
1/11/2017				<0.001		
1/12/2017	<0.001					
1/16/2017					<0.001	<0.001
2/22/2017		<0.001				
3/2/2017				0.0001 (J)	<0.001	
3/3/2017						<0.001
3/7/2017	7E-05 (J)					
3/8/2017			0.0001 (J)			
4/26/2017			<0.001			
4/27/2017				<0.001	<0.001	
4/28/2017						<0.001
5/2/2017	<0.001					
5/8/2017		<0.001				
5/26/2017						<0.001
6/27/2017	<0.001			<0.001	<0.001	
6/28/2017						<0.001
6/30/2017			<0.001			
7/17/2017		<0.001				
10/16/2017		<0.001				



# Time Series

Constituent: Lead (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.001				
3/27/2018			<0.001		<0.001	
3/28/2018						<0.001
3/29/2018	<0.001			<0.001		
8/6/2018		<0.001				
2/25/2019		<0.001				
2/26/2019			<0.001			
2/27/2019				<0.001	<0.001	<0.001
3/4/2019	<0.001					
4/3/2019	<0.001					
6/12/2019		<0.001				
8/19/2019		<0.001				
9/24/2019	9E-05 (J)					
10/8/2019		<0.001				
2/10/2020				4.9E-05 (J)	<0.001	
2/11/2020						<0.001
2/12/2020	<0.001		<0.001			
3/17/2020		<0.001				
3/18/2020			<0.001		<0.001	
3/19/2020				0.00012 (J)		<0.001
3/24/2020	6.8E-05 (J)					
8/26/2020		<0.001				
9/22/2020	4.2E-05 (J)	0.0001 (J)				
9/23/2020				<0.001	0.00021 (J)	0.0011 (J)
9/25/2020			<0.001			
2/8/2021	3.7E-05 (J)					
2/10/2021			4.8E-05 (J)			0.00015 (J)
2/12/2021				4.4E-05 (J)	0.00038 (J)	
3/2/2021	9.2E-05 (J)	<0.001	<0.001			
3/3/2021				5.6E-05 (J)	<0.001	<0.001
8/19/2021			<0.001	<0.001	<0.001	
8/20/2021		<0.001				
8/26/2021	<0.001					
8/27/2021						<0.001

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.001		
6/2/2016	<0.001	0.00056 (J)			
7/25/2016	<0.001		<0.001		
7/26/2016		0.0001 (J)			
9/1/2016				<0.001	
9/14/2016			<0.001		
9/15/2016		0.0002 (J)			
9/19/2016	<0.001				
11/1/2016	<0.001	<0.001	<0.001		
11/16/2016				<0.001	
1/11/2017		<0.001	<0.001		
1/16/2017	<0.001				
2/21/2017	<0.001				
2/27/2017				<0.001	
3/1/2017			<0.001		
3/2/2017		0.0002 (J)			
4/26/2017	<0.001	<0.001	<0.001		
5/8/2017				<0.001	
6/28/2017		<0.001	<0.001		
6/30/2017	<0.001				
7/13/2017				<0.001	
10/11/2017				<0.001	
3/27/2018	<0.001				
3/28/2018		<0.001	<0.001		
4/4/2018				<0.001	
9/19/2018				<0.001	
2/26/2019	<0.001				
2/27/2019		<0.001	<0.001		
8/21/2019				<0.001	
2/11/2020			<0.001		
2/12/2020	<0.001	<0.001			
3/19/2020	<0.001	0.00017 (J)	<0.001		
7/6/2020				<0.001	
8/27/2020					9.2E-05 (J)
8/28/2020				<0.001	
9/22/2020					6E-05 (J)
9/23/2020		<0.001	0.00015 (J)	<0.001	
9/24/2020	<0.001				
10/7/2020				<0.001	<0.001
11/12/2020				4.4E-05 (J)	6.4E-05 (J)
2/10/2021		<0.001	<0.001		
2/11/2021	4.6E-05 (J)				
3/1/2021	<0.001				8.7E-05 (J)
3/2/2021				<0.001	
3/3/2021		<0.001	<0.001		
8/19/2021	<0.001	<0.001			
8/20/2021					<0.001
8/27/2021			<0.001	<0.001	

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					0.0088	0.015
6/7/2016				<0.03		
7/27/2016				<0.03	0.0087 (J)	0.0049 (J)
8/30/2016	0.0061 (J)					
8/31/2016		0.0115 (J)	0.0147 (J)			
9/16/2016				<0.03		0.0031 (J)
9/19/2016					0.0043 (J)	
11/3/2016				<0.03	<0.03	0.0021 (J)
11/14/2016	0.0064 (J)		0.0175 (J)			
11/15/2016		0.0148 (J)				
1/11/2017				0.0035 (J)	0.0052 (J)	0.0025 (J)
2/24/2017	0.0049 (J)					
2/27/2017			0.0135 (J)			
2/28/2017		0.0124 (J)				
3/1/2017					0.0053 (J)	0.0029 (J)
3/2/2017				<0.03		
4/26/2017					0.0041 (J)	0.0019 (J)
5/2/2017				<0.03		
5/8/2017	0.0053 (J)	0.0132 (J)				
5/9/2017			0.0136 (J)			
6/28/2017					0.0039 (J)	0.0016 (J)
6/29/2017				<0.03		
7/11/2017	0.0051 (J)					
7/13/2017		0.0124 (J)	0.0129 (J)			
10/10/2017	0.0043 (J)	0.0123 (J)	0.015 (J)			
3/28/2018				<0.03	0.0041 (J)	0.0024 (J)
4/2/2018	0.0045 (J)					
4/3/2018			0.014 (J)			
4/4/2018		0.014 (J)				
6/7/2018					0.0032 (J)	
6/11/2018				<0.03		0.0014 (J)
9/19/2018	0.0043 (J)	0.013 (J)	0.012 (J)			
9/25/2018				<0.03	0.0036 (J)	0.0016 (J)
3/5/2019				<0.03		0.0031 (J)
3/6/2019					0.0033 (J)	
4/2/2019				<0.03		
4/3/2019					0.0035 (J)	0.0028 (J)
8/20/2019	0.0036 (J)	0.013 (J)	0.012 (J)			
9/25/2019				<0.03		
9/26/2019					0.0032 (J)	0.0029 (J)
10/8/2019	0.0036 (J)	0.012 (J)				
10/9/2019			0.012 (J)			
2/11/2020				<0.03	0.0033 (J)	0.005 (J)
3/17/2020	0.0046 (J)	0.013 (J)	0.014 (J)			
3/24/2020				0.0034 (J)	0.0033 (J)	0.0035 (J)
8/27/2020	0.0039 (J)	0.013 (J)				
8/28/2020			0.012 (J)			
9/22/2020	0.0036 (J)	0.013 (J)				
9/23/2020			0.012 (J)	<0.03	0.003 (J)	0.0022 (J)
2/9/2021					0.0031 (J)	0.0019 (J)
3/1/2021	0.0037 (J)	0.013 (J)	0.012 (J)			
3/3/2021				<0.03	0.0034 (J)	0.0021 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	0.0038 (J)	0.013 (J)	0.012 (J)			
8/26/2021						0.0019 (J)
8/27/2021				<0.03	0.0032 (J)	

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					0.013	0.0049 (J)
6/7/2016	<0.03	0.0055				
7/26/2016					0.0123 (J)	0.0063 (J)
7/27/2016	<0.03					
7/28/2016		0.0045 (J)				
9/14/2016					0.0137 (J)	0.0058 (J)
9/19/2016	<0.03	0.0054 (J)				
11/2/2016	<0.03				0.0136 (J)	0.0053 (J)
11/3/2016		<0.03				
1/12/2017						0.0054 (J)
1/13/2017	<0.03	0.0062 (J)			0.0121 (J)	
3/6/2017	<0.03	0.0059 (J)			0.0143 (J)	
3/7/2017						0.0056 (J)
4/26/2017	<0.03	0.0054 (J)				
5/1/2017					0.0132 (J)	0.0031 (J)
6/27/2017						0.0018 (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			
3/29/2018	<0.03	0.0062 (J)			0.014 (J)	0.0058 (J)
4/3/2018			0.0022 (J)	<0.03		
6/5/2018		0.0061 (J)				
6/6/2018	<0.03					0.0068 (J)
6/7/2018					0.013 (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	<0.03	0.0062 (J)				
9/26/2018					0.014 (J)	0.0065 (J)
3/4/2019					0.015 (J)	0.0065 (J)
3/5/2019	<0.03	0.0053 (J)				
4/2/2019		0.0051 (J)				
4/3/2019	<0.03				0.014 (J)	0.007 (J)
8/21/2019			0.0035 (J)	<0.03		
9/24/2019		0.0068 (J)				0.0065 (J)
9/25/2019	<0.03				0.014 (J)	
10/9/2019			0.0036 (J)	<0.03		
2/12/2020	<0.03	0.0065 (J)	0.0041 (J)	<0.03	0.011 (J)	0.0066 (J)
3/24/2020	<0.03	0.0064 (J)		<0.03		0.0064 (J)
3/25/2020			0.0049 (J)		0.014 (J)	
9/22/2020					0.013 (J)	0.0066 (J)
9/24/2020	<0.03	0.0069 (J)	0.0054 (J)	<0.03		
2/8/2021						0.0063 (J)
2/9/2021	<0.03	0.006 (J)			0.011 (J)	
2/10/2021			0.0071 (J)	<0.03		
3/2/2021						0.0018 (J)
3/3/2021	<0.03				0.012 (J)	

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.0062 (J)	0.0084 (J)	<0.03		
8/26/2021			0.0082 (J)		0.0094 (J)	0.0075 (J)
8/27/2021	<0.03					
9/1/2021		0.0057 (J)				
9/3/2021				<0.03		

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				0.015	<0.03	
6/2/2016	<0.03		<0.03			
7/25/2016					0.002 (J)	
7/26/2016	0.0027 (J)		<0.03	0.0135 (J)		
8/31/2016		<0.03				
9/13/2016				0.0112 (J)	<0.03	
9/14/2016	0.0029 (J)					0.004 (J)
9/15/2016			<0.03			
11/1/2016				0.0163 (J)		
11/2/2016			<0.03			
11/4/2016	<0.03				<0.03	<0.03
11/28/2016		<0.03				
12/15/2016						0.0026 (J)
1/10/2017			<0.03			
1/11/2017				0.0166 (J)		
1/12/2017	0.0032 (J)					
1/16/2017					0.0023 (J)	0.0023 (J)
2/22/2017		<0.03				
3/2/2017				0.0159 (J)	0.0025 (J)	
3/3/2017						0.0013 (J)
3/7/2017	0.0035 (J)					
3/8/2017			<0.03			
4/26/2017			<0.03			
4/27/2017				0.0137 (J)	0.0027 (J)	
4/28/2017						0.0031 (J)
5/2/2017	0.0031 (J)					
5/8/2017		0.0014 (J)				
5/26/2017						0.0038 (J)
6/27/2017	0.0029 (J)			0.0094 (J)	0.0024 (J)	
6/28/2017						0.0026 (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)	
3/28/2018						0.0025 (J)
3/29/2018	0.0034 (J)			0.0078 (J)		
6/5/2018				0.0079 (J)		
6/6/2018					0.0024 (J)	
6/7/2018	0.0032 (J)					0.0017 (J)
6/8/2018			<0.03			
8/6/2018		<0.03				
9/26/2018	0.0032 (J)					
10/1/2018			<0.03	0.0053 (J)	0.0023 (J)	<0.03
2/26/2019			<0.03			
2/27/2019				0.0093 (J)	0.0023 (J)	0.0011 (J)
3/4/2019	0.0032 (J)					
3/28/2019				0.013 (J)	0.0022 (J)	
3/29/2019			<0.03			0.0016 (J)
4/3/2019	0.0035 (J)					
8/19/2019		0.0019 (J)				
9/24/2019	0.0031 (J)			0.0046 (J)	0.0023 (J)	0.0011 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
9/25/2019			<0.03			
10/8/2019		0.0015 (J)				
2/10/2020				0.011 (J)	0.0023 (J)	
2/11/2020						0.0012 (J)
2/12/2020	0.0032 (J)		<0.03			
3/17/2020		0.0017 (J)				
3/18/2020			<0.03		0.0024 (J)	
3/19/2020				0.013 (J)		0.0022 (J)
3/24/2020	0.0033 (J)					
8/26/2020		0.0032 (J)				
9/22/2020	0.0034 (J)	0.0029 (J)				
9/23/2020				0.014 (J)	0.0024 (J)	0.0016 (J)
9/25/2020			<0.03			
2/8/2021	0.0032 (J)					
2/10/2021			<0.03			0.0039 (J)
2/12/2021				0.01 (J)	0.0025 (J)	
3/2/2021	0.0031 (J)	0.0033 (J)	<0.03			
3/3/2021				0.012 (J)	0.0025 (J)	0.0016 (J)
8/19/2021			<0.03	0.013 (J)	0.0023 (J)	
8/20/2021		0.0028 (J)				
8/26/2021	0.0032 (J)					
8/27/2021						0.0058 (J)



# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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)			
9/1/2016				0.0077 (J)	
9/14/2016			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)		
11/16/2016				0.0075 (J)	
1/11/2017		0.0177 (J)	0.0085 (J)		
1/16/2017	<0.03				
2/21/2017	<0.03				
2/27/2017				0.0084 (J)	
3/1/2017			0.0114 (J)		
3/2/2017		0.0185 (J)			
4/26/2017	<0.03	0.0183 (J)	0.0092 (J)		
5/8/2017				0.0087 (J)	
6/28/2017		0.0173 (J)	0.0085 (J)		
6/30/2017	<0.03				
7/13/2017				0.0104 (J)	
10/11/2017				0.0099 (J)	
3/27/2018	0.0011 (J)				
3/28/2018		0.02 (J)	0.013 (J)		
4/4/2018				0.012 (J)	
6/7/2018		0.02 (J)			
6/8/2018			0.012 (J)		
6/11/2018	0.0012 (J)				
9/19/2018				0.011 (J)	
10/1/2018		0.02 (J)	0.011 (J)		
10/2/2018	<0.03				
2/26/2019	0.0011 (J)				
2/27/2019		0.021 (J)	0.014 (J)		
4/1/2019	0.001 (J)	0.021 (J)	0.013 (J)		
8/21/2019				0.0076 (J)	
9/25/2019	0.0011 (J)	0.02 (J)	0.01 (J)		
10/9/2019				0.0078 (J)	
2/11/2020			0.013 (J)		
2/12/2020	0.0013 (J)	0.019 (J)			
3/17/2020				0.0071 (J)	
3/19/2020	0.0012 (J)	0.023 (J)	0.014 (J)		
7/6/2020				0.011 (J)	
8/27/2020					0.0048 (J)
8/28/2020				0.012 (J)	
9/22/2020					0.0046 (J)
9/23/2020		0.023 (J)	0.013 (J)	0.013 (J)	
9/24/2020	0.0011 (J)				
10/7/2020				0.011 (J)	0.0041 (J)
11/12/2020				0.014 (J)	0.0044 (J)
2/10/2021		0.023 (J)	0.015 (J)		
2/11/2021	0.0012 (J)				
3/1/2021	0.0011 (J)				0.0043 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.013 (J)	
3/3/2021		0.024 (J)	0.017 (J)		
8/19/2021	0.0012 (J)	0.023 (J)			
8/20/2021					0.0043 (J)
8/27/2021			0.026 (J)	0.014 (J)	

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.0002	<0.0002
6/7/2016				9.5E-05 (J)		
7/27/2016				<0.0002	<0.0002	<0.0002
8/30/2016	<0.0002					
8/31/2016		<0.0002	<0.0002			
9/16/2016				<0.0002		<0.0002
9/19/2016					<0.0002	
11/3/2016				<0.0002	<0.0002	<0.0002
11/14/2016	<0.0002		<0.0002			
11/15/2016		<0.0002				
1/11/2017				<0.0002	<0.0002	<0.0002
2/24/2017	<0.0002					
2/27/2017			<0.0002			
2/28/2017		<0.0002				
3/1/2017					<0.0002	<0.0002
3/2/2017				<0.0002		
4/26/2017					<0.0002	<0.0002
5/2/2017				<0.0002		
5/8/2017	<0.0002	<0.0002				
5/9/2017			<0.0002			
6/28/2017					<0.0002	<0.0002
6/29/2017				<0.0002		
7/11/2017	<0.0002					
7/13/2017		<0.0002	<0.0002			
10/10/2017	<0.0002	<0.0002	<0.0002			
3/28/2018				<0.0002	<0.0002	<0.0002
4/2/2018	<0.0002					
4/3/2018			<0.0002			
4/4/2018		<0.0002				
9/19/2018	5.3E-05 (J)	6E-05 (J)	7.1E-05 (J)			
9/25/2018				<0.0002	<0.0002	<0.0002
3/5/2019				<0.0002		<0.0002
3/6/2019					<0.0002	
8/20/2019	<0.0002	<0.0002	<0.0002			
2/11/2020				<0.0002	<0.0002	<0.0002
8/27/2020	<0.0002	<0.0002				
8/28/2020			<0.0002			
2/9/2021					<0.0002	<0.0002
3/3/2021				<0.0002	<0.0002	<0.0002
8/19/2021	<0.0002	<0.0002	<0.0002			
8/26/2021						<0.0002
8/27/2021				<0.0002	<0.0002	

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.0002	<0.0002
6/7/2016	9.6E-05 (J)	9.6E-05 (J)				
7/26/2016					<0.0002	<0.0002
7/27/2016	<0.0002					
7/28/2016		<0.0002				
9/14/2016					<0.0002	<0.0002
9/19/2016	<0.0002	<0.0002				
11/2/2016	<0.0002				<0.0002	<0.0002
11/3/2016		<0.0002				
1/12/2017						<0.0002
1/13/2017	<0.0002	<0.0002			<0.0002	
3/6/2017	<0.0002	<0.0002			<0.0002	
3/7/2017						<0.0002
4/26/2017	<0.0002	<0.0002				
5/1/2017					<0.0002	<0.0002
6/27/2017						<0.0002
6/29/2017	<0.0002	<0.0002			<0.0002	
10/11/2017			<0.0002			
10/12/2017				<0.0002		
11/20/2017			7E-05 (J)	8E-05 (J)		
1/10/2018				<0.0002		
1/11/2018			<0.0002			
2/19/2018				<0.0002		
2/20/2018			<0.0002			
3/29/2018	<0.0002	<0.0002			<0.0002	<0.0002
4/3/2018			<0.0002	<0.0002		
6/28/2018			<0.0002	3.6E-05 (J)		
8/7/2018			<0.0002	<0.0002		
9/24/2018			<0.0002	<0.0002		
9/25/2018	<0.0002	<0.0002				
9/26/2018					<0.0002	<0.0002
3/4/2019					<0.0002	<0.0002
3/5/2019	<0.0002	<0.0002				
8/21/2019			<0.0002	<0.0002		
2/12/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/8/2021						<0.0002
2/9/2021	<0.0002	<0.0002			<0.0002	
2/10/2021			<0.0002	<0.0002		
3/2/2021						<0.0002
3/3/2021	<0.0002				<0.0002	
3/4/2021		<0.0002	<0.0002	<0.0002		
8/26/2021			<0.0002		<0.0002	<0.0002
8/27/2021	<0.0002					
9/1/2021		<0.0002				
9/3/2021				0.00012 (J)		

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
5/1/2007		<0.0002				
9/11/2007		<0.0002				
3/20/2008		<0.0002				
8/27/2008		<0.0002				
3/3/2009		<0.0002				
11/18/2009		<0.0002				
3/3/2010		<0.0002				
9/8/2010		<0.0002				
3/10/2011		<0.0002				
9/8/2011		<0.0002				
3/5/2012		<0.0002				
9/10/2012		<0.0002				
2/6/2013		<0.0002				
8/12/2013		<0.0002				
2/5/2014		<0.0002				
8/5/2014		<0.0002				
2/4/2015		<0.0002				
8/3/2015		<0.0002				
2/16/2016		1.36E-05 (J)				
6/1/2016				<0.0002	<0.0002	
6/2/2016	<0.0002		<0.0002			
7/25/2016					<0.0002	
7/26/2016	<0.0002		<0.0002	<0.0002		
8/31/2016		<0.0002				
9/13/2016				<0.0002	<0.0002	
9/14/2016	<0.0002					<0.0002
9/15/2016			<0.0002			
11/1/2016			<0.0002	<0.0002		
11/2/2016			<0.0002			
11/4/2016	<0.0002				<0.0002	<0.0002
11/28/2016		<0.0002				
12/15/2016						<0.0002
1/10/2017			<0.0002			
1/11/2017				<0.0002		
1/12/2017	<0.0002					
1/16/2017					<0.0002	<0.0002
2/22/2017		<0.0002				
3/2/2017				<0.0002	<0.0002	
3/3/2017						<0.0002
3/7/2017	<0.0002					
3/8/2017			<0.0002			
4/26/2017			<0.0002			
4/27/2017				<0.0002	<0.0002	
4/28/2017						<0.0002
5/2/2017	<0.0002					
5/8/2017		<0.0002				
5/26/2017						<0.0002
6/27/2017	<0.0002			<0.0002	<0.0002	
6/28/2017						<0.0002
6/30/2017			<0.0002			
7/17/2017		<0.0002				
10/16/2017		<0.0002				

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.0002				
3/27/2018			<0.0002		<0.0002	
3/28/2018						<0.0002
3/29/2018	<0.0002			<0.0002		
8/6/2018		<0.0002				
9/26/2018	<0.0002					
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)	<0.0002
3/4/2019	<0.0002					
3/28/2019				4E-05 (J)	<0.0002	
3/29/2019			<0.0002			<0.0002
6/12/2019		<0.0002				
8/19/2019		<0.0002				
9/24/2019				<0.0002	<0.0002	<0.0002
9/25/2019			<0.0002			
10/8/2019		<0.0002				
2/10/2020				<0.0002	<0.0002	
2/11/2020						<0.0002
2/12/2020	<0.0002		<0.0002			
5/6/2020		<0.0002				
8/26/2020		<0.0002				
9/22/2020		<0.0002				
2/8/2021	<0.0002					
2/10/2021			<0.0002			<0.0002
2/12/2021				<0.0002	<0.0002	
3/2/2021	<0.0002	<0.0002				
8/20/2021		<0.0002				
8/26/2021	<0.0002					

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.0002		
6/2/2016	<0.0002	<0.0002			
7/25/2016	<0.0002		<0.0002		
7/26/2016		<0.0002			
9/1/2016				<0.0002	
9/14/2016			<0.0002		
9/15/2016		<0.0002			
9/19/2016	<0.0002				
11/1/2016	<0.0002	<0.0002	<0.0002		
11/16/2016				<0.0002	
1/11/2017		<0.0002	<0.0002		
1/16/2017	<0.0002				
2/21/2017	<0.0002				
2/27/2017				<0.0002	
3/1/2017			<0.0002		
3/2/2017		<0.0002			
4/26/2017	<0.0002	<0.0002	<0.0002		
5/8/2017				<0.0002	
6/28/2017		<0.0002	<0.0002		
6/30/2017	<0.0002				
7/13/2017				<0.0002	
10/11/2017				<0.0002	
3/27/2018	<0.0002				
3/28/2018		<0.0002	<0.0002		
4/4/2018				<0.0002	
9/19/2018				7E-05 (J)	
2/26/2019	6.8E-05 (J)				
2/27/2019		6.2E-05 (J)	6.1E-05 (J)		
4/1/2019	8.2E-05 (J)	9.6E-05 (J)	8.4E-05 (J)		
8/21/2019				<0.0002	
9/25/2019	<0.0002	<0.0002	<0.0002		
2/11/2020			<0.0002		
2/12/2020	<0.0002	<0.0002			
7/6/2020				<0.0002	
8/27/2020					<0.0002
8/28/2020				<0.0002	
11/12/2020				<0.0002	<0.0002
2/10/2021		<0.0002	<0.0002		
2/11/2021	<0.0002				
8/20/2021					<0.0002
8/27/2021				<0.0002	

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.01	<0.01
6/7/2016				<0.01		
7/27/2016				<0.01	<0.01	<0.01
8/30/2016	<0.01					
8/31/2016		<0.01	0.0024 (J)			
9/16/2016				<0.01		<0.01
9/19/2016					<0.01	
11/3/2016				<0.01	<0.01	<0.01
11/14/2016	<0.01		<0.01			
11/15/2016		<0.01				
1/11/2017				<0.01	<0.01	<0.01
2/24/2017	<0.01					
2/27/2017			0.0018 (J)			
2/28/2017		0.0005 (J)				
3/1/2017					<0.01	<0.01
3/2/2017				<0.01		
4/26/2017					<0.01	<0.01
5/2/2017				<0.01		
5/8/2017	<0.01	<0.01				
5/9/2017			0.0015 (J)			
6/28/2017					<0.01	<0.01
6/29/2017				<0.01		
7/11/2017	<0.01					
7/13/2017		<0.01	0.0015 (J)			
10/10/2017	<0.01	<0.01	0.0015 (J)			
3/28/2018				<0.01	<0.01	<0.01
4/2/2018	<0.01					
4/3/2018			<0.01			
4/4/2018		<0.01				
9/19/2018	<0.01	<0.01	<0.01			
3/5/2019				<0.01		<0.01
3/6/2019					<0.01	
8/20/2019	<0.01	<0.01	0.0011 (J)			
10/8/2019	<0.01	<0.01				
10/9/2019			0.0012 (J)			
2/11/2020				<0.01	<0.01	<0.01
3/17/2020	<0.01	<0.01	0.0016 (J)			
3/24/2020				<0.01	<0.01	<0.01
8/27/2020	<0.01	<0.01				
8/28/2020			0.0013 (J)			
9/22/2020	<0.01	<0.01				
9/23/2020			0.0011 (J)	<0.01	<0.01	<0.01
2/9/2021					<0.01	<0.01
3/1/2021	<0.01	<0.01	0.0012 (J)			
3/3/2021				<0.01	<0.01	<0.01
8/19/2021	<0.01	<0.01	0.0012 (J)			
8/26/2021						<0.01
8/27/2021				<0.01	<0.01	



# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.01	0.0035 (J)
6/7/2016	<0.01	<0.01				
7/26/2016					<0.01	0.0042 (J)
7/27/2016	<0.01					
7/28/2016		<0.01				
9/14/2016					<0.01	0.0041 (J)
9/19/2016	<0.01	<0.01				
11/2/2016	<0.01				<0.01	0.0039 (J)
11/3/2016		<0.01				
1/12/2017						0.0041 (J)
1/13/2017	<0.01	<0.01			<0.01	
3/6/2017	<0.01	0.0007 (J)			<0.01	
3/7/2017						0.0047 (J)
4/26/2017	<0.01	0.0008 (J)				
5/1/2017					<0.01	0.0045 (J)
6/27/2017						0.004 (J)
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			
3/29/2018	<0.01	<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	<0.01
3/5/2019	<0.01	<0.01				
8/21/2019			0.0021 (J)	<0.01		
10/9/2019			0.0018 (J)	<0.01		
2/12/2020	<0.01	<0.01	0.0025 (J)	<0.01	<0.01	0.0011 (J)
3/24/2020	<0.01	<0.01		<0.01		0.0011 (J)
3/25/2020			0.002 (J)		<0.01	
9/22/2020					<0.01	0.00099 (J)
9/24/2020	<0.01	<0.01	0.0016 (J)	<0.01		
2/8/2021						0.0011 (J)
2/9/2021	<0.01	<0.01			<0.01	
2/10/2021			0.0013 (J)	<0.01		
3/2/2021						<0.01
3/3/2021	<0.01				<0.01	
3/4/2021		<0.01	0.0014 (J)	<0.01		
8/26/2021			0.0027 (J)		<0.01	0.001 (J)
8/27/2021	<0.01					
9/1/2021		<0.01				
9/3/2021				<0.01		

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				0.014 (J)	0.012 (J)	
6/2/2016	<0.01		<0.01			
7/25/2016					0.0098 (J)	
7/26/2016	<0.01		<0.01	0.0132		
8/31/2016		<0.01				
9/13/2016				0.0127	0.01 (J)	
9/14/2016	<0.01					0.0039 (J)
9/15/2016			<0.01			
11/1/2016				0.0092 (J)		
11/2/2016			<0.01			
11/4/2016	<0.01				0.01	0.0077 (J)
11/28/2016		<0.01				
12/15/2016						0.0066 (J)
1/10/2017			<0.01			
1/11/2017				0.0093 (J)		
1/12/2017	<0.01					
1/16/2017					0.0086 (J)	0.0056 (J)
2/22/2017		<0.01				
3/2/2017				0.0099 (J)	0.01	
3/3/2017						0.0049 (J)
3/7/2017	<0.01					
3/8/2017			<0.01			
4/26/2017			<0.01			
4/27/2017				0.0103	0.0101	
4/28/2017						0.004 (J)
5/2/2017	<0.01					
5/8/2017		<0.01				
5/26/2017						0.0029 (J)
6/27/2017	<0.01			0.0097 (J)	0.0093 (J)	
6/28/2017						0.0036 (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)	
3/28/2018						0.0038 (J)
3/29/2018	<0.01			0.0076 (J)		
6/5/2018				0.0092 (J)		
6/6/2018					0.0073 (J)	
6/7/2018						0.004 (J)
6/8/2018			<0.01			
8/6/2018		<0.01				
10/1/2018			<0.01	0.0085 (J)	0.0076 (J)	0.0042 (J)
2/26/2019			<0.01			
2/27/2019				0.0087 (J)	0.0078 (J)	0.0041 (J)
3/4/2019	<0.01					
3/28/2019				0.0092 (J)	0.0082 (J)	
3/29/2019			<0.01			0.0041 (J)
8/19/2019		<0.01				
9/24/2019				0.0072 (J)	0.0074 (J)	0.0054 (J)
9/25/2019			<0.01			
2/10/2020				0.0087 (J)	0.0062 (J)	

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/11/2020						0.0057 (J)
2/12/2020	<0.01		<0.01			
3/18/2020			<0.01		0.0056 (J)	
3/19/2020				0.0088 (J)		0.0046 (J)
3/24/2020	<0.01					
8/26/2020		<0.01				
9/22/2020	<0.01					
9/23/2020				0.008 (J)	0.0059 (J)	0.0071 (J)
9/25/2020			<0.01			
2/8/2021	<0.01					
2/10/2021			<0.01			0.0041 (J)
2/12/2021				0.008 (J)	0.0056 (J)	
3/2/2021	<0.01		<0.01			
3/3/2021				0.0088 (J)	0.0049 (J)	0.0074 (J)
8/19/2021			<0.01	0.0083 (J)	0.005 (J)	
8/20/2021		<0.01				
8/26/2021	<0.01					
8/27/2021						0.0048 (J)

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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			
9/1/2016				<0.01	
9/14/2016			0.0034 (J)		
9/15/2016		0.0112			
9/19/2016	<0.01				
11/1/2016	<0.01	0.0099 (J)	0.0025 (J)		
11/16/2016				<0.01	
1/11/2017		0.0093 (J)	0.0033 (J)		
1/16/2017	<0.01				
2/21/2017	<0.01				
2/27/2017				<0.01	
3/1/2017			0.0044 (J)		
3/2/2017		0.0103			
4/26/2017	<0.01	0.01	0.0075 (J)		
5/8/2017				0.0008 (J)	
6/28/2017		0.0102	0.008 (J)		
6/30/2017	<0.01				
7/13/2017				0.0015 (J)	
10/11/2017				0.002 (J)	
3/27/2018	<0.01				
3/28/2018		0.011	0.0025 (J)		
4/4/2018				0.0021 (J)	
6/7/2018		0.011			
6/8/2018			0.0041 (J)		
6/11/2018	<0.01				
9/19/2018				0.0039 (J)	
10/1/2018		0.012	0.0037 (J)		
10/2/2018	<0.01				
2/26/2019	<0.01				
2/27/2019		0.011	0.0027 (J)		
4/1/2019	<0.01	0.012	0.0021 (J)		
8/21/2019				0.0012 (J)	
9/25/2019	<0.01	0.012	0.0087 (J)		
10/9/2019				0.0013 (J)	
2/11/2020			0.003 (J)		
2/12/2020	<0.01	0.013			
3/17/2020				0.0015 (J)	
3/19/2020	<0.01	0.013	0.0043 (J)		
7/6/2020				0.0026 (J)	
8/27/2020					<0.01
8/28/2020				0.003 (J)	
9/22/2020					<0.01
9/23/2020		0.012	0.01	0.0025 (J)	
9/24/2020	<0.01				
10/7/2020				0.0024 (J)	<0.01
11/12/2020				0.0019 (J)	<0.01
2/10/2021		0.014	0.0038 (J)		
2/11/2021	<0.01				
3/1/2021	<0.01				<0.01

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.0023 (J)	
3/3/2021		0.013	0.0036 (J)		
8/19/2021	<0.01	0.013			
8/20/2021					<0.01
8/27/2021			0.0099 (J)	0.0022 (J)	

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					6.17	5.71
6/7/2016				5.62		
7/27/2016				5.59	6.14	5.46
8/30/2016	5.75					
8/31/2016		6.01	7.15			
9/16/2016				5.58		
9/19/2016					6.04	5.59
11/3/2016				5.59	5.97	5.39
11/14/2016	5.59		6.96			
11/15/2016		5.91				
1/11/2017				5.59	6.05	5.48
2/24/2017	5.49					
2/27/2017			6.79			
2/28/2017		5.85				
3/1/2017					5.94	5.41
3/2/2017				5.54		
4/26/2017					5.99	5.4
5/2/2017				5.47		
5/8/2017	5.58	5.91				
5/9/2017			6.9			
6/28/2017					6	5.36
6/29/2017				5.56		
7/11/2017	5.58					
7/13/2017		5.8	6.77			
10/4/2017				5.57		5.32
10/5/2017					6.11	
10/10/2017	5.49	5.76	6.9			
3/28/2018				5.59	6.1	5.34
4/2/2018	6.3 (O)					
4/3/2018			6.44			
4/4/2018		5.77				
6/7/2018					5.98	
6/11/2018				5.58		5.28
9/19/2018	5.48	5.77	6.47			
9/25/2018				5.59	5.81	4.86
3/5/2019				5.48		5.26
3/6/2019					5.99	
3/27/2019	5.83	6.1	7.18			
4/2/2019				5.74		
4/3/2019					6.29	5.47
8/20/2019	5.58	5.78	6.48			
9/25/2019				5.49		
9/26/2019					6.04	5.2
10/8/2019	5.59	5.84				
10/9/2019			6.55			
2/11/2020				5.58	6.07	5.3
3/17/2020	5.57	5.9	6.69			
3/24/2020				5.57	5.98	5.33
8/27/2020	4.88	5.75				
8/28/2020			6.84			
9/22/2020	5.46	5.53				
9/23/2020			6.57	5.58	6.01	5.29

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
2/9/2021					6.12	5.43
3/1/2021	5.48	5.76	6.5			
3/3/2021				5.52	5.89	5.31
8/19/2021	5.5	5.73	6.13			
8/26/2021						4.4
8/27/2021				5.27	5.4	

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					6.36	7.67
6/7/2016	5.77	6.1				
7/26/2016					6.22	7.66
7/27/2016	5.79					
7/28/2016		6.12				
9/14/2016					6.23	7.6
9/19/2016	5.73	6.12				
11/2/2016	5.67				6.08	7.35
11/3/2016		6.07				
1/12/2017						7.49
1/13/2017	5.79	6.41			6.19	
3/6/2017	5.63	6.34			6.2	
3/7/2017						7.43
4/26/2017	5.66	6.32				
5/1/2017					6.21	7.22
6/27/2017						7.32
6/29/2017	5.85	6.47			6.21	
10/3/2017		6.56				7.48
10/4/2017	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			
3/29/2018	5.93	6.75			6.09	7.02
4/3/2018			6.87	5.84		
6/5/2018		6.09				
6/6/2018	5.86					7.43
6/7/2018					6.12	
6/28/2018			6.18	5.24		
8/7/2018			6.08	5.18		
9/24/2018			5.81	5.14		
9/25/2018	5.84	6.67				
9/26/2018					5.84	7.13
3/4/2019					6.18	7.46
3/5/2019	6.07	7.22				
3/26/2019				5.3		
3/27/2019			5.84			
4/2/2019		6.94				
4/3/2019	5.71				6.43	7.11
8/21/2019			5.96	5.26		
9/24/2019		6.87				6.93
9/25/2019	5.86				6.2	
10/9/2019			5.81	5.22		
2/12/2020	6	7.13	5.97	5.3	6.15	7.52
3/24/2020	5.86	6.35		5.29		7.34
3/25/2020			5.78		6.26	
9/22/2020					5.8	7.19
9/24/2020	5.8	6.7	5.7	5.43		



# Time Series

Constituent: pH, Field (S.U.) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
2/9/2021	5.86	6.95			6.06	
2/10/2021			5.8	5.19		
3/2/2021						7.15
3/3/2021	5.89				6.21	
3/4/2021		6.8	5.54	5.23		
8/26/2021			6.91		5.82	7.16
8/27/2021	5.57					
9/1/2021		6.65				
9/3/2021				4.75		

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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	5.75		5.46			
7/25/2016					6.21	
7/26/2016	5.72		5.45	7.43		
9/13/2016				7.44	6.16	7.41
9/14/2016	5.74					
9/15/2016			5.45			
11/1/2016				7.24		
11/2/2016			5.41			
11/4/2016	5.61				6.29	7.12
11/28/2016		6.23				
12/15/2016						7.24
1/10/2017			5.37			
1/11/2017				7.3		
1/12/2017	5.71					
1/16/2017					6.29	7.24
2/22/2017		6.21				
3/2/2017				7.23	6.28	
3/3/2017						7.22
3/7/2017	5.66					
3/8/2017			5.41			
4/26/2017			5.02			
4/27/2017				6.99	6.09	
4/28/2017						7.21
5/2/2017	5.65					
5/8/2017		6.12				
5/26/2017						7.13
6/27/2017	5.7			6.87	6.21	
6/28/2017						7.06
6/30/2017			5.39			
7/17/2017		6.03				
10/3/2017	5.79			6.81	5.98	6.99
10/5/2017			5.49			
10/16/2017		6.12				
2/19/2018		6.13				
3/27/2018			5.47		6.25	
3/28/2018						7.3
3/29/2018	5.63			7.38		
6/5/2018				7.16		

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/6/2018					6.17	
6/7/2018	5.63					7.29
6/8/2018			5.45			
8/6/2018		6.01				
9/26/2018	5.63					
10/1/2018			5.39	6.8	5.9	7.07
2/25/2019		6.51				
2/26/2019			5.46			
2/27/2019				6.84	5.8	7.27
3/4/2019	5.75					
3/28/2019				6.99	6.15	
3/29/2019			5.34			7.06
4/3/2019	5.63					
6/12/2019		6.3				
8/19/2019		6.23				
9/24/2019	5.6			7.07	6.23	7.01
9/25/2019			5.19			
10/8/2019		6.28				
2/10/2020				7.2	6.1	
2/11/2020						7.38
2/12/2020	5.83		5.48			
3/17/2020		6.14				
3/18/2020			5.38		6.19	
3/19/2020				7.03		7.22
3/24/2020	5.81					
5/6/2020		6.24				
8/26/2020		5.67				
9/22/2020	5.99	5.78				
9/23/2020				7.15	6.01	7.22
9/25/2020			5.44			
2/8/2021	5.67					
2/10/2021			5.35			7.29
2/12/2021				7.14	6.21	
3/2/2021	5.63	5.42	5.49			
3/3/2021				7.2	5.38	7.92
8/19/2021			7.32	6.32	6.38	
8/20/2021		5.86				
8/26/2021	5.51					
8/27/2021						7.14

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			7.72		
6/2/2016	5.75	7.84			
7/25/2016	5.82		7.74		
7/26/2016		7.88			
9/1/2016				6.19	
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		
11/16/2016				6.05	
1/11/2017		7.66	7.53		
1/16/2017	5.72				
2/21/2017	5.67				
2/27/2017				6.01	
3/1/2017			7.42		
3/2/2017		7.68			
4/26/2017	5.56	7.45	7.4		
5/8/2017				6.1	
6/28/2017		7.65	7.5		
6/30/2017	5.72				
7/13/2017				6.07	
10/4/2017	5.87	7.49	7.45		
10/11/2017				5.93	
3/27/2018	5.83				
3/28/2018		7.91	7.74		
4/4/2018				6.01	
6/7/2018		7.69			
6/8/2018			7.64		
6/11/2018	5.69				
9/19/2018				6.09	
10/1/2018		7.39	7.47		
10/2/2018	5.39				
2/26/2019	5.77				
2/27/2019		7.55	7.54		
3/27/2019				6.2	
4/1/2019	5.62	7.87	7.74		
8/21/2019				5.82	
9/25/2019	5.69	7.64	7.47		
10/9/2019				5.96	
2/11/2020			7.09		
2/12/2020	5.8	7.83			
3/17/2020				5.99	
3/19/2020	6	7.65	7.31		
7/6/2020				6.89	
8/27/2020					5.8
8/28/2020				7.05	
9/22/2020					5.91
9/23/2020		7.57	7.37	6.81	
9/24/2020	5.67				
10/7/2020				7.06	5.87
2/10/2021		7.81	7.58		
2/11/2021	5.73				

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/1/2021	5.78				5.84
3/2/2021				6.72	
3/3/2021		8.39	8.23		
8/19/2021		5.34			
8/20/2021					6.71
8/27/2021			7.39	6.83	

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/2/2021 4:37 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.005	<0.005
6/7/2016				0.001 (J)		
7/27/2016				0.0012 (J)	<0.005	<0.005
8/30/2016	0.0017 (J)					
8/31/2016		<0.005	<0.005			
9/16/2016				0.0015 (J)		<0.005
9/19/2016					<0.005	
11/3/2016				0.0015 (J)	<0.005	<0.005
11/14/2016	<0.005		<0.005			
11/15/2016		<0.005				
1/11/2017				0.0014 (J)	<0.005	<0.005
2/24/2017	0.0011 (J)					
2/27/2017			<0.005			
2/28/2017		<0.005				
3/1/2017					<0.005	<0.005
3/2/2017				0.0017 (J)		
4/26/2017					<0.005	<0.005
5/2/2017				<0.005		
5/8/2017	<0.005	<0.005				
5/9/2017			<0.005			
6/28/2017					<0.005	<0.005
6/29/2017				<0.005		
7/11/2017	<0.005					
7/13/2017		<0.005	<0.005			
10/10/2017	<0.005	<0.005	<0.005			
3/28/2018				<0.005	<0.005	<0.005
4/2/2018	<0.005					
4/3/2018			<0.005			
4/4/2018		<0.005				
6/7/2018					<0.005	
6/11/2018				<0.005		<0.005
9/19/2018	<0.005	<0.005	<0.005			
9/25/2018				<0.005	<0.005	<0.005
3/5/2019				<0.005		<0.005
3/6/2019					<0.005	
4/2/2019				<0.005		
4/3/2019					<0.005	<0.005
8/20/2019	<0.005	<0.005	<0.005			
9/25/2019				<0.005		
9/26/2019					<0.005	<0.005
2/11/2020				<0.005	<0.005	<0.005
3/24/2020				<0.005	<0.005	<0.005
8/27/2020	<0.005	<0.005				
8/28/2020			<0.005			
9/23/2020				<0.005	<0.005	<0.005
2/9/2021					<0.005	<0.005
3/3/2021				<0.005	<0.005	<0.005
8/19/2021	<0.005	<0.005	<0.005			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.005	<0.005
6/7/2016	<0.005	0.00048 (J)				
7/26/2016					0.0009 (J)	<0.005
7/27/2016	<0.005					
7/28/2016		<0.005				
9/14/2016					<0.005	<0.005
9/19/2016	<0.005	0.0014 (J)				
11/2/2016	<0.005				<0.005	<0.005
11/3/2016		<0.005				
1/12/2017						<0.005
1/13/2017	<0.005	<0.005			<0.005	
3/6/2017	<0.005	<0.005			<0.005	
3/7/2017						<0.005
4/26/2017	<0.005	<0.005				
5/1/2017					<0.005	<0.005
6/27/2017						<0.005
6/29/2017	<0.005	<0.005			<0.005	
10/11/2017			<0.005			
10/12/2017				<0.005		
11/20/2017			<0.005	0.0042 (J)		
1/10/2018				0.0043 (J)		
1/11/2018			<0.005			
2/19/2018				<0.005		
2/20/2018			<0.005			
3/29/2018	<0.005	<0.005			<0.005	<0.005
4/3/2018			<0.005	<0.005		
6/5/2018		<0.005				
6/6/2018	<0.005					<0.005
6/7/2018					<0.005	
6/28/2018			<0.005	0.0032 (J)		
8/7/2018			<0.005	0.0031 (J)		
9/24/2018			0.0015 (J)	0.0026 (J)		
9/25/2018	<0.005	<0.005				
9/26/2018					<0.005	<0.005
3/4/2019					<0.005	<0.005
3/5/2019	<0.005	<0.005				
4/2/2019		<0.005				
4/3/2019	<0.005				<0.005	<0.005
8/21/2019			<0.005	0.0024 (J)		
9/24/2019		<0.005				<0.005
9/25/2019	<0.005				<0.005	
10/9/2019			<0.005	0.0026 (J)		
2/12/2020	<0.005	<0.005	<0.005	0.002 (J)	<0.005	<0.005
3/24/2020	<0.005	<0.005		0.002 (J)		<0.005
3/25/2020			<0.005		<0.005	
9/22/2020					<0.005	<0.005
9/24/2020	<0.005	<0.005	<0.005	0.0016 (J)		
2/8/2021						<0.005
2/9/2021	<0.005	<0.005			<0.005	
2/10/2021			<0.005	<0.005		
3/2/2021						<0.005
3/3/2021	<0.005				0.0019 (J)	

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		<0.005	<0.005	<0.005		
8/26/2021			<0.005		<0.005	<0.005
8/27/2021	<0.005					
9/1/2021		<0.005				
9/3/2021				<0.005		



# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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				<0.005	<0.005	
6/2/2016	<0.005		0.0011 (J)			
7/25/2016					<0.005	
7/26/2016	0.0009 (J)		0.0016 (J)	<0.005		
8/31/2016		<0.005				
9/13/2016				<0.005	<0.005	
9/14/2016	<0.005					<0.005
9/15/2016			0.0014 (J)			
11/1/2016				<0.005		
11/2/2016			<0.005			
11/4/2016	<0.005				<0.005	<0.005
11/28/2016		<0.005				
12/15/2016						<0.005
1/10/2017			0.0012 (J)			
1/11/2017				<0.005		
1/12/2017	<0.005					
1/16/2017					<0.005	<0.005
2/22/2017		<0.005				
3/2/2017				<0.005	<0.005	
3/3/2017						<0.005
3/7/2017	<0.005					
3/8/2017			<0.005			
4/26/2017			<0.005			
4/27/2017				<0.005	<0.005	
4/28/2017						<0.005
5/2/2017	<0.005					
5/8/2017		<0.005				
5/26/2017						<0.005
6/27/2017	<0.005			<0.005	<0.005	
6/28/2017						<0.005
6/30/2017			<0.005			
7/17/2017		<0.005				
10/16/2017		<0.005				

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						<0.005
3/29/2018	<0.005			<0.005		
6/7/2018	<0.005					
8/6/2018		<0.005				
9/26/2018	<0.005					
2/25/2019		<0.005				
2/26/2019			<0.005			
2/27/2019				<0.005	<0.005	<0.005
3/4/2019	<0.005					
3/28/2019				<0.005	<0.005	
3/29/2019			0.0019 (J)			<0.005
4/3/2019	<0.005					
6/12/2019		<0.005				
8/19/2019		<0.005				
9/24/2019	<0.005			<0.005	<0.005	<0.005
9/25/2019			<0.005			
10/8/2019		<0.005				
2/10/2020				<0.005	<0.005	
2/11/2020						<0.005
2/12/2020	<0.005		<0.005			
3/17/2020		<0.005				
3/18/2020			<0.005		<0.005	
3/19/2020				<0.005		<0.005
3/24/2020	<0.005					
8/26/2020		<0.005				
9/22/2020	<0.005	<0.005				
9/23/2020				<0.005	<0.005	<0.005
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				<0.005	<0.005	
3/2/2021	<0.005	<0.005	<0.005			
3/3/2021				<0.005	<0.005	<0.005
8/19/2021			<0.005	<0.005	<0.005	
8/20/2021		<0.005				
8/26/2021	<0.005					
8/27/2021						<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.005		
6/2/2016	<0.005	<0.005			
7/25/2016	<0.005		<0.005		
7/26/2016		<0.005			
9/1/2016				<0.005	
9/14/2016			<0.005		
9/15/2016		<0.005			
9/19/2016	<0.005				
11/1/2016	<0.005	<0.005	<0.005		
11/16/2016				<0.005	
1/11/2017		<0.005	<0.005		
1/16/2017	<0.005				
2/21/2017	<0.005				
2/27/2017				<0.005	
3/1/2017			<0.005		
3/2/2017		<0.005			
4/26/2017	<0.005	<0.005	<0.005		
5/8/2017				<0.005	
6/28/2017		<0.005	<0.005		
6/30/2017	<0.005				
7/13/2017				<0.005	
10/11/2017				<0.005	
3/27/2018	<0.005				
3/28/2018		<0.005	<0.005		
4/4/2018				<0.005	
9/19/2018				<0.005	
2/26/2019	<0.005				
2/27/2019		<0.005	<0.005		
4/1/2019	<0.005	<0.005	<0.005		
8/21/2019				<0.005	
9/25/2019	<0.005	<0.005	<0.005		
2/11/2020			<0.005		
2/12/2020	<0.005	<0.005			
3/19/2020	<0.005	<0.005	<0.005		
7/6/2020				<0.005	
8/27/2020					<0.005
8/28/2020				<0.005	
9/23/2020		<0.005	<0.005		
9/24/2020	<0.005				
11/12/2020				<0.005	<0.005
2/10/2021		<0.005	<0.005		
2/11/2021	<0.005				
3/1/2021	<0.005				
3/3/2021		<0.005	<0.005		
8/19/2021	<0.005	<0.005			
8/20/2021					<0.005
8/27/2021			<0.005	<0.005	

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					1.2	1.8
6/7/2016				4.4		
7/27/2016				4.7	1.7	1.9
8/30/2016	160					
8/31/2016		150	190			
9/16/2016				4.8		1.7
9/19/2016					1.8	
11/3/2016				5.3	0.69 (J)	1.9
11/14/2016	150		200			
11/15/2016		150				
1/11/2017				5.2	<1	1.7
2/24/2017	120					
2/27/2017			190			
2/28/2017		130				
3/1/2017					1.8	<1
3/2/2017				5		
4/26/2017					1.6	1.9
5/2/2017				5		
5/8/2017	120	150				
5/9/2017			190			
6/28/2017					<1	<1
6/29/2017				5.2		
7/11/2017	110					
7/13/2017		150	180			
10/4/2017				5.3		1.7
10/5/2017					1.6	
10/10/2017	93	140	180			
4/2/2018	88.8					
4/3/2018			183			
4/4/2018		137				
6/7/2018					0.68 (J)	
6/11/2018				5.2		0.95 (J)
9/19/2018	75	137	192			
9/25/2018				6.1	1	1.5
3/27/2019	65.9	146	188			
4/2/2019				5.1		
4/3/2019					0.82 (J)	1.3
9/25/2019				5.5		
9/26/2019					0.64 (J)	1
10/8/2019	52.3	142				
10/9/2019			183			
3/17/2020	71.6	121	161			
3/24/2020				5.4	<1	0.99 (J)
9/22/2020	51.5	130				
9/23/2020			170	5.1	0.53 (J)	1.1
3/1/2021	51.6	119	159			
3/3/2021				5.2	<1	1
8/19/2021	52.6	115	149			
8/26/2021						1.2
8/27/2021				5.3	0.59 (J)	

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					8	20
6/7/2016	<1	5.2				
7/26/2016					7.7	20
7/27/2016	0.08 (J)					
7/28/2016		5.1				
9/14/2016					7.5	19
9/19/2016	0.08 (J)	4.8				
11/2/2016	0.1 (J)				8.2	20
11/3/2016		5				
1/12/2017						19
1/13/2017	<1	4.3			8.1	
3/6/2017	<1	4.5			8	
3/7/2017						20
4/26/2017	<1	4.9				
5/1/2017					8.4	20
6/27/2017						18
6/29/2017	<1	5.5			9.2	
10/3/2017		5.8				16
10/4/2017	<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)					8.3
6/7/2018					8.5	
6/28/2018			22	43.8		
8/7/2018			20.7	40.5		
9/24/2018			21.2	39.7		
9/25/2018	0.13 (J)	7				
9/26/2018					10.2	7.9
3/26/2019				34.3		
3/27/2019			17.7			
4/2/2019		3.8				
4/3/2019	0.12 (J)				8.5	7
9/24/2019		1				5.5
9/25/2019	<1				8.5	
10/9/2019			15	27.9		
3/24/2020	<1	3		25.2		5.9
3/25/2020			14.3		8.8	
9/22/2020					8.2	5.5
9/24/2020	<1	3.6	11.7	22.9		
3/2/2021						2.6
3/3/2021	<1				7.8	
3/4/2021		4.5	12	21.5		
8/26/2021			19.2		8.5	6
8/27/2021	<1					

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		5				
9/3/2021				21.3		

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				5	4.2	
6/2/2016	1.9		6.6			
7/25/2016					3.7	
7/26/2016	1.8		6.1	5.4		
8/31/2016		29				
9/13/2016				2.9	5.2	
9/14/2016	1.8					9.4
9/15/2016			6.1			
11/1/2016				3.9		
11/2/2016			6.3			
11/4/2016	2				5	13
11/28/2016		36				
12/15/2016						1.8
1/10/2017			5.9			
1/11/2017				3.7		
1/12/2017	1.9					
1/16/2017					7.9	11
2/22/2017		43				
3/2/2017				4.6	7.4	
3/3/2017						8.8
3/7/2017	2.1					
3/8/2017			7			
4/26/2017			7			
4/27/2017				5.2	7.4	
4/28/2017						10
5/2/2017	2					
5/8/2017		60				
5/26/2017						12
6/27/2017	2.1			5.9	6.4	
6/28/2017						11
6/30/2017			6.5			
7/17/2017		63				
10/3/2017	2.3			6.6	5.9	7.9
10/5/2017			7.9			
10/16/2017		62				
2/19/2018		64.6				
6/5/2018				6.4		
6/6/2018					4.4	
6/7/2018	2					8.8
6/8/2018			6.4			
8/6/2018		42.1				
9/26/2018	2.3					
10/1/2018			6.8	5.6	4	9.1
2/25/2019		42.1				
3/28/2019				8	4.3	
3/29/2019			7.3			9
4/3/2019	2.1					
6/12/2019		83.4				
9/24/2019	2.4			5.3	4.3	9.1
9/25/2019			6.6			
10/8/2019		128				
3/17/2020		98.6				

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			8.1		5.3	
3/19/2020				10		12.4
3/24/2020	2.1					
9/22/2020	2.1	145				
9/23/2020				8.1	3.4	11.8
9/25/2020			6.1			
3/2/2021	2.3	156	6			
3/3/2021				9	4.4	10.6
8/19/2021			6.7	8.9	4.9	
8/20/2021		121				
8/26/2021	2.4					
8/27/2021						16.7



# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			12		
6/2/2016	1.3	5.8			
7/25/2016	1.2		8.4		
7/26/2016		6.7			
9/1/2016				770	
9/14/2016			8.6		
9/15/2016		6			
9/19/2016	1.2				
11/1/2016	1.3	4.9	8.9		
11/16/2016				780	
1/11/2017		4.5	8.6		
1/16/2017	<1				
2/21/2017	1.4				
2/27/2017				650	
3/1/2017			9.3		
3/2/2017		4.4			
4/26/2017	1.4	5.1	11		
5/8/2017				770	
6/28/2017		5.4	12		
6/30/2017	<1				
7/13/2017				630	
10/4/2017	1.4	6.2	12		
10/11/2017				540	
4/4/2018				430	
6/7/2018		6.7			
6/8/2018			9.6		
6/11/2018	1.1				
9/19/2018				395	
10/1/2018		7.1	9.1		
10/2/2018	1				
3/27/2019				437	
4/1/2019	0.96 (J)	7.2	8.5		
9/25/2019	0.81 (J)	7	13.8		
10/9/2019				<1	
3/17/2020				439	
3/19/2020	1.6	9	12.9		
7/6/2020				385	
8/27/2020					144
8/28/2020				394	
9/22/2020					156
9/23/2020		6.9	16.8	430	
9/24/2020	0.69 (J)				
10/7/2020				427	156
11/12/2020				385	147
3/1/2021	0.88 (J)				139
3/2/2021				387	
3/3/2021		7	9.6		
8/19/2021	1	7.5			
8/20/2021					122
8/27/2021			18.2	423	

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.001	<0.001
6/7/2016				<0.001		
7/27/2016				<0.001	<0.001	<0.001
8/30/2016	<0.001					
8/31/2016		<0.001	<0.001			
9/16/2016				<0.001		<0.001
9/19/2016					<0.001	
11/3/2016				<0.001	<0.001	<0.001
11/14/2016	<0.001		<0.001			
11/15/2016		<0.001				
1/11/2017				<0.001	<0.001	<0.001
2/24/2017	<0.001					
2/27/2017			<0.001			
2/28/2017		<0.001				
3/1/2017					<0.001	<0.001
3/2/2017				<0.001		
4/26/2017					<0.001	<0.001
5/2/2017				<0.001		
5/8/2017	<0.001	<0.001				
5/9/2017			<0.001			
6/28/2017					<0.001	<0.001
6/29/2017				<0.001		
7/11/2017	<0.001					
7/13/2017		<0.001	<0.001			
10/10/2017	<0.001	<0.001	<0.001			
3/28/2018				<0.001	<0.001	<0.001
4/2/2018	<0.001					
4/3/2018			<0.001			
4/4/2018		<0.001				
9/19/2018	<0.001	<0.001	<0.001			
3/5/2019				<0.001		<0.001
3/6/2019					<0.001	
4/2/2019				<0.001		
4/3/2019					<0.001	<0.001
8/20/2019	5.8E-05 (J)	<0.001	<0.001			
9/25/2019				<0.001		
9/26/2019					<0.001	<0.001
10/8/2019	8.4E-05 (J)	<0.001				
10/9/2019			<0.001			
2/11/2020				<0.001	<0.001	<0.001
3/17/2020	<0.001	8E-05 (J)	<0.001			
3/24/2020				<0.001	<0.001	<0.001
8/27/2020	<0.001	<0.001				
8/28/2020			<0.001			
9/23/2020				<0.001	<0.001	<0.001
2/9/2021					<0.001	<0.001
8/19/2021	<0.001	<0.001	<0.001			

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.001	<0.001
6/7/2016	<0.001	<0.001				
7/26/2016					<0.001	<0.001
7/27/2016	<0.001					
7/28/2016		<0.001				
9/14/2016					<0.001	<0.001
9/19/2016	<0.001	<0.001				
11/2/2016	<0.001				<0.001	<0.001
11/3/2016		<0.001				
1/12/2017						<0.001
1/13/2017	<0.001	<0.001			<0.001	
3/6/2017	<0.001	<0.001			<0.001	
3/7/2017						<0.001
4/26/2017	<0.001	<0.001				
5/1/2017					<0.001	<0.001
6/27/2017						<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			
3/29/2018	<0.001	<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	<0.001
3/5/2019	<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				<0.001
9/25/2019	<0.001				<0.001	
2/12/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
3/24/2020	<0.001	<0.001		<0.001		<0.001
3/25/2020			<0.001		<0.001	
9/22/2020					<0.001	<0.001
9/24/2020	<0.001	<0.001	<0.001	<0.001		
2/8/2021						<0.001
2/9/2021	<0.001	<0.001			<0.001	
2/10/2021			<0.001	<0.001		

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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			
7/25/2016					<0.001	
7/26/2016	<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			
11/4/2016	<0.001				<0.001	<0.001
11/28/2016		<0.001				
12/15/2016						<0.001
1/10/2017			<0.001			
1/11/2017				<0.001		
1/12/2017	<0.001					
1/16/2017					<0.001	<0.001
2/22/2017		<0.001				
3/2/2017				<0.001	<0.001	
3/3/2017						<0.001
3/7/2017	<0.001					
3/8/2017			<0.001			
4/26/2017			<0.001			
4/27/2017				<0.001	<0.001	
4/28/2017						<0.001
5/2/2017	<0.001					
5/8/2017		6E-05 (J)				
5/26/2017						<0.001
6/27/2017	<0.001			<0.001	<0.001	
6/28/2017						<0.001
6/30/2017			<0.001			
7/17/2017		6E-05 (J)				
10/16/2017		7E-05 (J)				
2/19/2018		<0.001				

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/27/2018			<0.001		<0.001	
3/28/2018						<0.001
3/29/2018	<0.001			<0.001		
8/6/2018		<0.001				
2/25/2019		<0.001				
2/26/2019			<0.001			
2/27/2019				<0.001	<0.001	<0.001
3/4/2019	<0.001					
4/3/2019	<0.001					
6/12/2019		<0.001				
8/19/2019		5.5E-05 (J)				
9/24/2019	<0.001					
10/8/2019		<0.001				
2/10/2020				<0.001	5.5E-05 (J)	
2/11/2020						<0.001
2/12/2020	<0.001		8.9E-05 (J)			
3/17/2020		<0.001				
3/18/2020			<0.001		<0.001	
3/19/2020				<0.001		<0.001
3/24/2020	<0.001					
8/26/2020		<0.001				
9/22/2020	<0.001	<0.001				
9/23/2020				<0.001	<0.001	<0.001
9/25/2020			<0.001			
2/8/2021	<0.001					
2/10/2021			<0.001			<0.001
2/12/2021				<0.001	<0.001	
3/2/2021		<0.001				
8/20/2021		<0.001				

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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)			
9/1/2016				<0.001	
9/14/2016			<0.001		
9/15/2016		<0.001			
9/19/2016	<0.001				
11/1/2016	<0.001	<0.001	<0.001		
11/16/2016				<0.001	
1/11/2017		<0.001	<0.001		
1/16/2017	<0.001				
2/21/2017	<0.001				
2/27/2017				<0.001	
3/1/2017			<0.001		
3/2/2017		<0.001			
4/26/2017	<0.001	<0.001	<0.001		
5/8/2017				<0.001	
6/28/2017		<0.001	<0.001		
6/30/2017	<0.001				
7/13/2017				<0.001	
10/11/2017				<0.001	
3/27/2018	<0.001				
3/28/2018		<0.001	<0.001		
4/4/2018				<0.001	
9/19/2018				<0.001	
2/26/2019	<0.001				
2/27/2019		<0.001	<0.001		
8/21/2019				<0.001	
10/9/2019				<0.001	
2/11/2020			<0.001		
2/12/2020	<0.001	<0.001			
3/17/2020				<0.001	
3/19/2020	<0.001	<0.001	<0.001		
7/6/2020				7.3E-05 (J)	
8/27/2020					<0.001
8/28/2020				<0.001	
9/23/2020		<0.001	0.00016 (J)		
9/24/2020	<0.001				
11/12/2020				<0.001	<0.001
2/10/2021		<0.001	<0.001		
2/11/2021	<0.001				
8/20/2021					<0.001
8/27/2021				<0.001	

# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					120	58
6/7/2016				28		
7/27/2016				74	94	35
8/30/2016	319					
8/31/2016		332	402			
9/16/2016				67		35
9/19/2016					92	
11/3/2016				41	104	48
11/14/2016	280		445			
11/15/2016		356				
1/11/2017				104	133	95
2/24/2017	162					
2/27/2017			346			
2/28/2017		483				
3/1/2017					119	79
3/2/2017				77		
4/26/2017					162	36
5/2/2017				142		
5/8/2017	194	296				
5/9/2017			388			
6/28/2017					98	45
6/29/2017				53		
7/11/2017	193					
7/13/2017		345	433			
10/4/2017				61		45
10/5/2017					104	
10/10/2017	175	311	396			
4/2/2018	192					
4/3/2018			418			
4/4/2018		313				
6/7/2018					68	
6/11/2018				70		74
9/19/2018	186	326	413			
9/25/2018				86	109	63
3/27/2019	170	302	383			
4/2/2019				72		
4/3/2019					89	63
9/25/2019				81		
9/26/2019					126	72
10/8/2019	172	324				
10/9/2019			432			
3/17/2020	165	283	391			
3/24/2020				71	91	59
9/22/2020	141	294				
9/23/2020			404	99	103	81
3/1/2021	145	276	379			
3/3/2021				57	95	37
8/19/2021	134	333	391			
8/26/2021						31
8/27/2021				93	112	

# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					96	160
6/7/2016	38	60				
7/26/2016					92	177
7/27/2016	74					
7/28/2016		81				
9/14/2016					102	187
9/19/2016	45	68				
11/2/2016	53				115	181
11/3/2016		61				
1/12/2017						202
1/13/2017	46	76			67	
3/6/2017	164	167			159	
3/7/2017						257
4/26/2017	34	50				
5/1/2017					107	165
6/27/2017						189
6/29/2017	68	94			79	
10/3/2017		149				170
10/4/2017	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					151
6/7/2018					90	
6/28/2018			88	112		
8/7/2018			89	103		
9/24/2018			82	107		
9/25/2018	73	122				
9/26/2018					116	144
3/26/2019				90		
3/27/2019			75			
4/2/2019		134				
4/3/2019	57				111	142
9/24/2019		157				129
9/25/2019	75				117	
10/9/2019			119	98		
3/24/2020	76	117		84		139
3/25/2020			158		146	
9/22/2020					83	104
9/24/2020	69	113	170	77		
3/2/2021						52
3/3/2021	53				80	
3/4/2021		110	168	57		
8/26/2021			249		93	123
8/27/2021	67					



# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		137				
9/3/2021				88		

# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				120	54	
6/2/2016	66		46			
7/25/2016					48	
7/26/2016	78		54	94		
8/31/2016		209				
9/13/2016				105	67	
9/14/2016	73					152
9/15/2016			54			
11/1/2016				44		
11/2/2016			71			
11/4/2016	75				60	148
11/28/2016		102				
12/15/2016						191
1/10/2017			45			
1/11/2017				107		
1/12/2017	86					
1/16/2017					65	180
2/22/2017		164				
3/2/2017				98	61	
3/3/2017						156
3/7/2017	108					
3/8/2017			178			
4/26/2017			52			
4/27/2017				116	31	
4/28/2017						130
5/2/2017	103					
5/8/2017		145				
5/26/2017						223
6/27/2017	73			89	42	
6/28/2017						166
6/30/2017			45			
7/17/2017		185				
10/3/2017	89			119	58	153
10/5/2017			40			
10/16/2017		218				
2/19/2018		173				
6/5/2018				127		
6/6/2018					96	
6/7/2018	142					146
6/8/2018			114			
8/6/2018		158				
9/26/2018	86					
10/1/2018			50	117	60	155
2/25/2019		92				
3/28/2019				87	87	
3/29/2019			63			150
4/3/2019	83					
6/12/2019		226				
9/24/2019	79			124	54	146
9/25/2019			64			
10/8/2019		276				
3/17/2020		185				

# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:37 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			57		35	
3/19/2020				116		148
3/24/2020	68					
9/22/2020	75	281				
9/23/2020				108	15	161
9/25/2020			54			
3/2/2021	67	296	67			
3/3/2021				99	39	138
8/19/2021			54	105	44	
8/20/2021		254				
8/26/2021	86					
8/27/2021						150

# Time Series

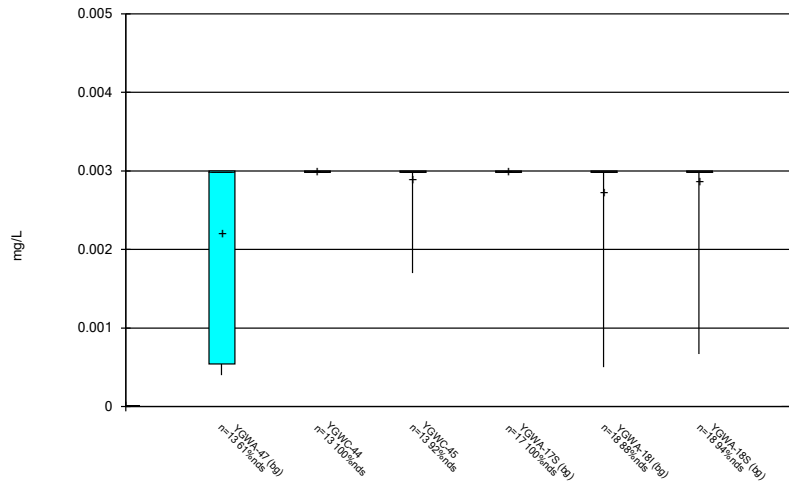
Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			150		
6/2/2016	36	130			
7/25/2016	50		135		
7/26/2016		141			
9/1/2016				1240	
9/14/2016			127		
9/15/2016		153			
9/19/2016	35				
11/1/2016	<25	92	75		
11/16/2016				1220	
1/11/2017		159	148		
1/16/2017	47				
2/21/2017	<25				
2/27/2017				1060	
3/1/2017			182		
3/2/2017		117			
4/26/2017	55	181	92		
5/8/2017				1160	
6/28/2017		169	126		
6/30/2017	42				
7/13/2017				996	
10/4/2017	31	141	147		
10/11/2017				835	
4/4/2018				1470	
6/7/2018		95			
6/8/2018			158		
6/11/2018	59				
9/19/2018				702	
10/1/2018		165	138		
10/2/2018	57				
3/27/2019				641	
4/1/2019	54	149	19 (J)		
9/25/2019	51	157	159		
10/9/2019				809	
3/17/2020				733	
3/19/2020	47	146	148		
7/6/2020				793	
8/27/2020					349
8/28/2020				838	
9/22/2020					296
9/23/2020		157	155	832	
9/24/2020	51				
10/7/2020				842	336
11/12/2020				760	317
3/1/2021	23				265
3/2/2021				782	
3/3/2021		137	111		
8/19/2021	50	144			
8/20/2021					289
8/27/2021			155	810	

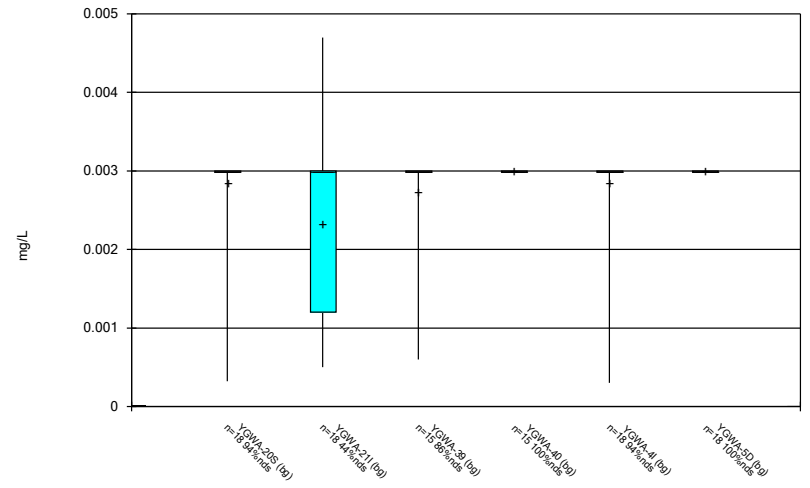
FIGURE B.

Box & Whiskers Plot



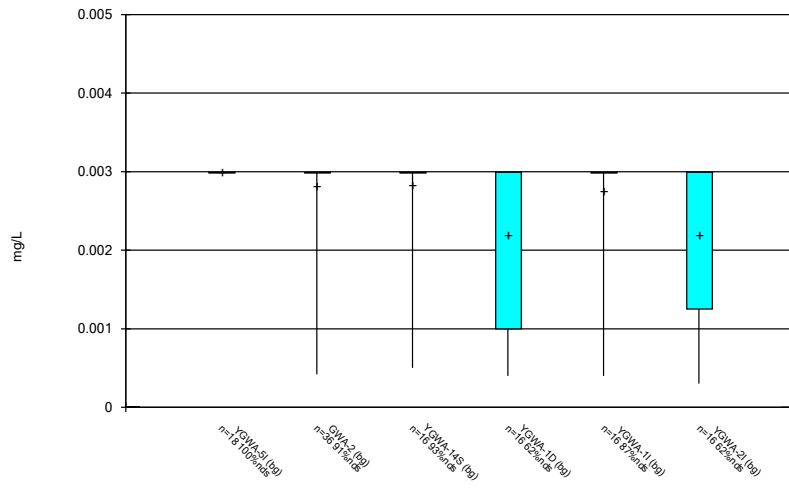
Constituent: Antimony Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



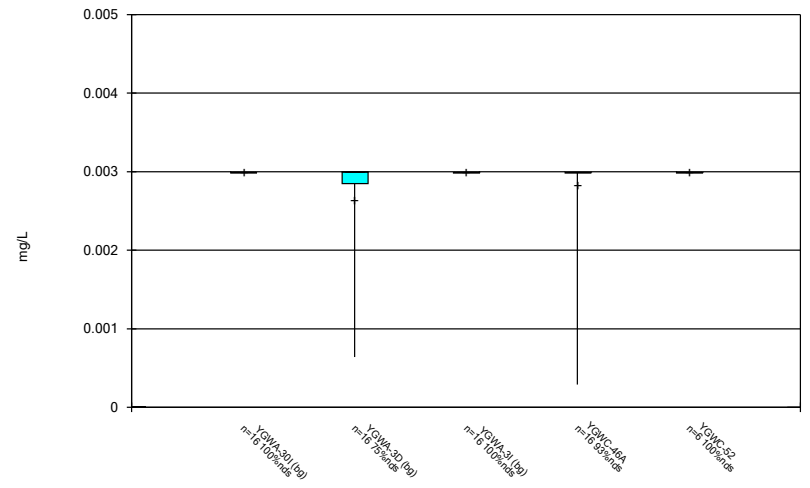
Constituent: Antimony Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



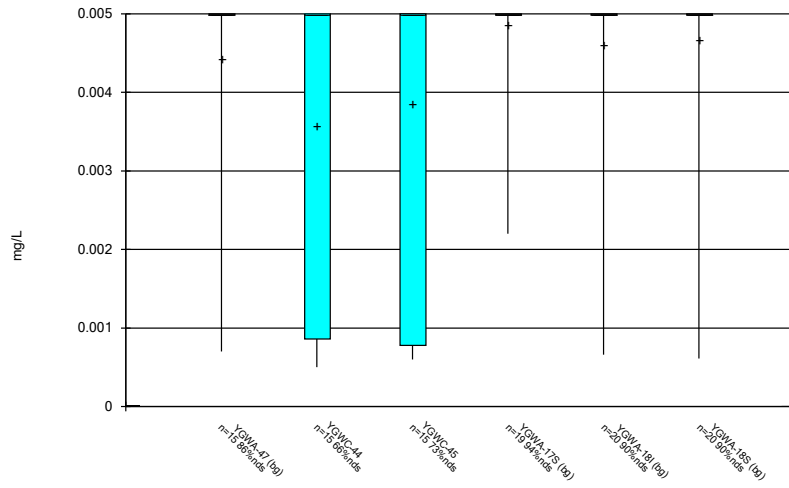
Constituent: Antimony Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



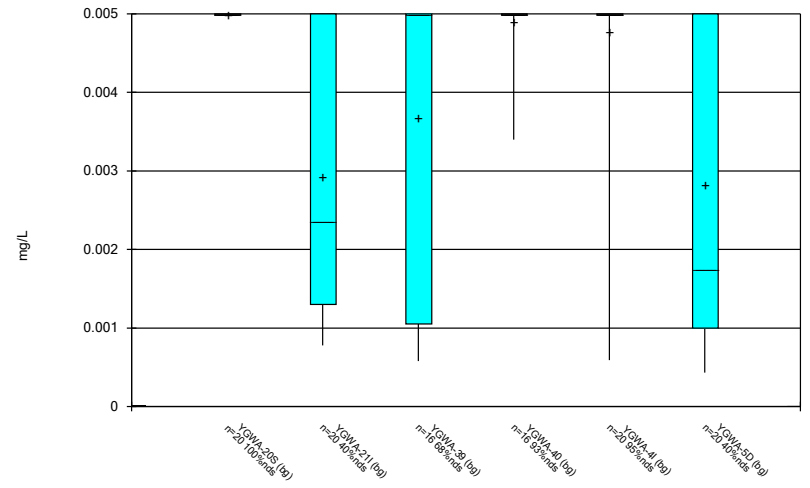
Constituent: Antimony Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



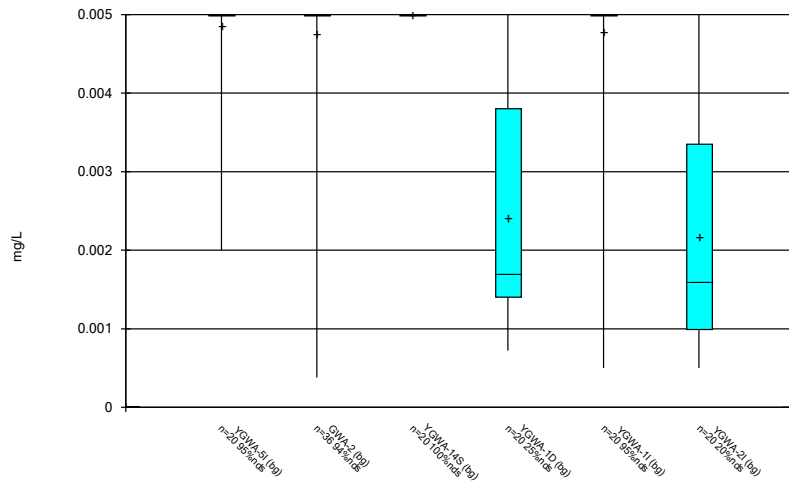
Constituent: Arsenic Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



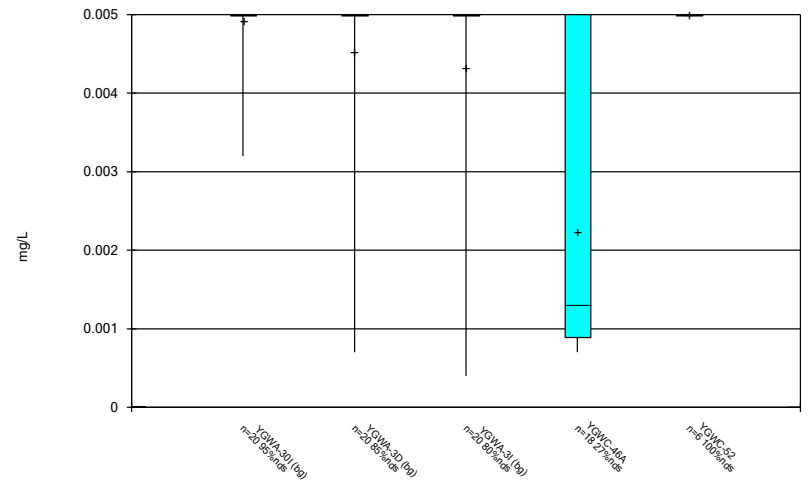
Constituent: Arsenic Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



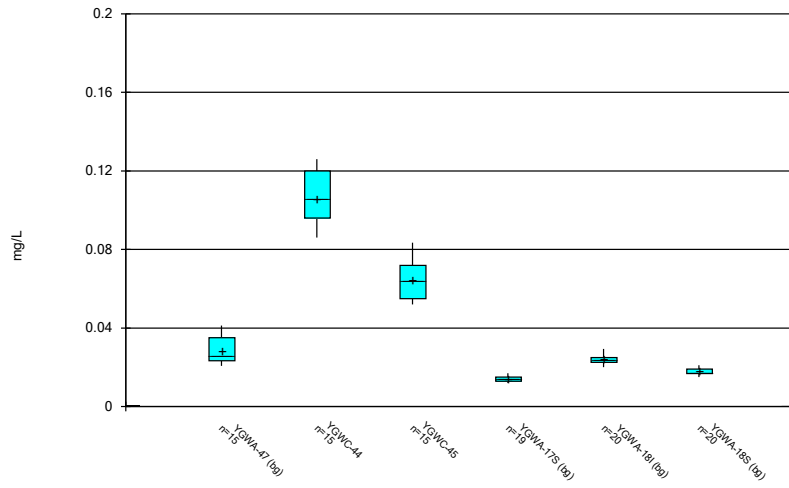
Constituent: Arsenic Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



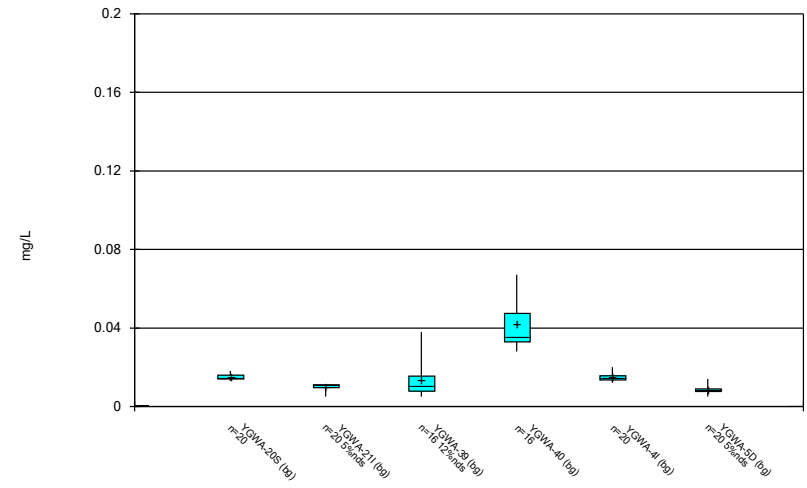
Constituent: Arsenic Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



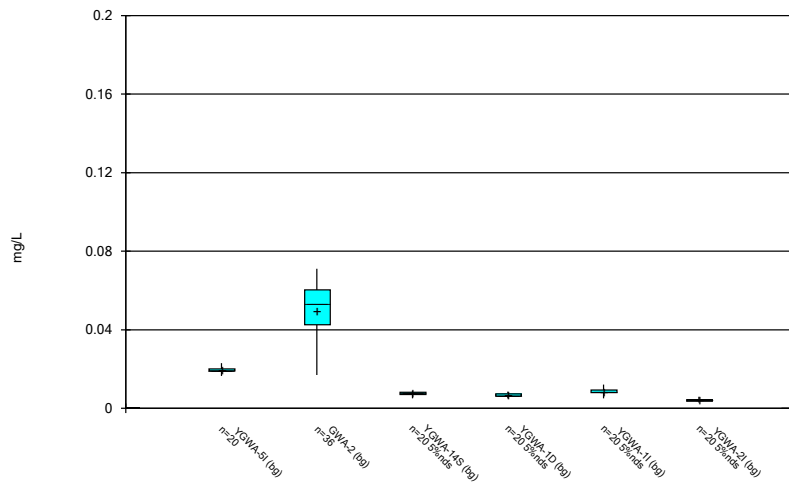
Constituent: Barium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



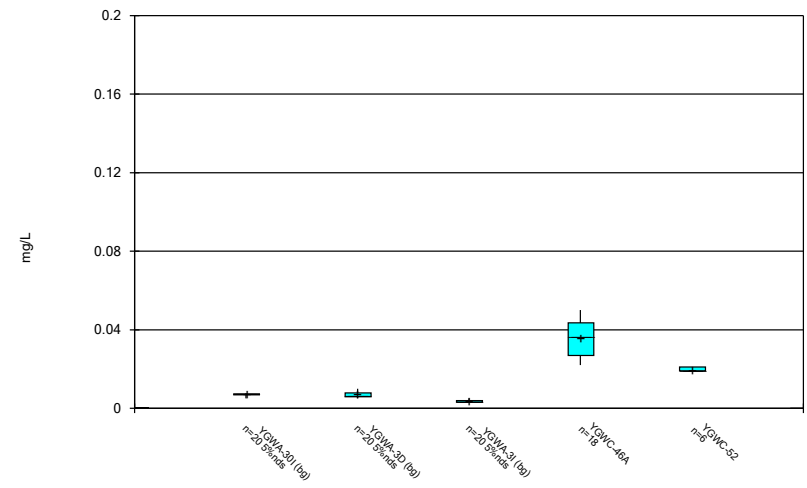
Constituent: Barium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



Constituent: Barium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

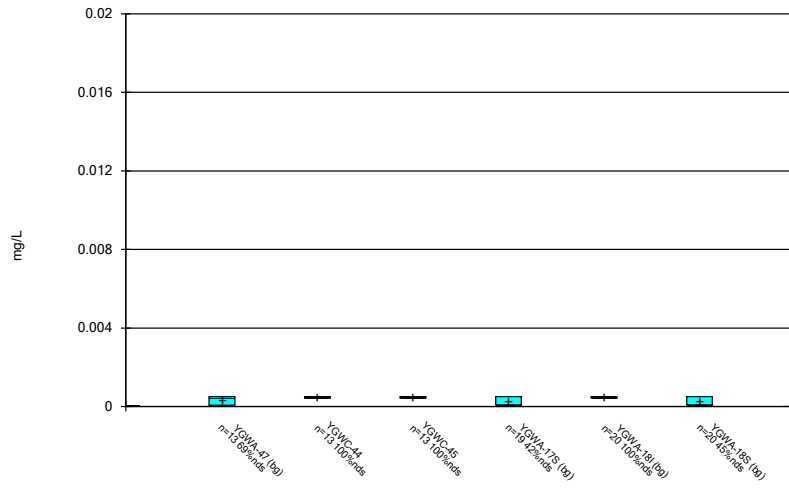
Box & Whiskers Plot



Constituent: Barium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

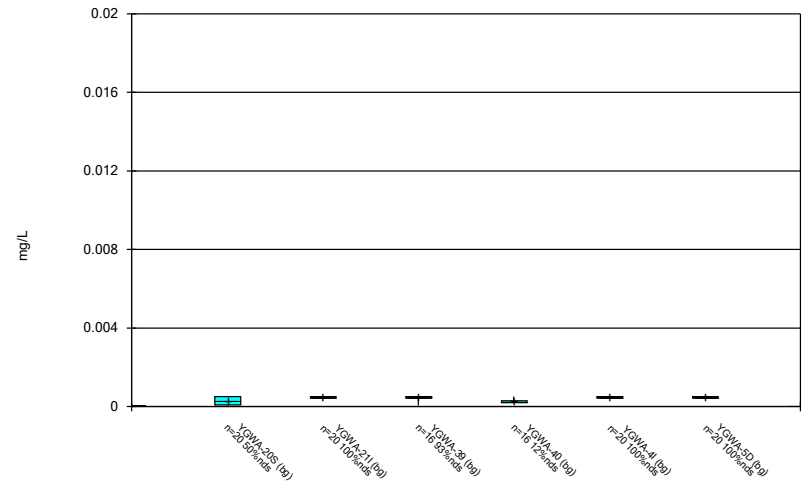


### Box & Whiskers Plot



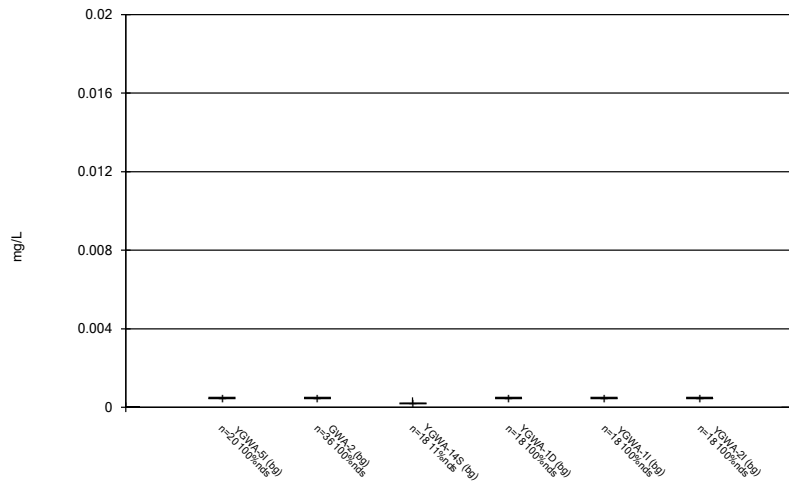
Constituent: Beryllium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



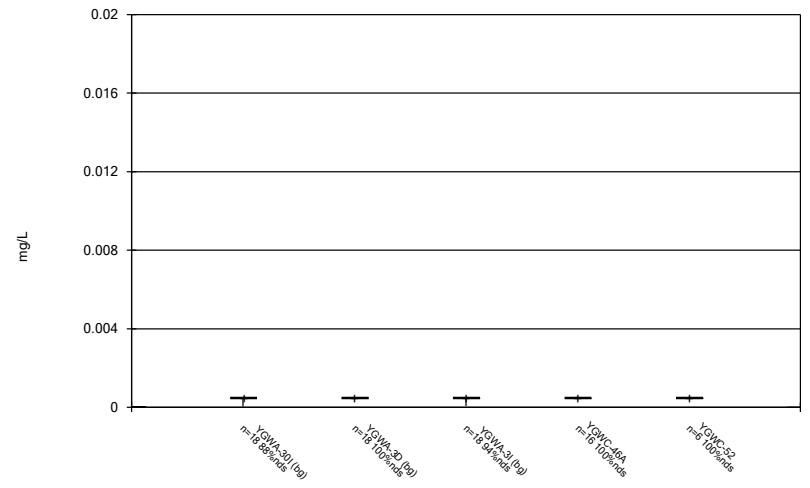
Constituent: Beryllium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



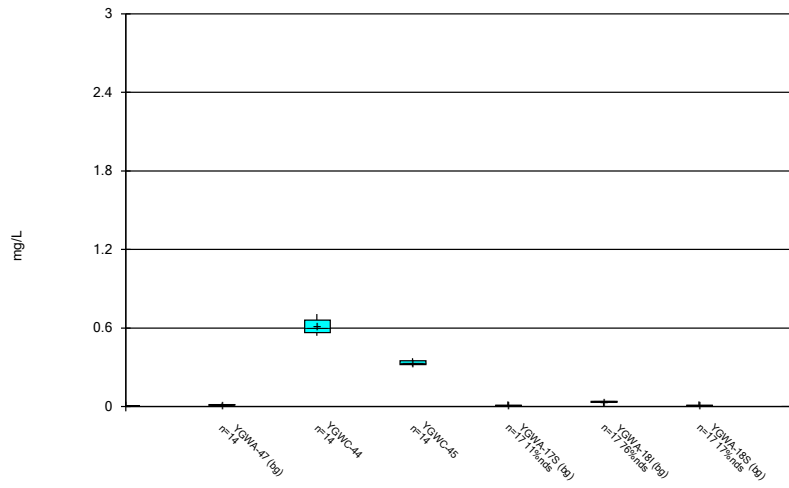
Constituent: Beryllium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



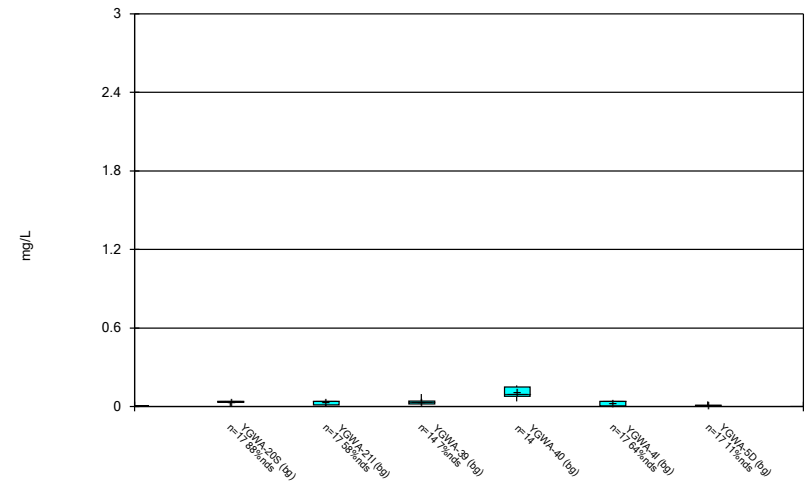
Constituent: Beryllium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



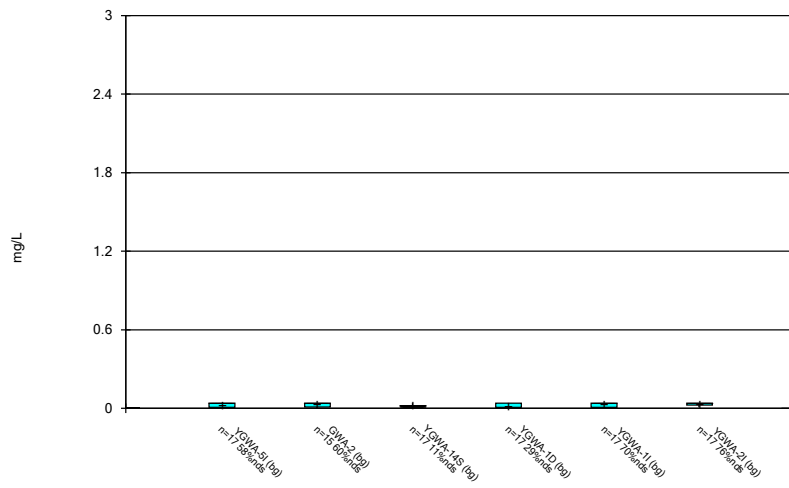
Constituent: Boron, total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



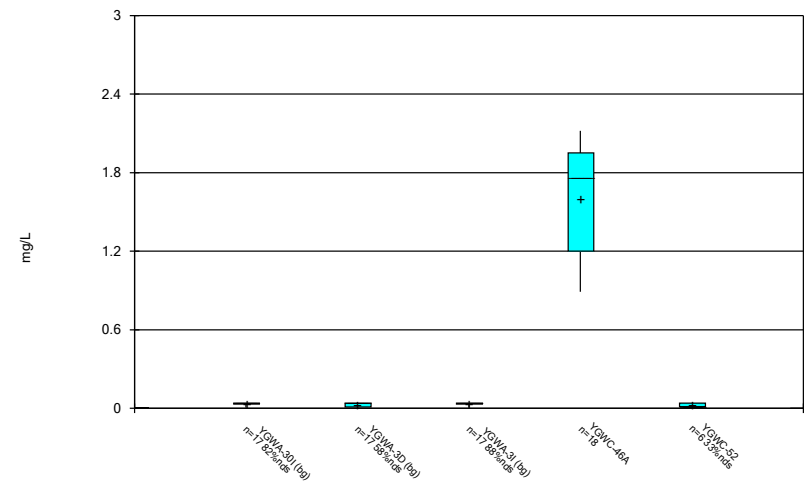
Constituent: Boron, total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



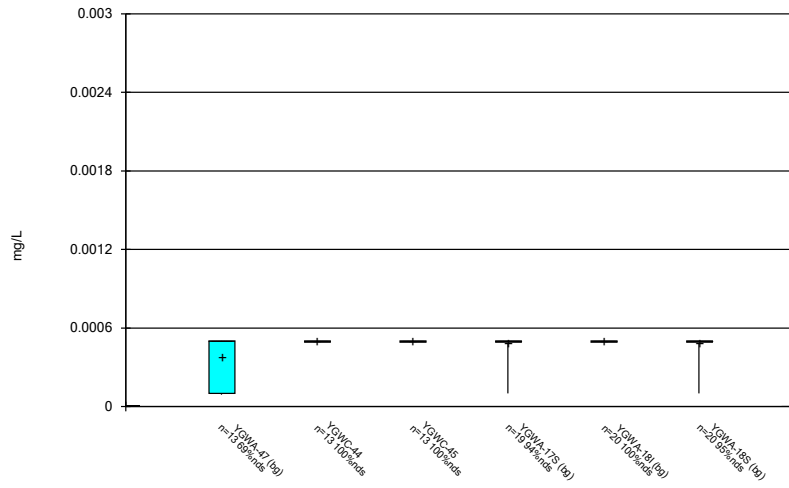
Constituent: Boron, total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



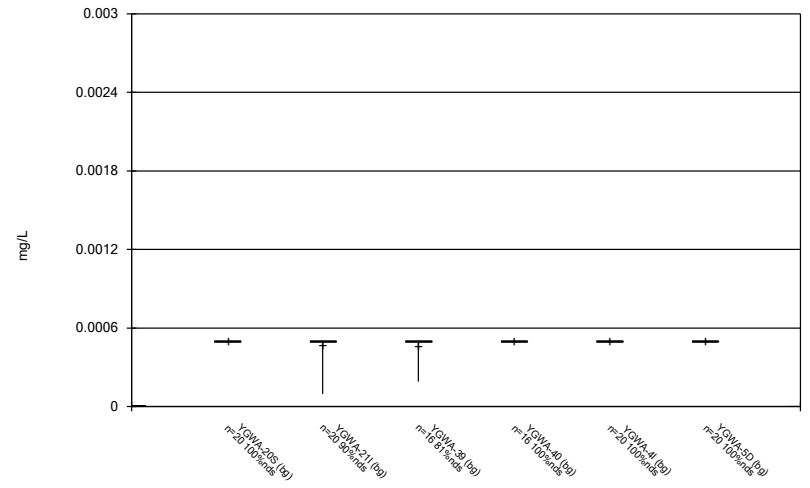
Constituent: Boron, total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



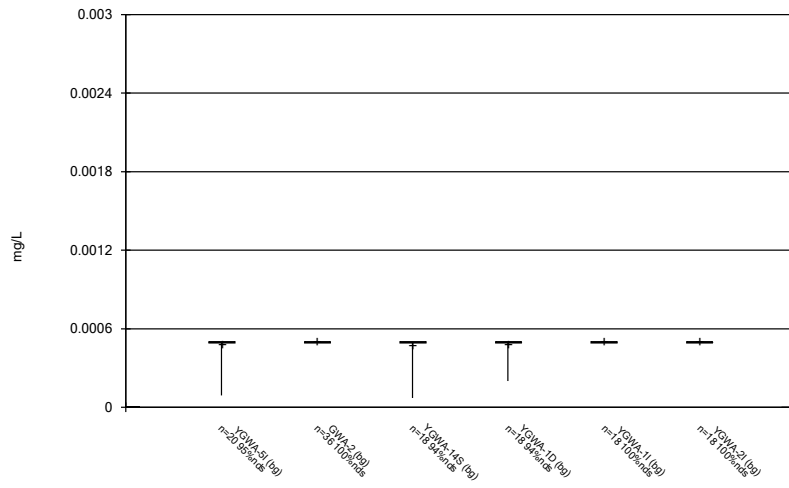
Constituent: Cadmium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



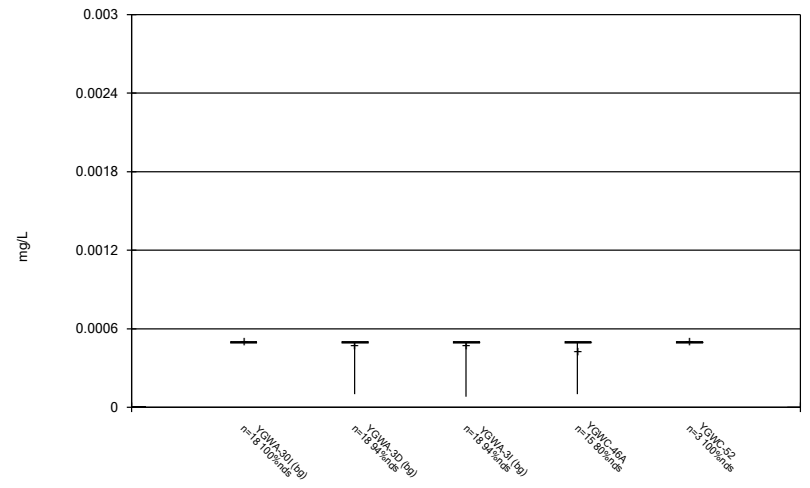
Constituent: Cadmium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



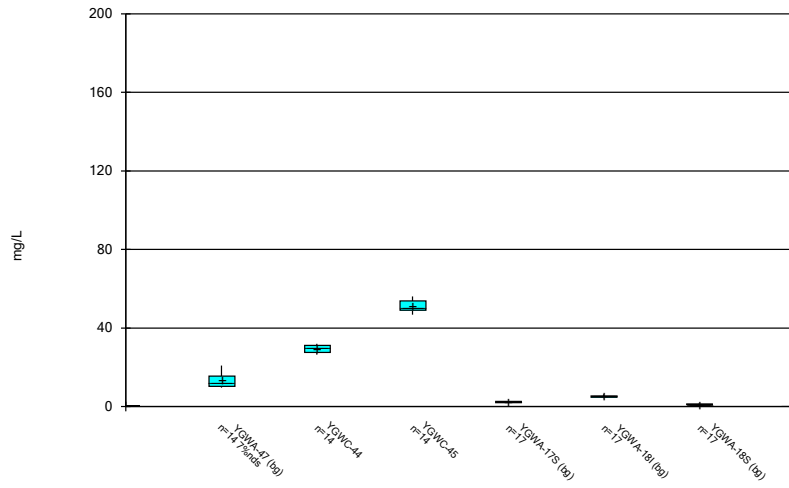
Constituent: Cadmium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



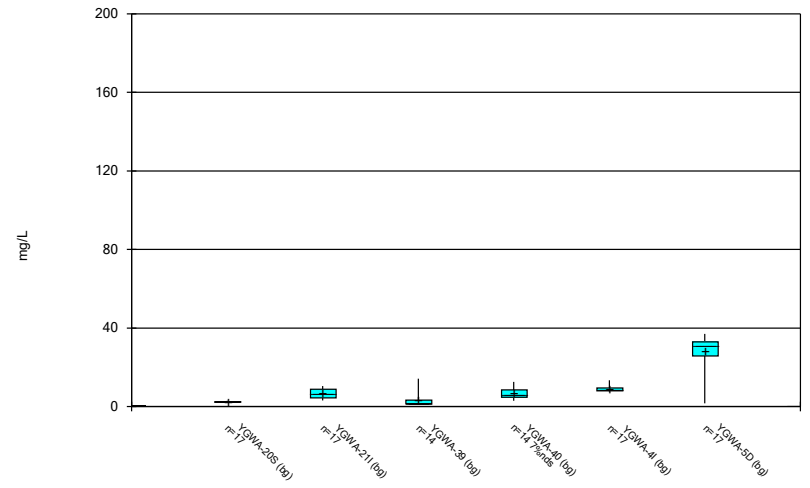
Constituent: Cadmium Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



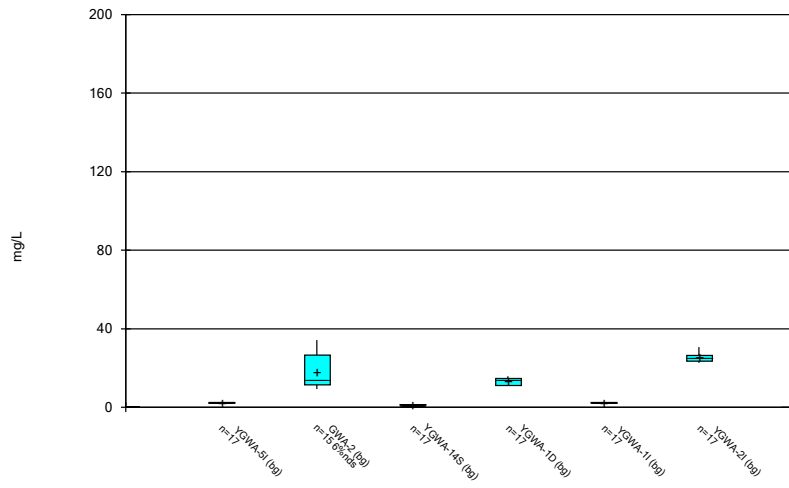
Constituent: Calcium, total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



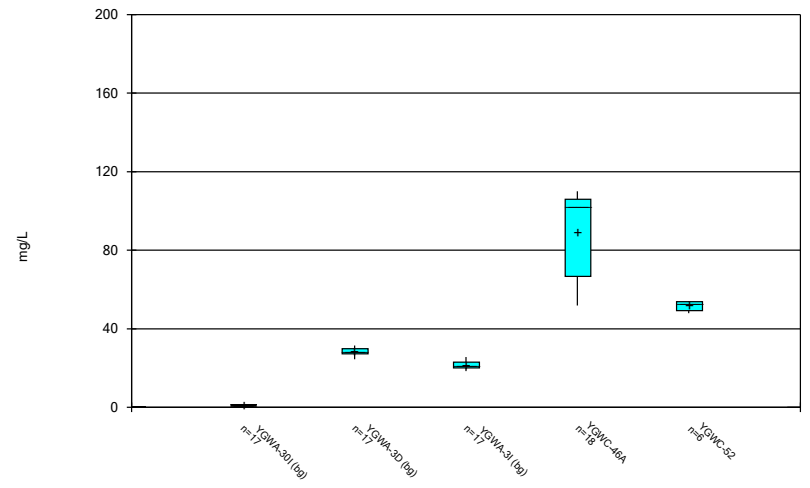
Constituent: Calcium, total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



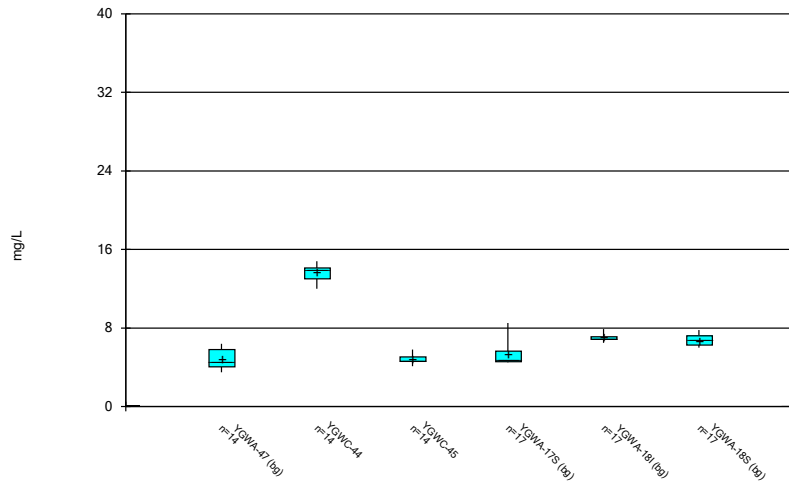
Constituent: Calcium, total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



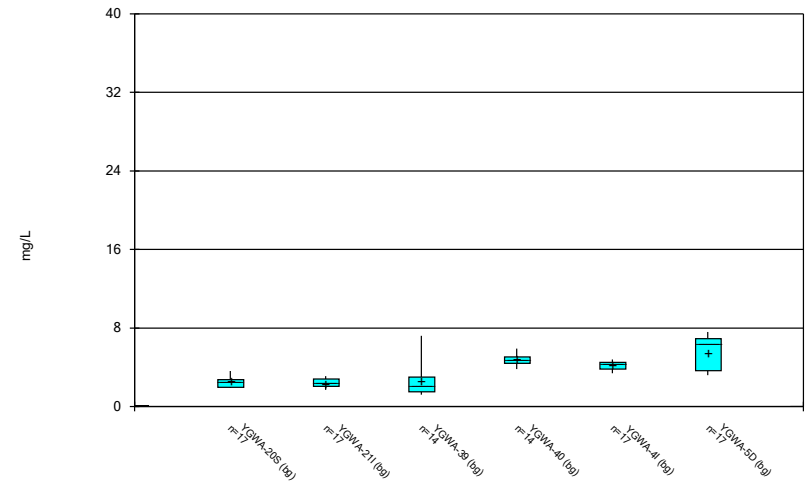
Constituent: Calcium, total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



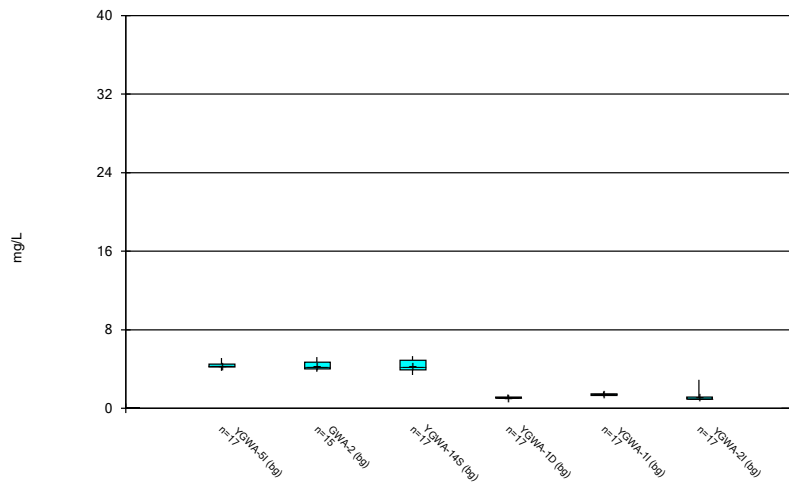
Constituent: Chloride, Total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



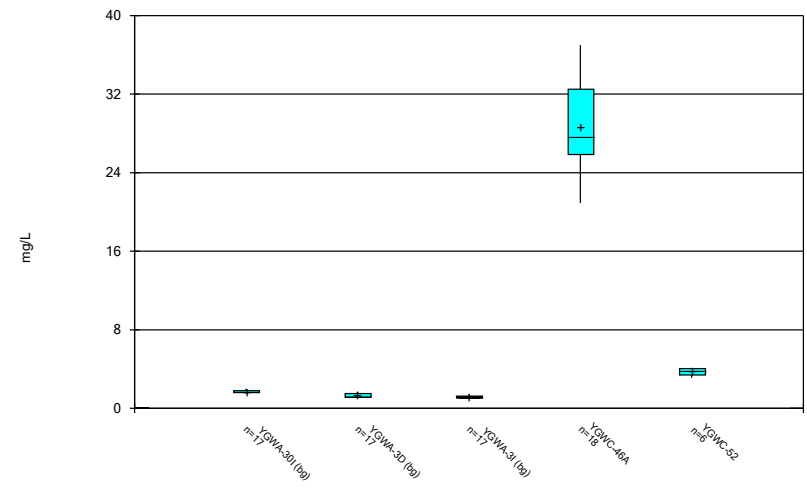
Constituent: Chloride, Total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



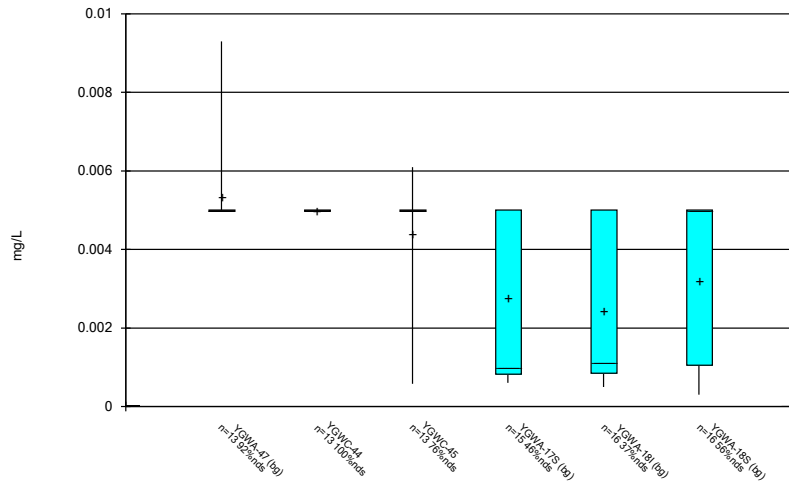
Constituent: Chloride, Total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



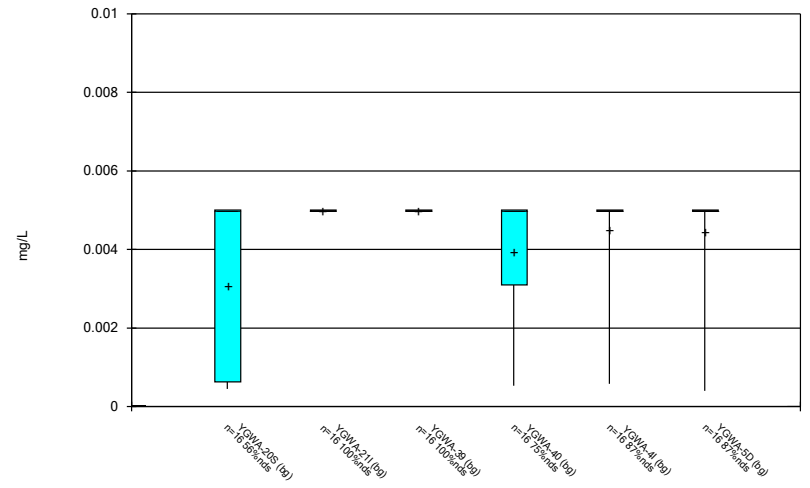
Constituent: Chloride, Total Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



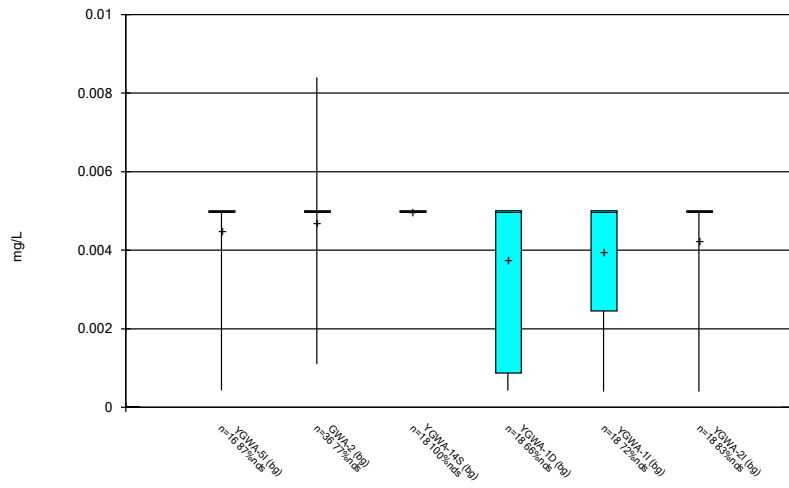
Constituent: Chromium Analysis Run 11/2/2021 4:38 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



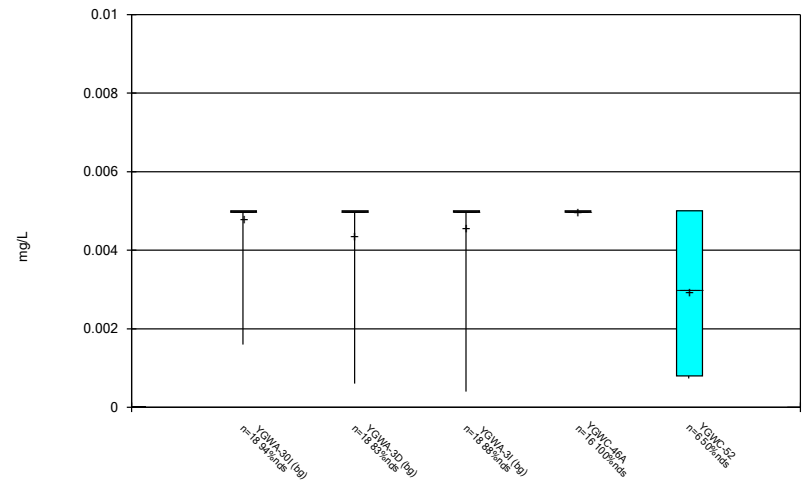
Constituent: Chromium Analysis Run 11/2/2021 4:38 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



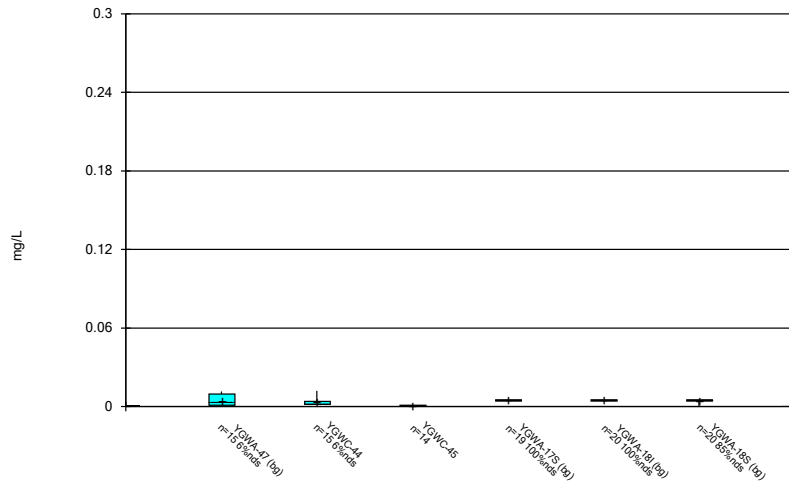
Constituent: Chromium Analysis Run 11/2/2021 4:38 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



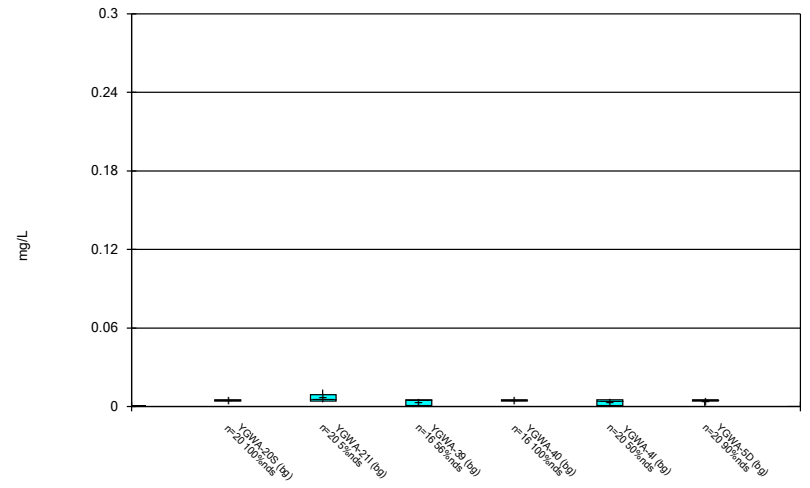
Constituent: Chromium Analysis Run 11/2/2021 4:38 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



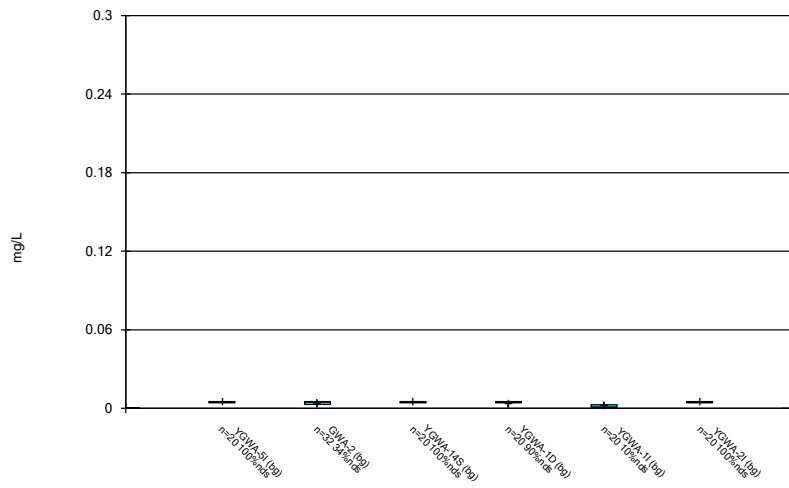
Constituent: Cobalt Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



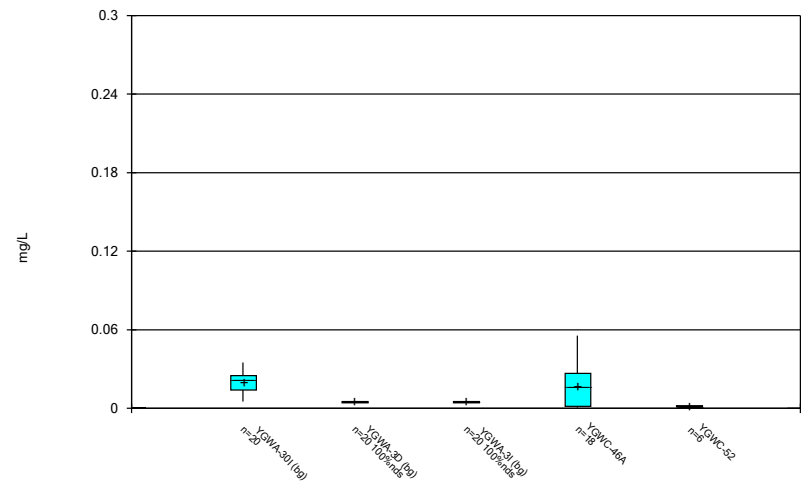
Constituent: Cobalt Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



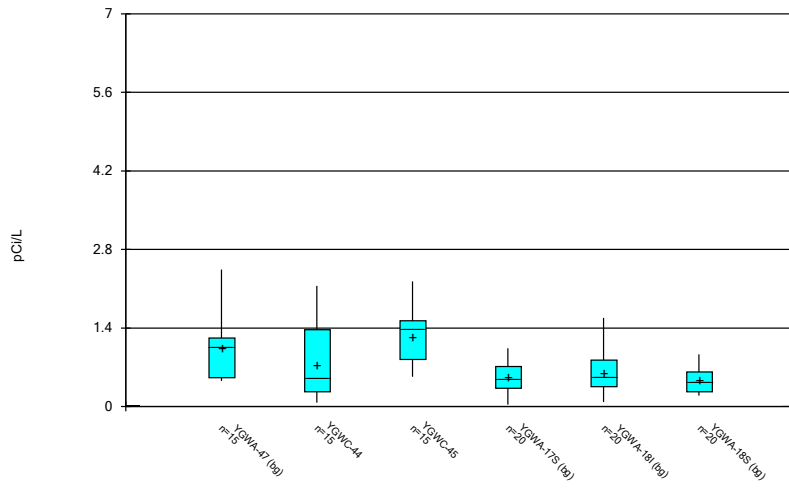
Constituent: Cobalt Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



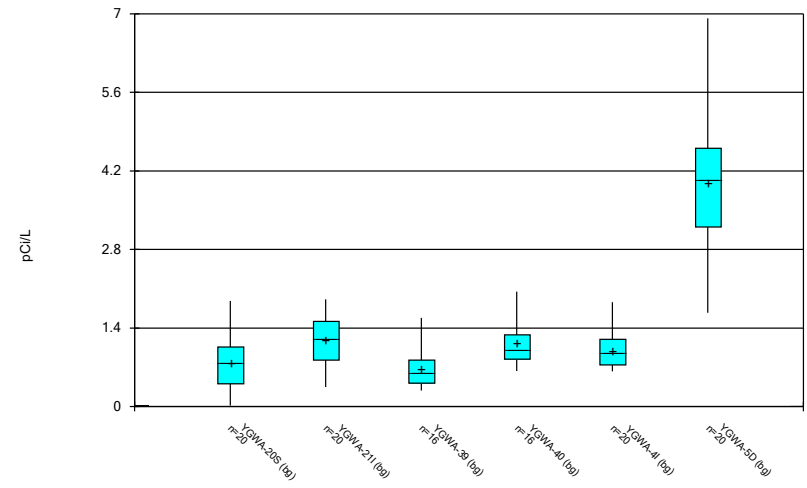
Constituent: Cobalt Analysis Run 11/2/2021 4:38 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



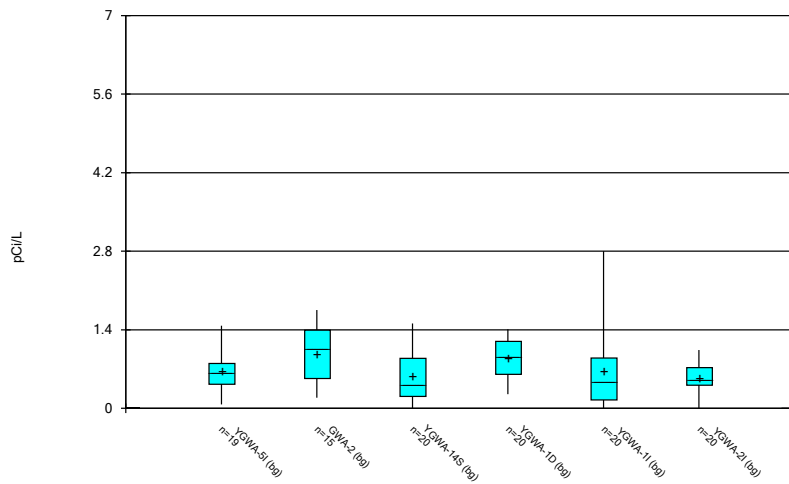
Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:38 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



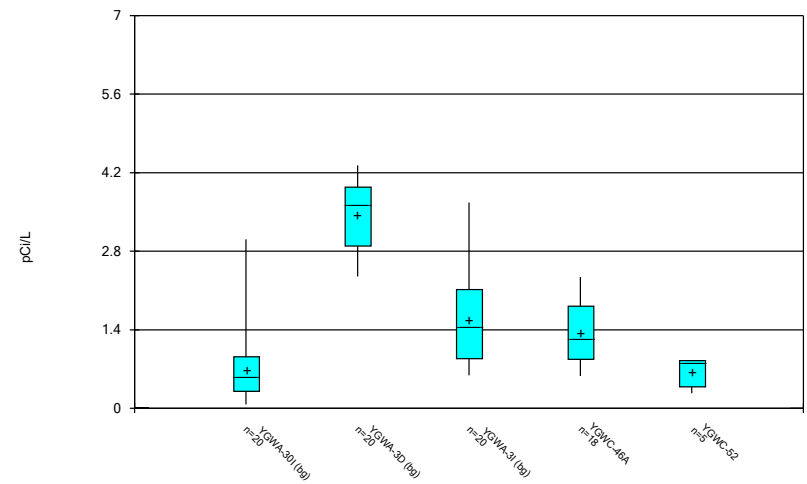
Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:38 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:38 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

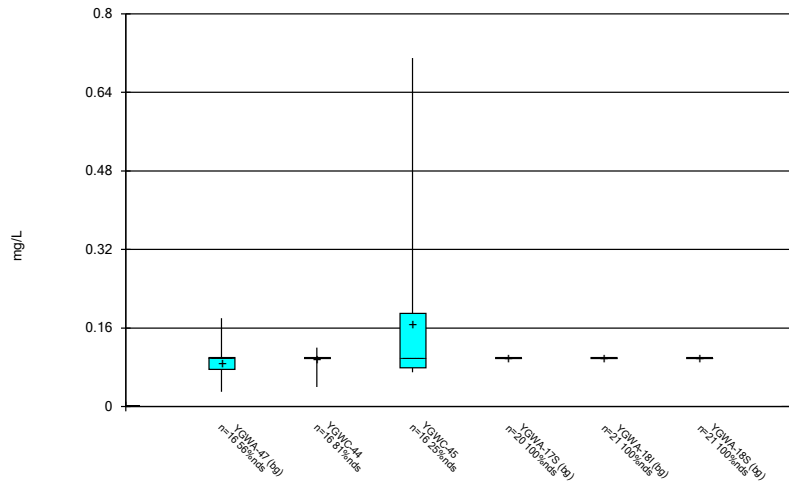
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:38 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

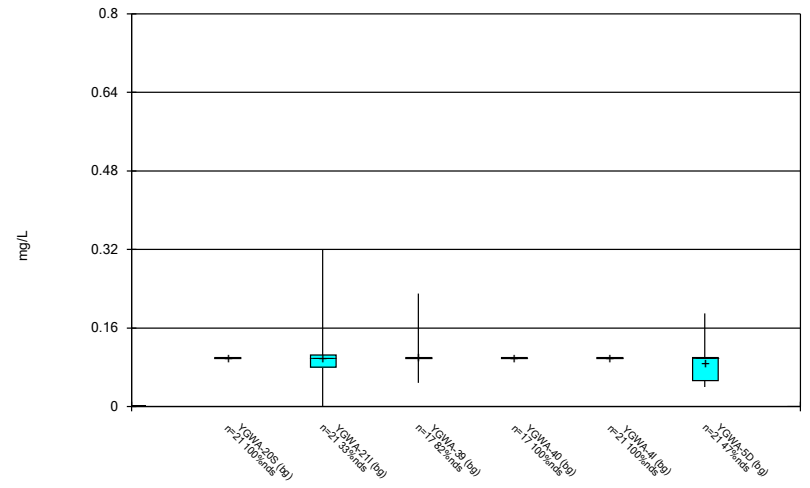


### Box & Whiskers Plot



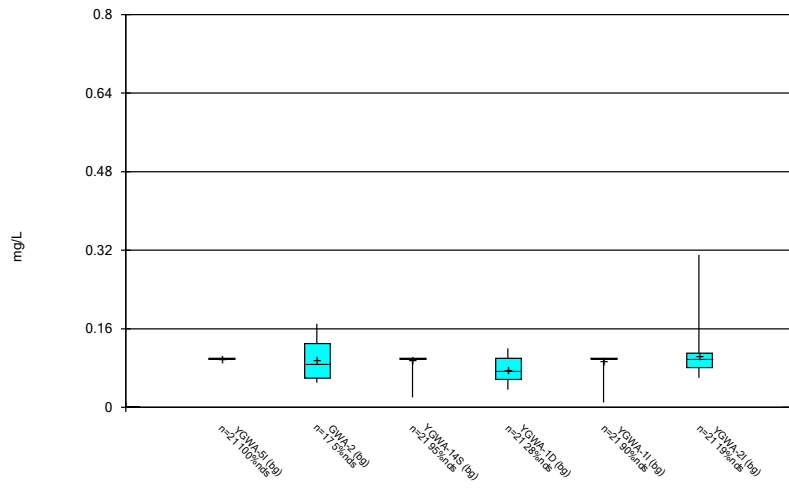
Constituent: Fluoride, total Analysis Run 11/2/2021 4:38 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



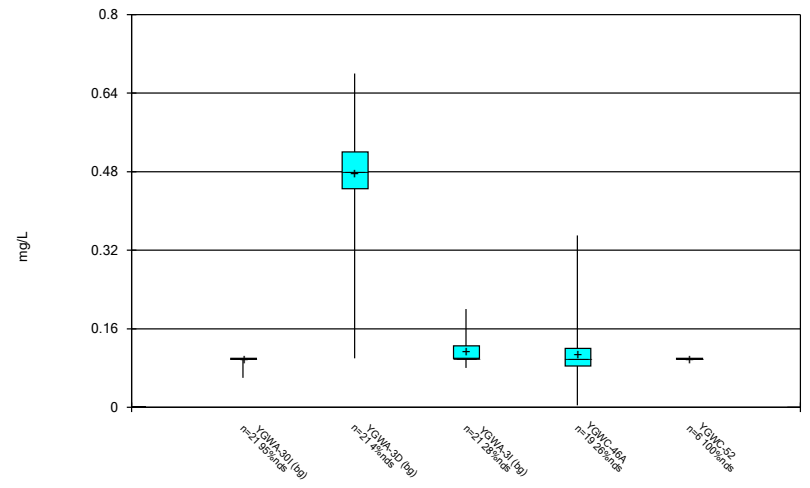
Constituent: Fluoride, total Analysis Run 11/2/2021 4:38 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



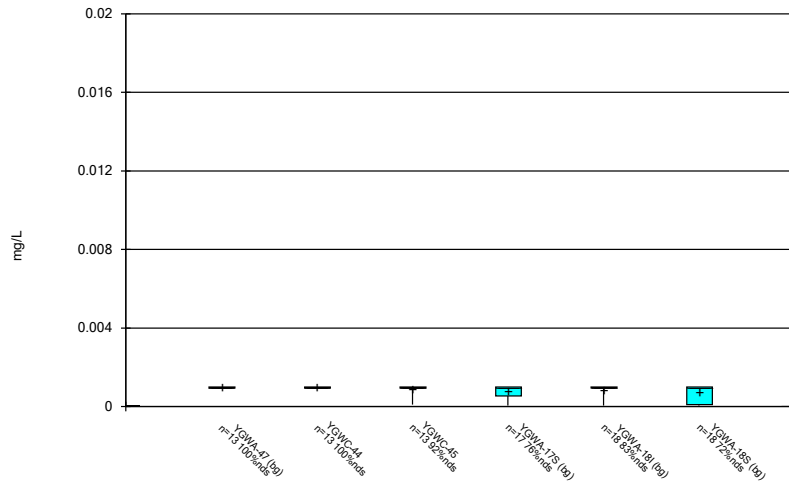
Constituent: Fluoride, total Analysis Run 11/2/2021 4:38 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



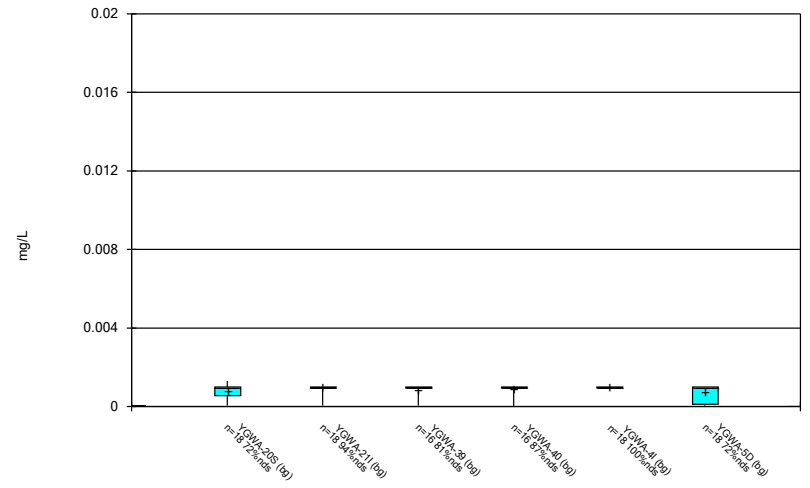
Constituent: Fluoride, total Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



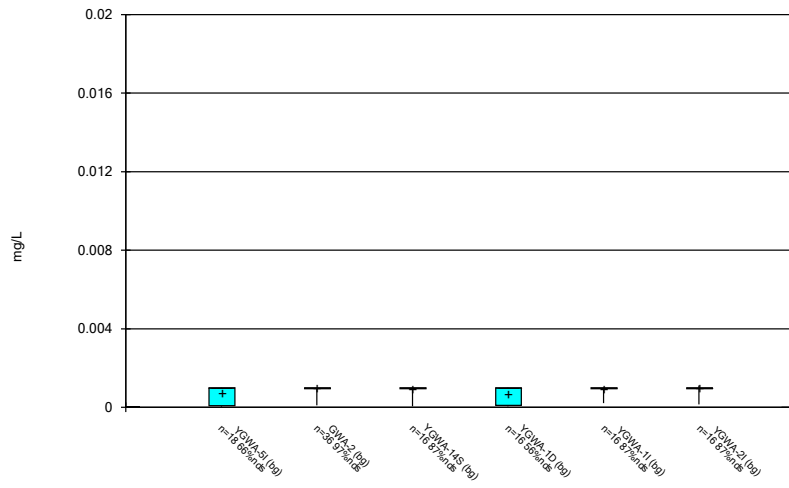
Constituent: Lead Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



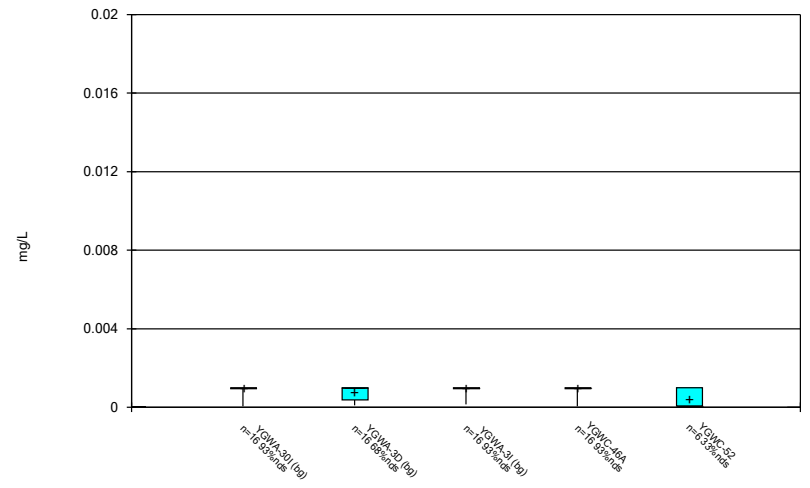
Constituent: Lead Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



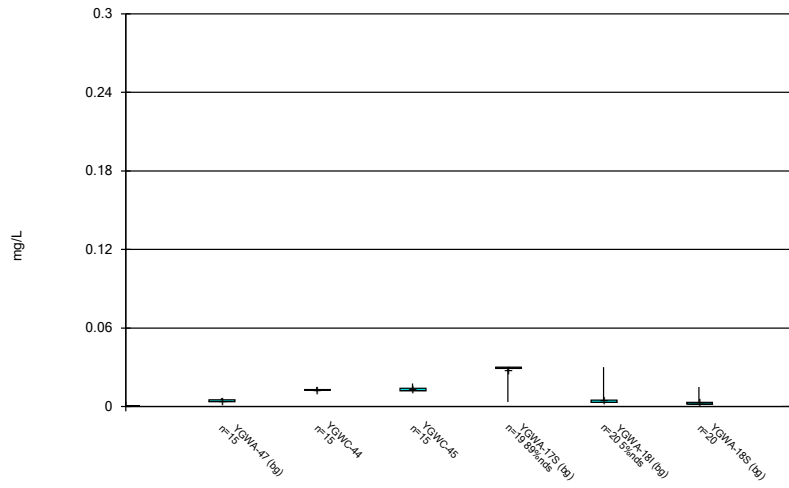
Constituent: Lead Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



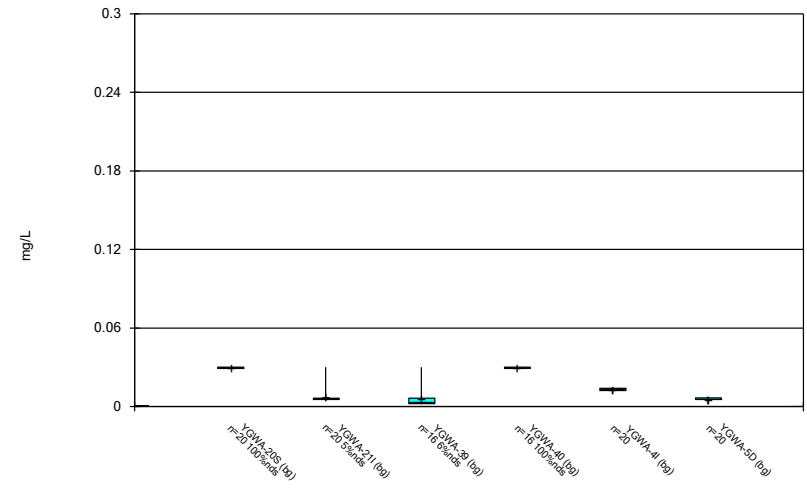
Constituent: Lead Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



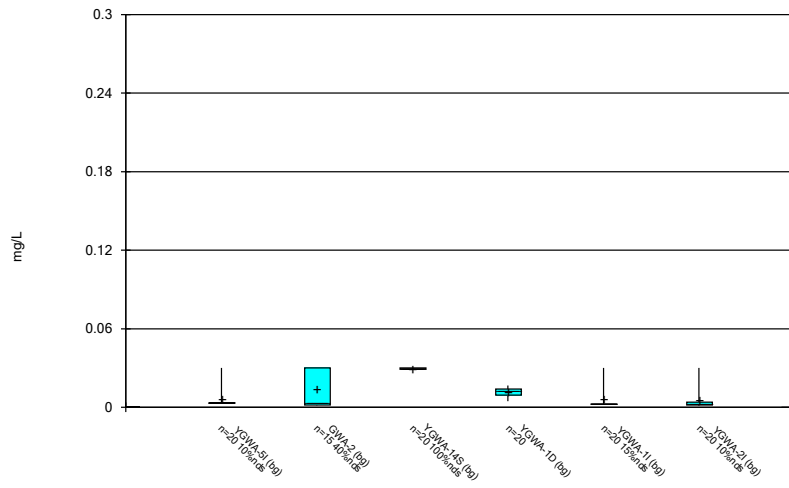
Constituent: Lithium Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



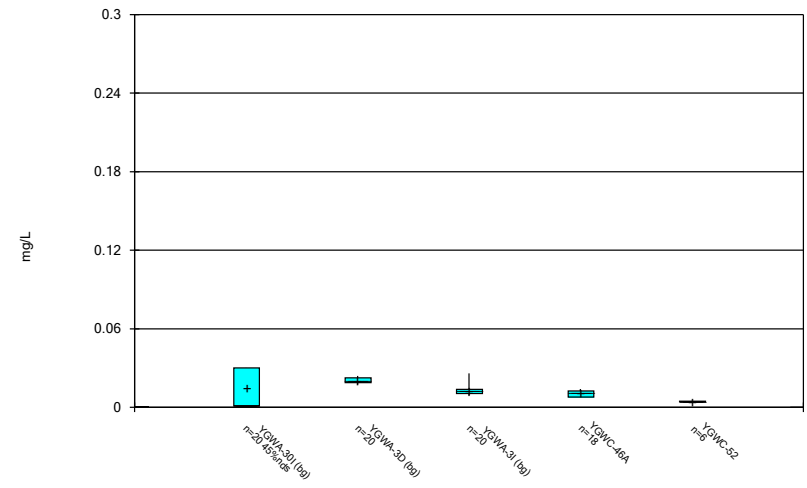
Constituent: Lithium Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



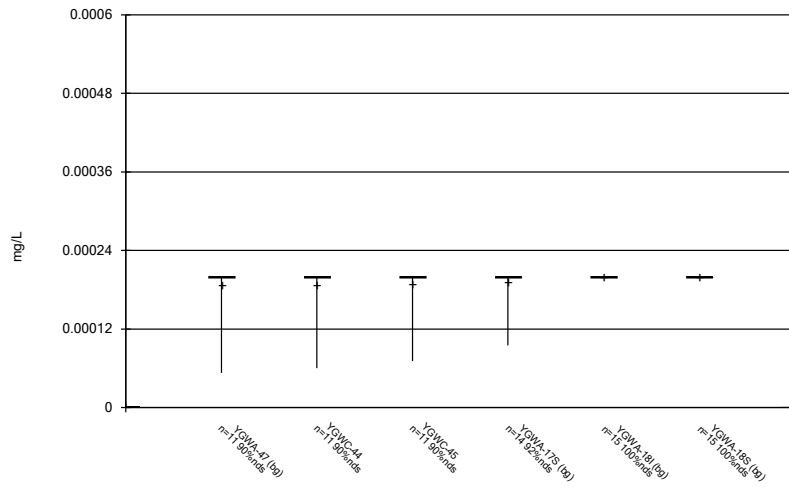
Constituent: Lithium Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



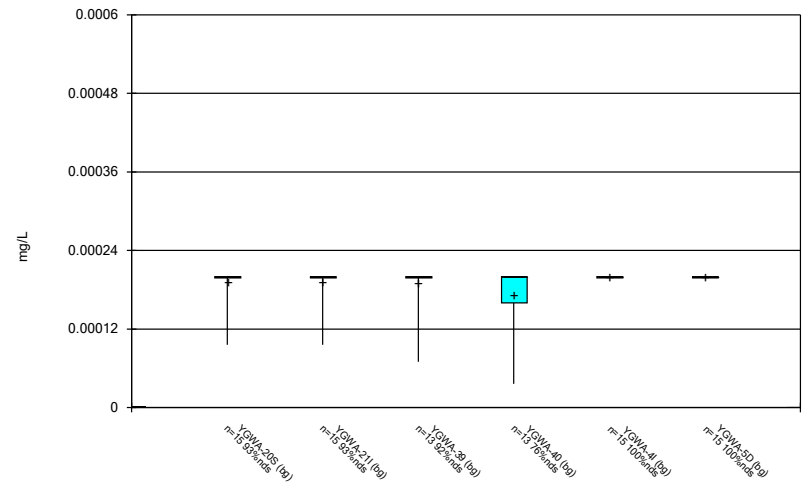
Constituent: Lithium Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



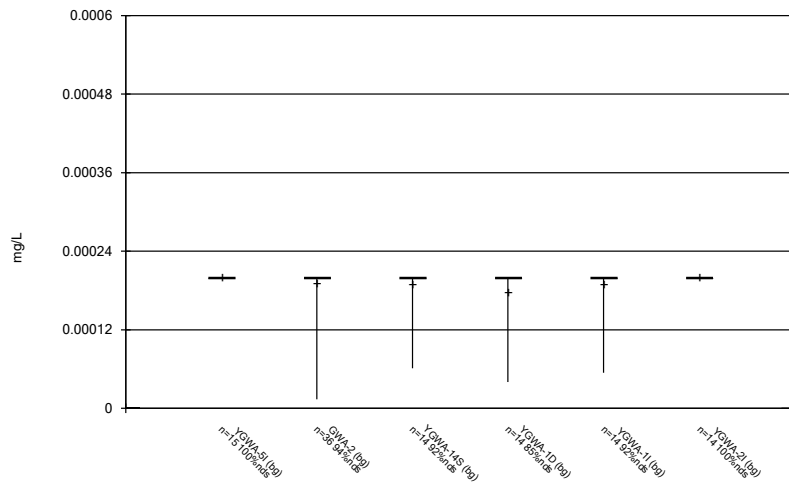
Constituent: Mercury Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



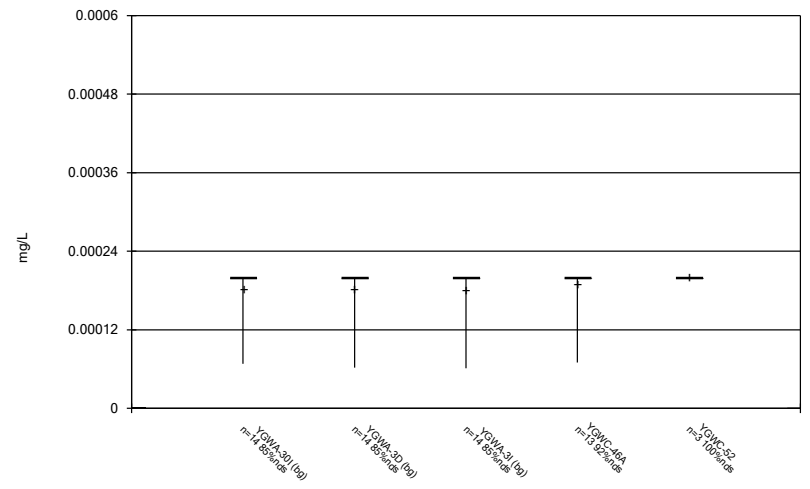
Constituent: Mercury Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



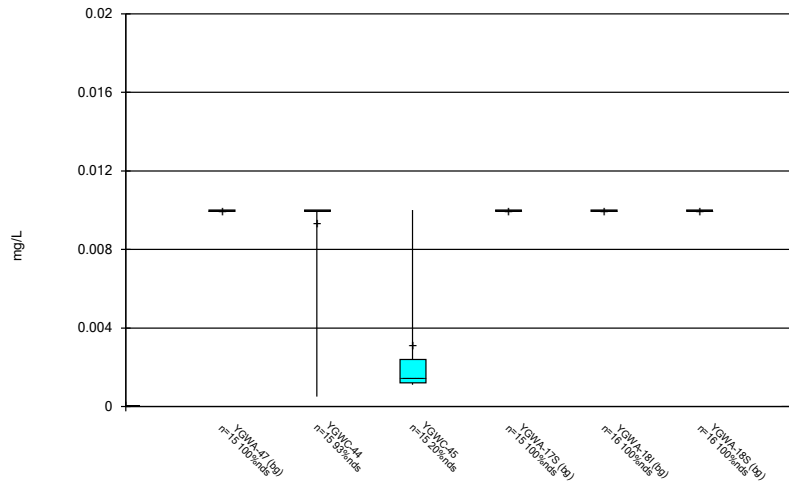
Constituent: Mercury Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



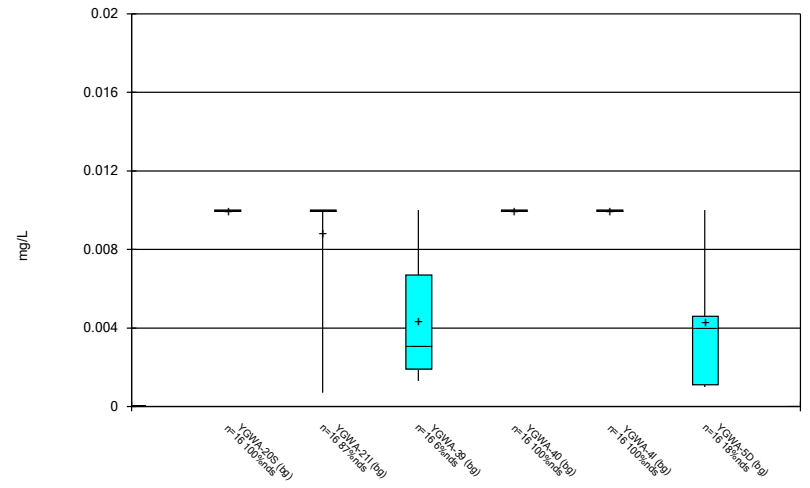
Constituent: Mercury Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



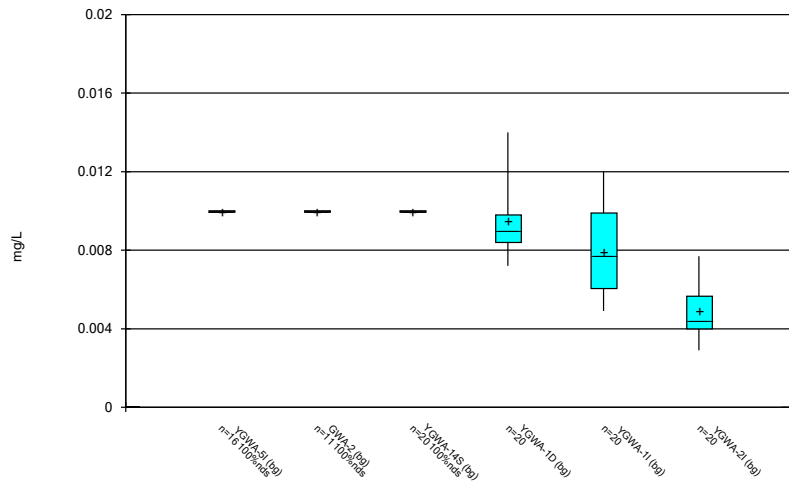
Constituent: Molybdenum Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



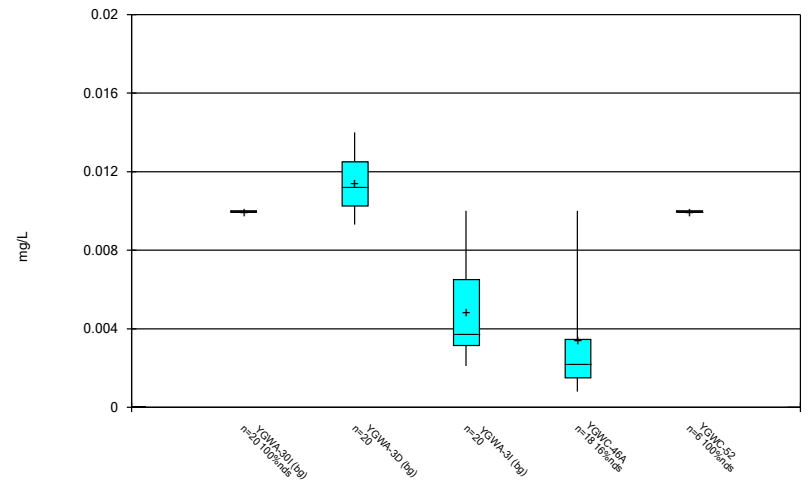
Constituent: Molybdenum Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



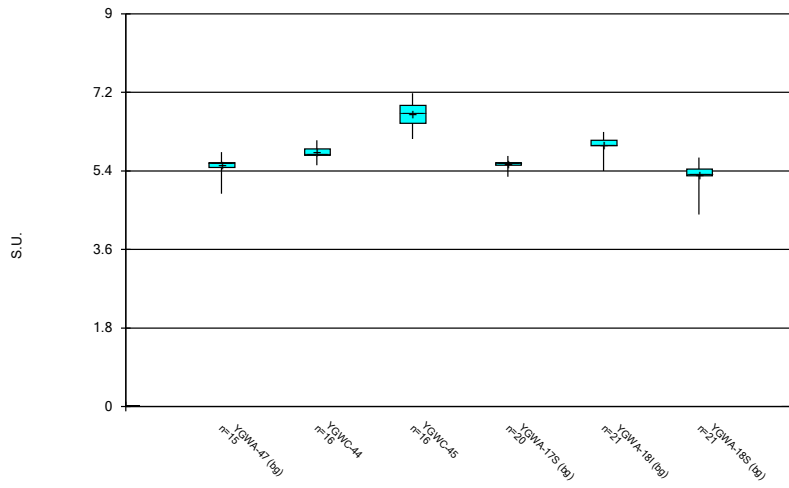
Constituent: Molybdenum Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



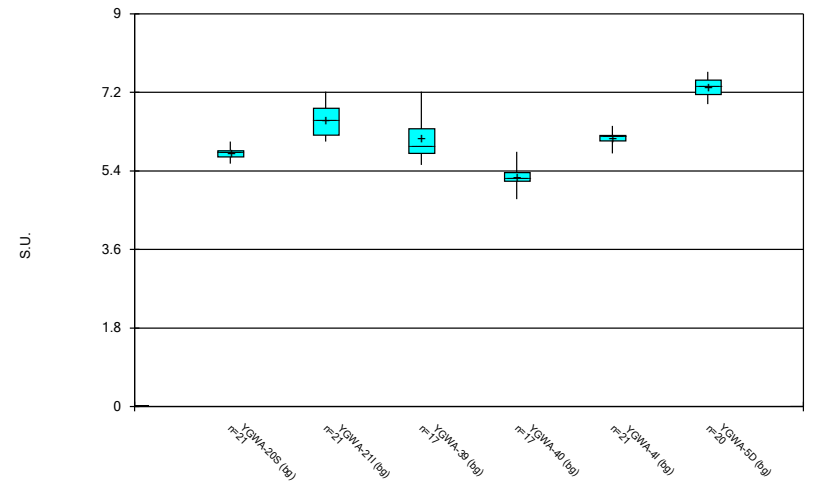
Constituent: Molybdenum Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



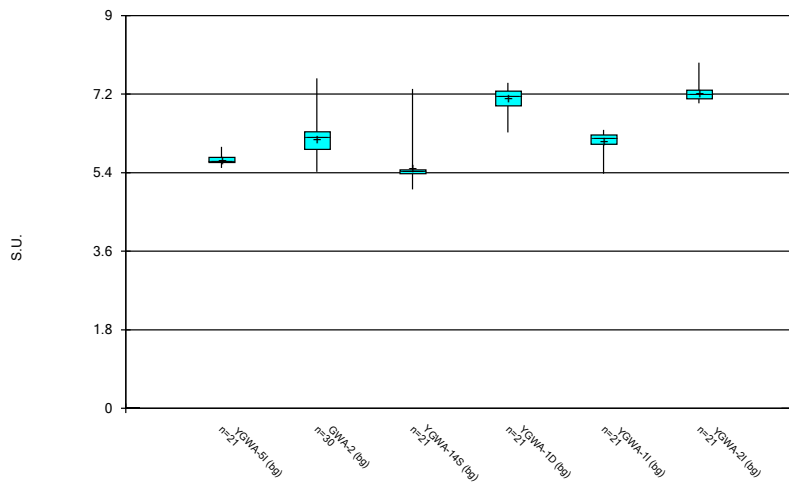
Constituent: pH, Field Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



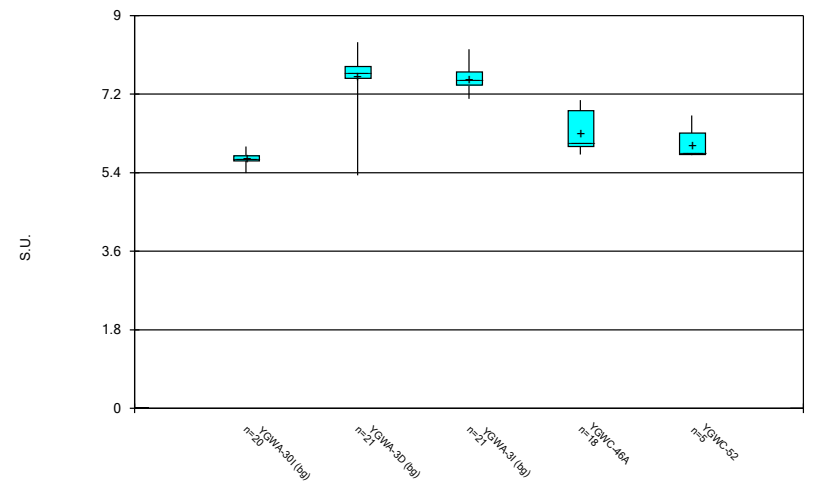
Constituent: pH, Field Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



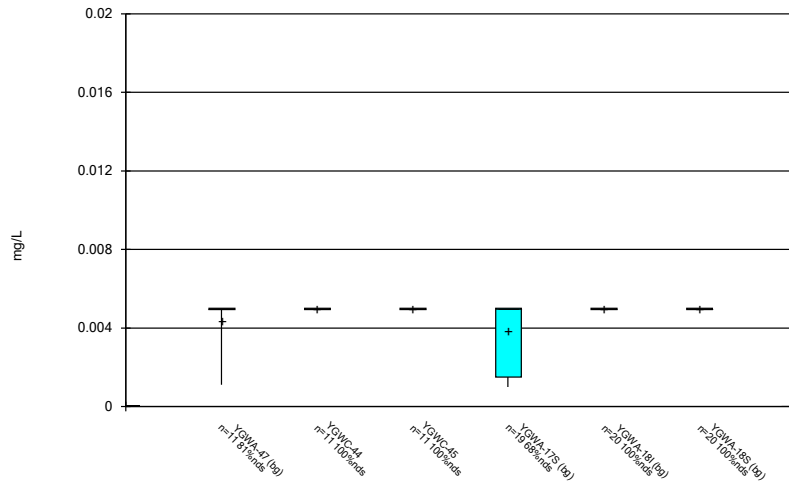
Constituent: pH, Field Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



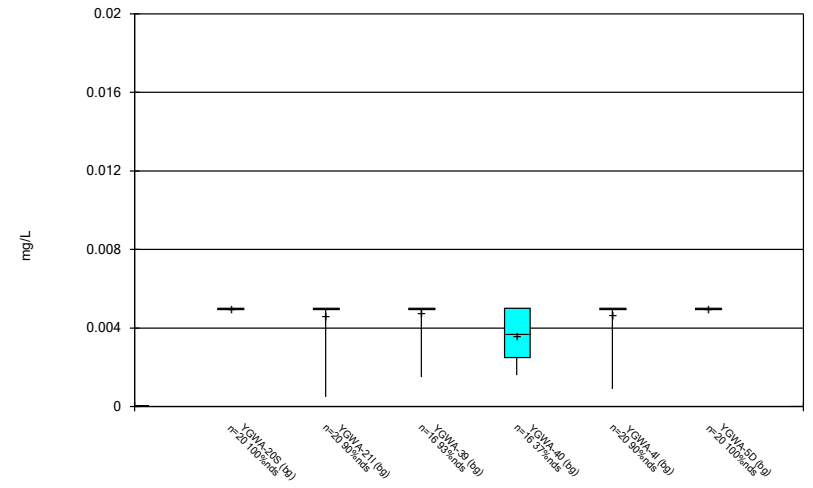
Constituent: pH, Field Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



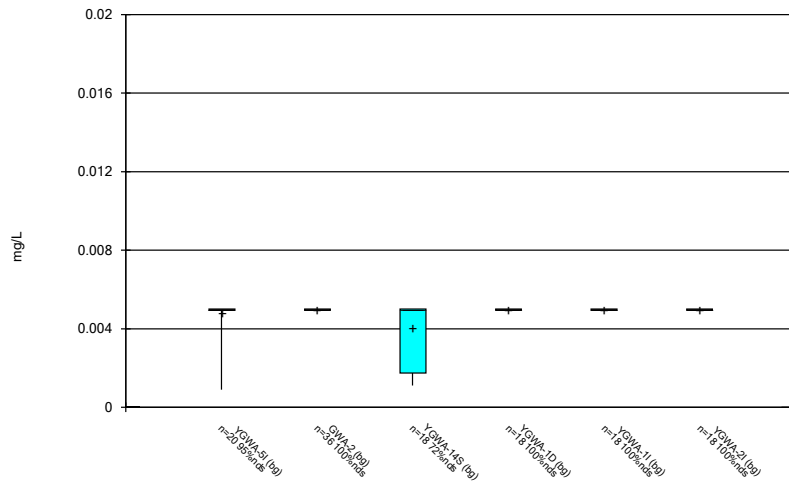
Constituent: Selenium Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



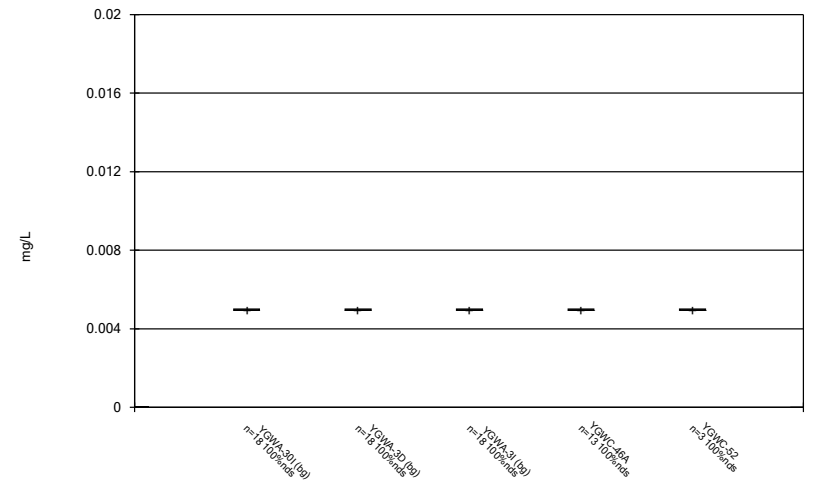
Constituent: Selenium Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



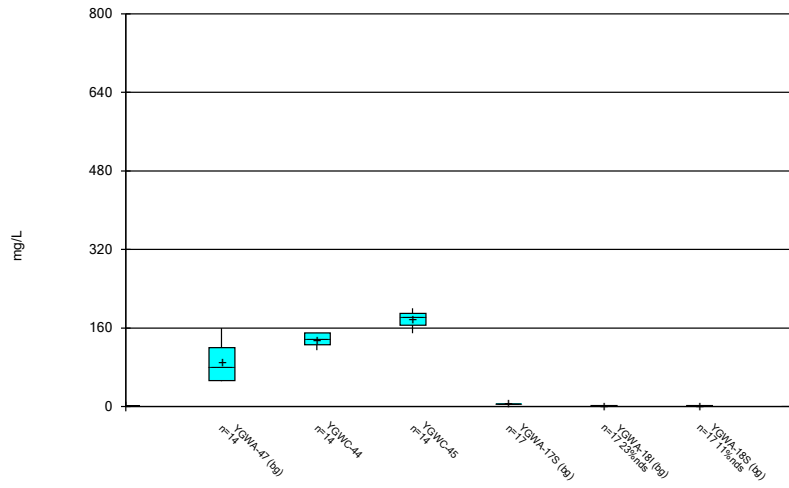
Constituent: Selenium Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



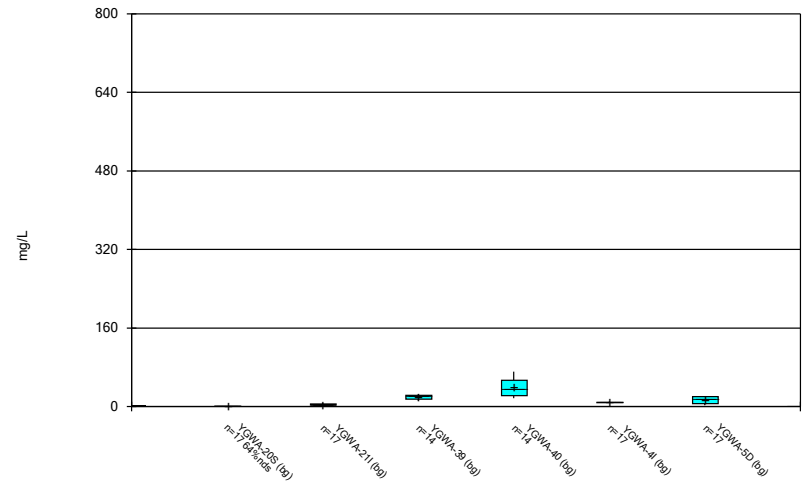
Constituent: Selenium Analysis Run 11/2/2021 4:39 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



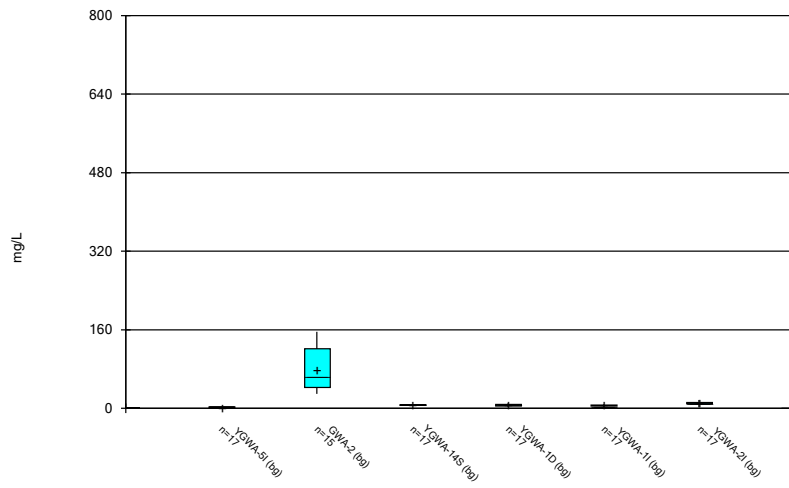
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



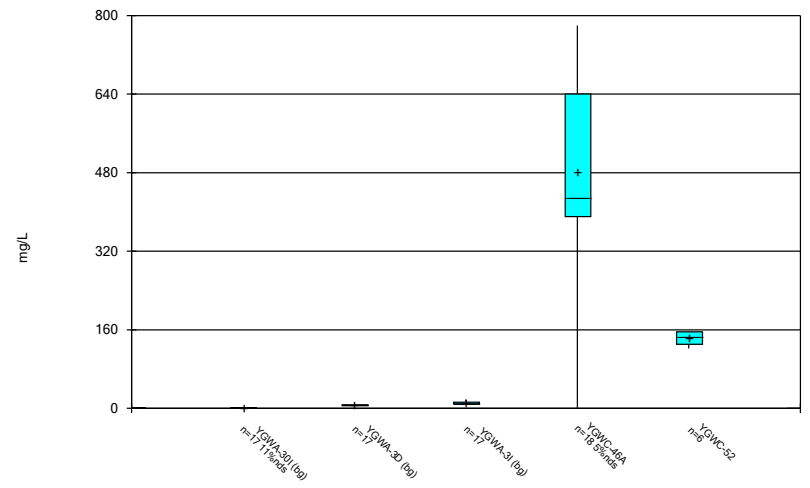
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

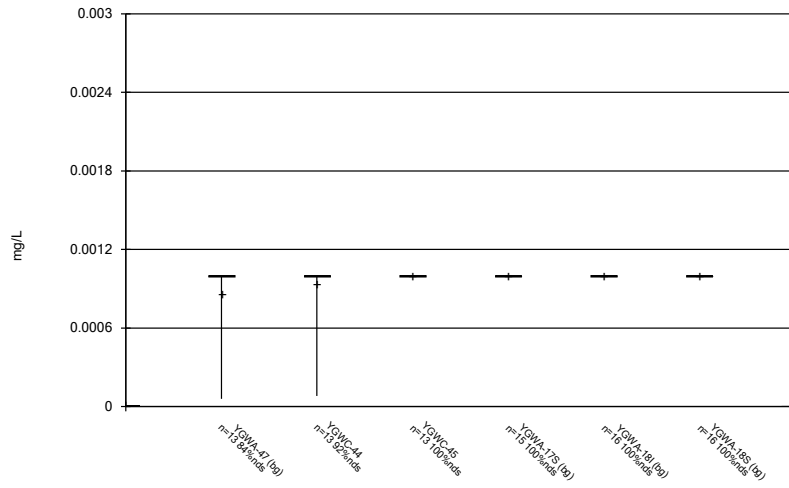
Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

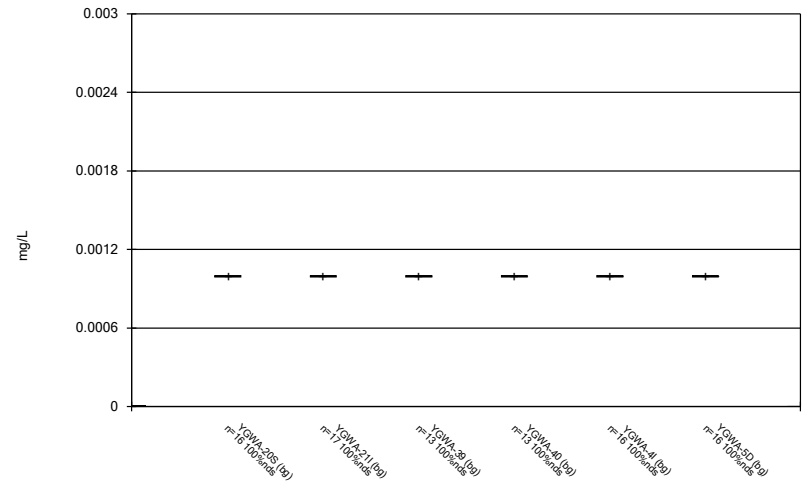


### Box & Whiskers Plot



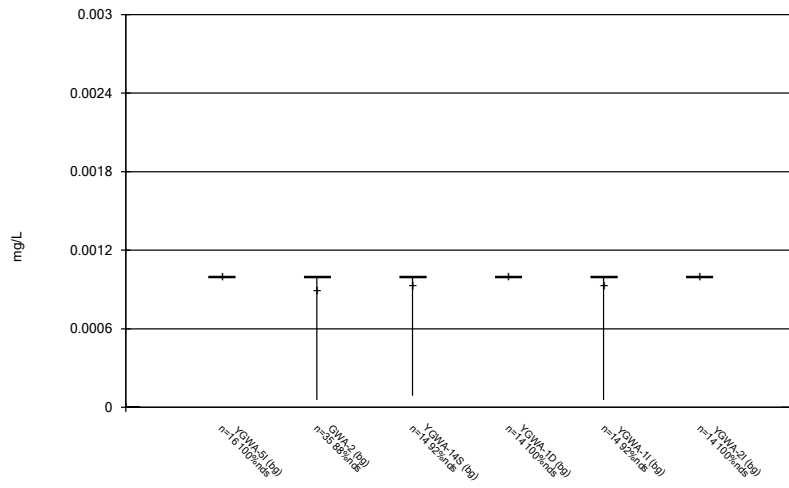
Constituent: Thallium Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



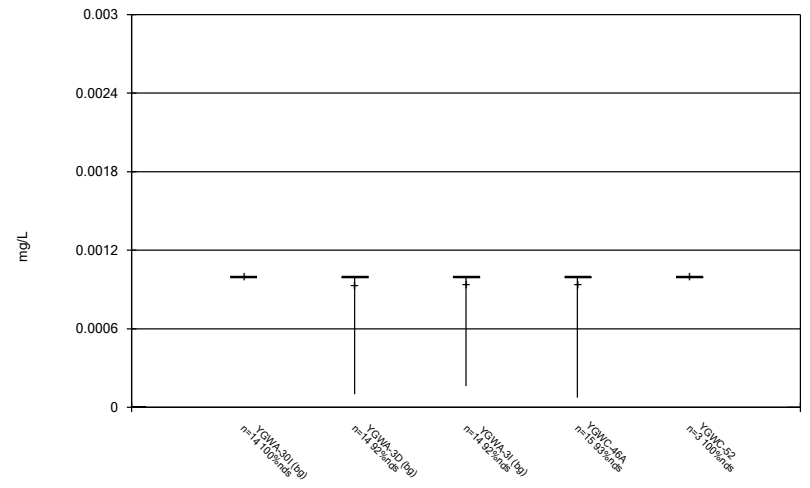
Constituent: Thallium Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



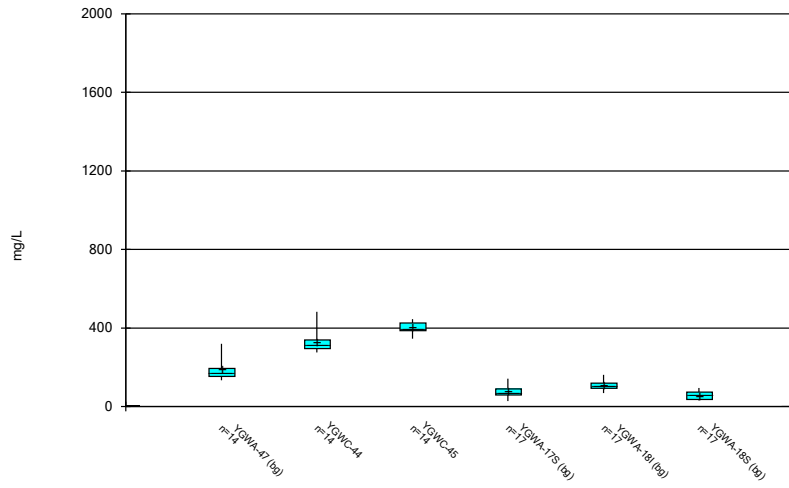
Constituent: Thallium Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



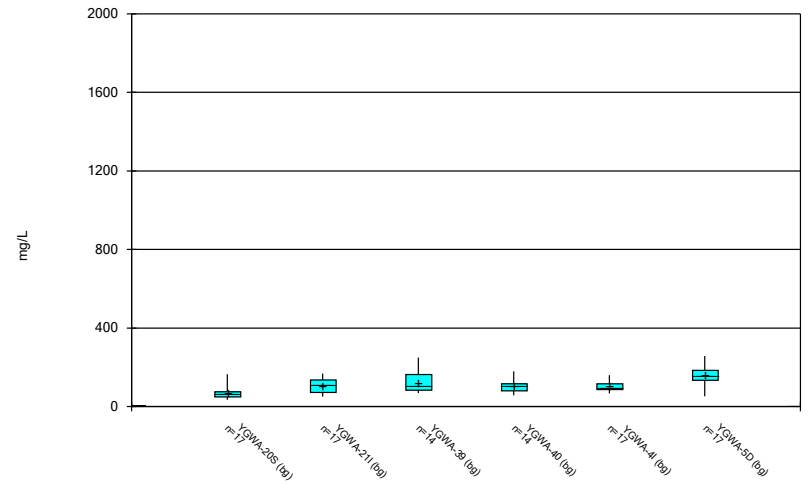
Constituent: Thallium Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



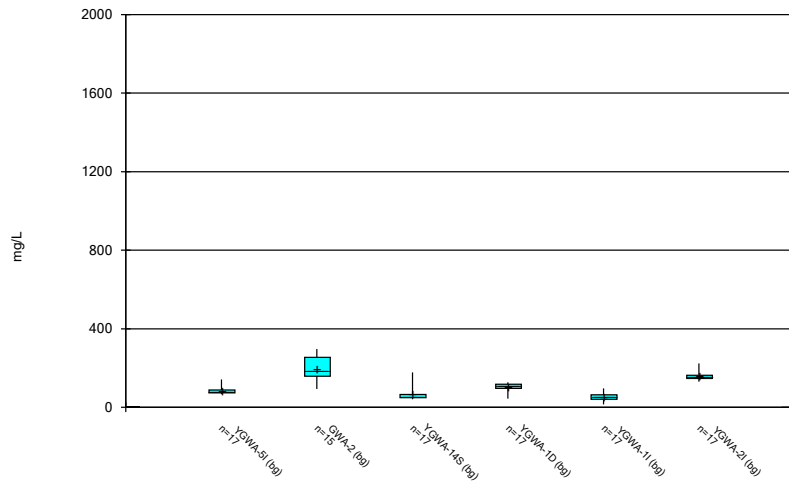
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



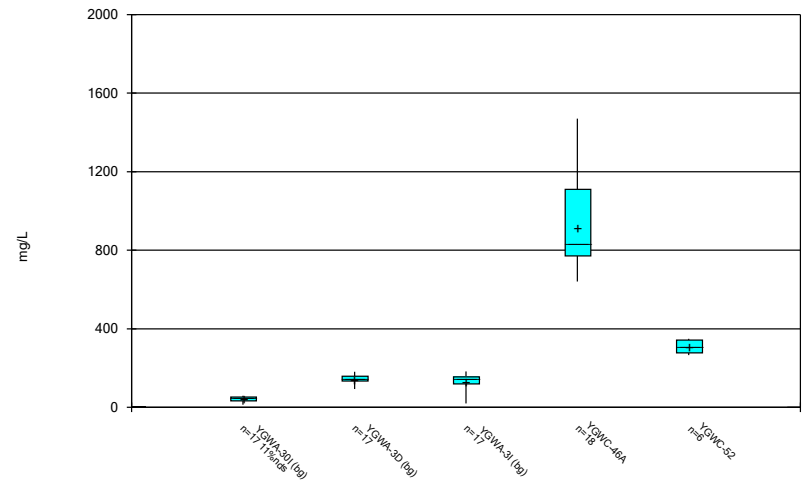
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:39 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

FIGURE C.

# Outlier Summary

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 11/2/2021, 4:52 PM

---

	YGWC-45 Cobalt (mg/L)	GWA-2 Cobalt (mg/L)	YGWA-47 pH, Field (S.U.)
4/2/2018			6.3 (O)
4/3/2018	<0.01 (O)		
8/26/2020	0.2 (O)		
9/22/2020	0.16 (O)		
3/2/2021	0.21 (O)		
8/20/2021	0.074 (O)		

FIGURE D.

# Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 11/2/2021, 4:58 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	YGWC-44	0.16	n/a	8/19/2021	0.56	Yes	312	n/a	n/a	47.12	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Boron, total (mg/L)	YGWC-45	0.16	n/a	8/19/2021	0.31	Yes	312	n/a	n/a	47.12	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Boron, total (mg/L)	YGWC-46A	0.16	n/a	8/27/2021	1.9	Yes	312	n/a	n/a	47.12	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-45	37	n/a	8/19/2021	50.4	Yes	312	n/a	n/a	0.9615	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-46A	37	n/a	8/27/2021	108	Yes	312	n/a	n/a	0.9615	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-52	37	n/a	8/20/2021	47.9	Yes	312	n/a	n/a	0.9615	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	YGWC-44	8.5	n/a	8/19/2021	13	Yes	312	n/a	n/a	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	YGWC-46A	8.5	n/a	8/27/2021	29.3	Yes	312	n/a	n/a	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-46A	160	n/a	8/27/2021	423	Yes	312	n/a	n/a	6.09	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	YGWC-44	210.1	n/a	8/19/2021	333	Yes	312	10.03	2.584	0.641	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	YGWC-45	210.1	n/a	8/19/2021	391	Yes	312	10.03	2.584	0.641	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	YGWC-46A	210.1	n/a	8/27/2021	810	Yes	312	10.03	2.584	0.641	None	sqrt(x)	0.00188	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	YGWC-52	210.1	n/a	8/20/2021	289	Yes	312	10.03	2.584	0.641	None	sqrt(x)	0.00188	Param Inter 1 of 2

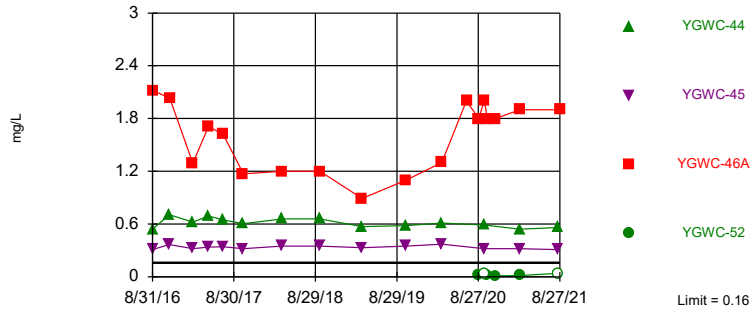
# Appendix III Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 11/2/2021, 4:58 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
<b>Boron, total (mg/L)</b>	<b>YGWC-44</b>	<b>0.16</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>0.56</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>47.12</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Boron, total (mg/L)</b>	<b>YGWC-45</b>	<b>0.16</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>0.31</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>47.12</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Boron, total (mg/L)</b>	<b>YGWC-46A</b>	<b>0.16</b>	<b>n/a</b>	<b>8/27/2021</b>	<b>1.9</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>47.12</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Boron, total (mg/L)	YGWC-52	0.16	n/a	8/20/2021	0.04ND	No	312	n/a	n/a	47.12	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-44	37	n/a	8/19/2021	31.7	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Calcium, total (mg/L)</b>	<b>YGWC-45</b>	<b>37</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>50.4</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9615</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium, total (mg/L)</b>	<b>YGWC-46A</b>	<b>37</b>	<b>n/a</b>	<b>8/27/2021</b>	<b>108</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9615</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium, total (mg/L)</b>	<b>YGWC-52</b>	<b>37</b>	<b>n/a</b>	<b>8/20/2021</b>	<b>47.9</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9615</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Chloride, Total (mg/L)</b>	<b>YGWC-44</b>	<b>8.5</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>13</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride, Total (mg/L)	YGWC-45	8.5	n/a	8/19/2021	4.1	No	312	n/a	n/a	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Chloride, Total (mg/L)</b>	<b>YGWC-46A</b>	<b>8.5</b>	<b>n/a</b>	<b>8/27/2021</b>	<b>29.3</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride, Total (mg/L)	YGWC-52	8.5	n/a	8/20/2021	3.1	No	312	n/a	n/a	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	YGWC-44	0.68	n/a	8/19/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-45	0.68	n/a	8/19/2021	0.075J	No	381	n/a	n/a	67.98	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-46A	0.68	n/a	8/27/2021	0.13	No	381	n/a	n/a	67.98	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-52	0.68	n/a	8/20/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	YGWC-44	8.39	4.4	8/19/2021	5.73	No	391	n/a	n/a	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-45	8.39	4.4	8/19/2021	6.13	No	391	n/a	n/a	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-46A	8.39	4.4	8/27/2021	6.83	No	391	n/a	n/a	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-52	8.39	4.4	8/20/2021	6.71	No	391	n/a	n/a	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-44	160	n/a	8/19/2021	115	No	312	n/a	n/a	6.09	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-45	160	n/a	8/19/2021	149	No	312	n/a	n/a	6.09	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-46A</b>	<b>160</b>	<b>n/a</b>	<b>8/27/2021</b>	<b>423</b>	<b>Yes</b>	<b>312</b>	<b>n/a</b>	<b>n/a</b>	<b>6.09</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate as SO4 (mg/L)	YGWC-52	160	n/a	8/20/2021	122	No	312	n/a	n/a	6.09	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-44</b>	<b>210.1</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>333</b>	<b>Yes</b>	<b>312</b>	<b>10.03</b>	<b>2.584</b>	<b>0.641</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-45</b>	<b>210.1</b>	<b>n/a</b>	<b>8/19/2021</b>	<b>391</b>	<b>Yes</b>	<b>312</b>	<b>10.03</b>	<b>2.584</b>	<b>0.641</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-46A</b>	<b>210.1</b>	<b>n/a</b>	<b>8/27/2021</b>	<b>810</b>	<b>Yes</b>	<b>312</b>	<b>10.03</b>	<b>2.584</b>	<b>0.641</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-52</b>	<b>210.1</b>	<b>n/a</b>	<b>8/20/2021</b>	<b>289</b>	<b>Yes</b>	<b>312</b>	<b>10.03</b>	<b>2.584</b>	<b>0.641</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter 1 of 2</b>

Exceeds Limit: YGWC-44, YGWC-45,  
YGWC-46A

Prediction Limit  
Interwell Non-parametric

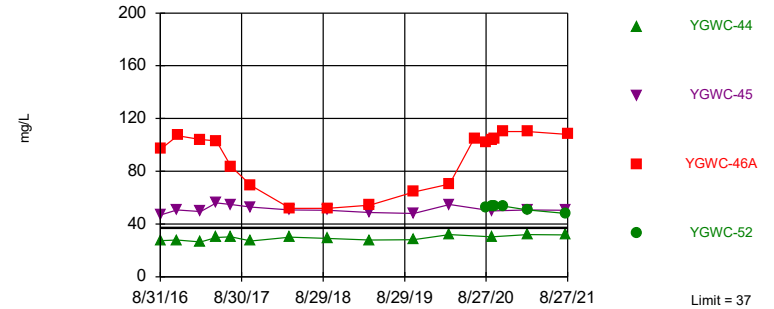


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 312 background values. 47.12% NDs. Annual per-constituent alpha = 0.0003937. Individual comparison alpha = 0.00004922 (1 of 2). Comparing 4 points to limit.

Constituent: Boron, total Analysis Run 11/2/2021 4:55 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Exceeds Limit: YGWC-45, YGWC-46A,  
YGWC-52

Prediction Limit  
Interwell Non-parametric

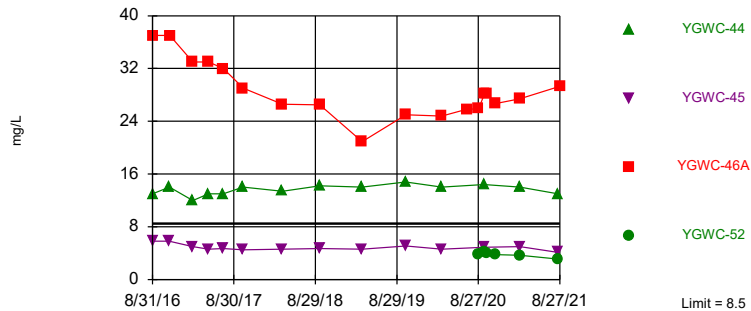


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 312 background values. 0.9615% NDs. Annual per-constituent alpha = 0.0003937. Individual comparison alpha = 0.00004922 (1 of 2). Comparing 4 points to limit.

Constituent: Calcium, total Analysis Run 11/2/2021 4:55 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Exceeds Limit: YGWC-44, YGWC-46A

Prediction Limit  
Interwell Non-parametric

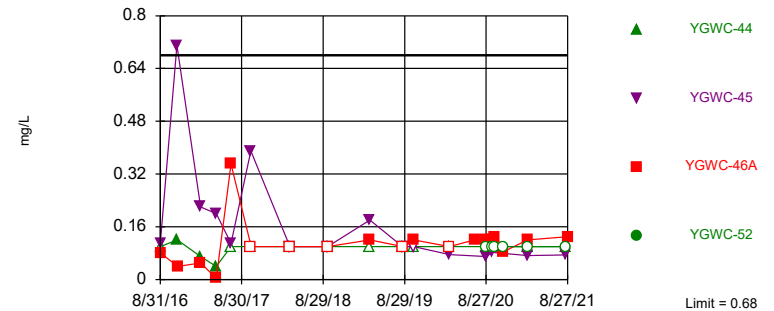


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 312 background values. Annual per-constituent alpha = 0.0003937. Individual comparison alpha = 0.00004922 (1 of 2). Comparing 4 points to limit.

Constituent: Chloride, Total Analysis Run 11/2/2021 4:55 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Within Limit

Prediction Limit  
Interwell Non-parametric



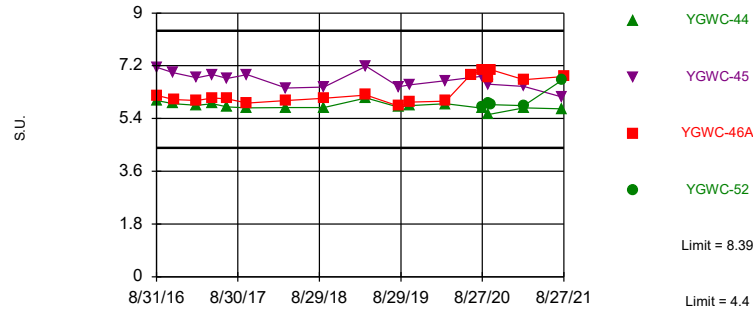
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 381 background values. 67.98% NDs. Annual per-constituent alpha = 0.0003937. Individual comparison alpha = 0.00004922 (1 of 2). Comparing 4 points to limit.

Constituent: Fluoride, total Analysis Run 11/2/2021 4:55 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1



Within Limits

Prediction Limit  
Interwell Non-parametric



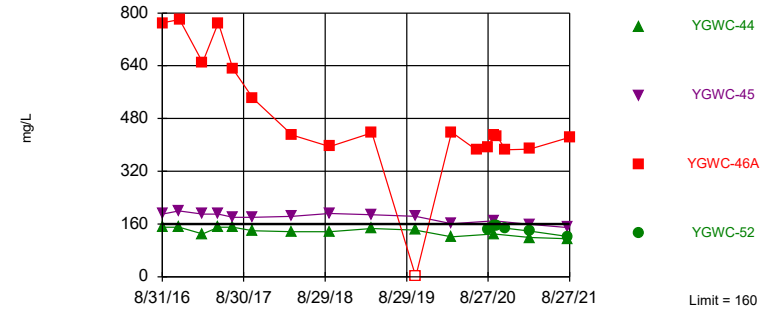
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 391 background values. Annual per-constituent alpha = 0.0007874. Individual comparison alpha = 0.00009844 (1 of 2). Comparing 4 points to limit.

Constituent: pH, Field Analysis Run 11/2/2021 4:55 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Hollow symbols indicate censored values.

Exceeds Limit: YGWC-46A

Prediction Limit  
Interwell Non-parametric

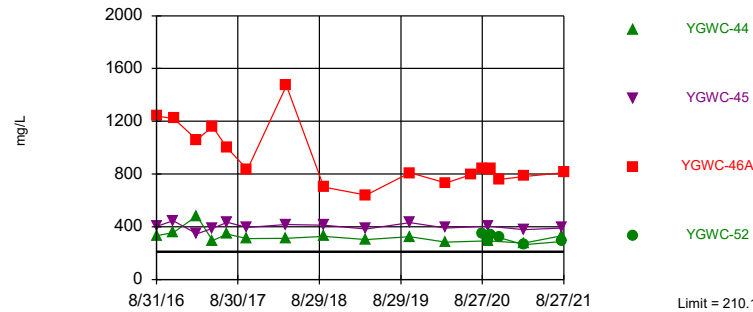


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 312 background values. 6.09% NDs. Annual per-constituent alpha = 0.0003937. Individual comparison alpha = 0.00004922 (1 of 2). Comparing 4 points to limit.

Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:55 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Exceeds Limit: YGWC-44, YGWC-45, YGWC-46A, YGWC-52

Prediction Limit  
Interwell Parametric



Background Data Summary (based on square root transformation): Mean=10.03, Std. Dev.=2.584, n=312, 0.641% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 12.68, critical = 14.07. Kappa = 1.728 (c=7, w=4, 1 of 2, event alpha = 0.05132). N exceeds UG tables; Kappa based on n=150. Report alpha = 0.007498. Individual comparison alpha = 0.00188. Comparing 4 points to limit.

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:55 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

# Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-30I (bg)
6/1/2016	<0.04	<0.04	<0.04						
6/2/2016				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
6/6/2016									
6/7/2016									
7/25/2016		<0.04	<0.04						<0.04
7/26/2016	0.0055 (J)			<0.04	0.0052 (J)	0.0097 (J)	0.0047 (J)	0.0177 (J)	
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	<0.04	<0.04							
9/14/2016			<0.04	0.01 (J)	0.0071 (J)		<0.04		
9/15/2016						0.0102 (J)		0.0214 (J)	
9/16/2016									
9/19/2016									<0.04
11/1/2016	0.0086 (J)		<0.04			<0.04			<0.04
11/2/2016					<0.04		<0.04	<0.04	
11/3/2016									
11/4/2016		<0.04		<0.04					
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017								0.0198 (J)	
1/11/2017	0.0074 (J)		<0.04			<0.04			
1/12/2017				<0.04	0.0076 (J)				
1/13/2017							<0.04		
1/16/2017		<0.04							<0.04
2/21/2017									<0.04
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017			<0.04						
3/2/2017	0.008 (J)	<0.04				0.0084 (J)			
3/3/2017									
3/6/2017							<0.04		
3/7/2017				<0.04	0.0089 (J)				
3/8/2017								0.0189 (J)	
4/26/2017			<0.04			<0.04		0.0161 (J)	<0.04
4/27/2017	0.0066 (J)	<0.04							
4/28/2017									
5/1/2017					0.0061 (J)		<0.04		
5/2/2017				<0.04					
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	0.0087 (J)	0.006 (J)		<0.04	0.0079 (J)				
6/28/2017			<0.04			<0.04			
6/29/2017							<0.04		

# Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-30I (bg)
6/30/2017								0.0173 (J)	<0.04
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	0.0072 (J)	0.0071 (J)		<0.04	0.0094 (J)				
10/4/2017			<0.04			<0.04			<0.04
10/5/2017							<0.04	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		<0.04			0.0098 (J)				
6/7/2018				<0.04		0.004 (J)	0.0045 (J)		
6/8/2018			<0.04					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				0.0057 (J)	0.01 (J)		0.005 (J)		
10/1/2018	0.021 (J)	0.0049 (J)	<0.04			<0.04		0.015 (J)	
10/2/2018									<0.04
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	0.005 (J)	<0.04							
3/29/2019								0.014 (J)	
4/1/2019			<0.04			<0.04			<0.04
4/2/2019									
4/3/2019				0.0044 (J)	0.0076 (J)		0.0055 (J)		
6/12/2019									
9/24/2019	0.0064 (J)	0.0055 (J)		0.0049 (J)	0.01 (J)				
9/25/2019			<0.04			0.0054 (J)	<0.04	0.018 (J)	<0.04
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020		0.0087 (J)						0.02 (J)	
3/19/2020	0.0085 (J)		0.0053 (J)			0.0073 (J)			0.0052 (J)
3/24/2020				0.0068 (J)	0.011 (J)				
3/25/2020							0.011 (J)		



# Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-211 (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44	GWA-2 (bg)
6/1/2016									
6/2/2016									
6/6/2016	<0.04	<0.04							
6/7/2016			<0.04	<0.04	<0.04				
7/25/2016									
7/26/2016									
7/27/2016	<0.04	0.0059 (J)	0.008 (J)		<0.04				
7/28/2016				<0.04					
8/30/2016						0.0166 (J)			
8/31/2016							0.308	0.541	0.0315 (J)
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		0.0079 (J)	0.0086 (J)						
9/19/2016	<0.04			<0.04	<0.04				
11/1/2016									
11/2/2016					<0.04				
11/3/2016	<0.04	0.0082 (J)	0.0077 (J)	<0.04					
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	<0.04	0.0096 (J)	0.0092 (J)						
1/12/2017									
1/13/2017				<0.04	<0.04				
1/16/2017									
2/21/2017									
2/22/2017									<0.04
2/24/2017						0.0145 (J)			
2/27/2017							0.321		
2/28/2017								0.623	
3/1/2017	<0.04	<0.04							
3/2/2017			0.0095 (J)						
3/3/2017									
3/6/2017				<0.04	<0.04				
3/7/2017									
3/8/2017									
4/26/2017	<0.04	0.0091 (J)		<0.04	<0.04				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			<0.04						
5/8/2017						0.0141 (J)		0.69	0.0084 (J)
5/9/2017							0.338		
5/26/2017									
6/27/2017									
6/28/2017	<0.04	0.0079 (J)							
6/29/2017			0.0074 (J)	<0.04	<0.04				





# Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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		<0.04			
9/15/2016					
9/16/2016					
9/19/2016					
11/1/2016					
11/2/2016					
11/3/2016					
11/4/2016		<0.04			
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		<0.04			
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		<0.04			
3/6/2017					
3/7/2017					
3/8/2017					
4/26/2017					
4/27/2017					
4/28/2017		<0.04			
5/1/2017					
5/2/2017					
5/8/2017	1.71				
5/9/2017					
5/26/2017		<0.04			
6/27/2017					
6/28/2017		<0.04			
6/29/2017					



# Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
6/30/2017					
7/11/2017					
7/13/2017	1.62				
7/17/2017					
10/3/2017		<0.04			
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			<0.04		
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		<0.04			
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		<0.04			
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: Boron, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
7/6/2020	2				
8/27/2020					0.014 (J)
8/28/2020	1.8				
9/22/2020					<0.04
9/23/2020	2	<0.04			
9/24/2020			0.037 (J)	0.087 (J)	
9/25/2020					
10/7/2020	1.8				0.018 (J)
11/12/2020	1.8				0.012 (J)
3/1/2021					0.015 (J)
3/2/2021	1.9				
3/3/2021		<0.04			
3/4/2021			0.033 (J)	0.078	
8/19/2021					
8/20/2021					<0.04
8/26/2021			0.095		
8/27/2021	1.9	<0.04			
9/1/2021					
9/3/2021				0.077	

# Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-30I (bg)
6/1/2016	12	2.5	21						
6/2/2016				2.4	33	28	8.8	1.3	1.3
6/6/2016									
6/7/2016									
7/25/2016		2.16	20.3						1.17
7/26/2016	11			2.12	32.3	24.5	7.69	1.24	
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	11.8	2.21							
9/14/2016			19.7	2.18	31		8.49		
9/15/2016						27		1.17	
9/16/2016									
9/19/2016									1.05
11/1/2016	11		18.4			25.6			1.14
11/2/2016					30.9		7.83	1.23	
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	11.2		20.3			27.5			
1/12/2017				2.37	35.7				
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	11	2.57				27.5			
3/3/2017									
3/6/2017							8.64		
3/7/2017				2.34	32.7				
3/8/2017								1.21	
4/26/2017			25.6			30.4		1.14	1.03
4/27/2017	11.1	2.38							
4/28/2017									
5/1/2017					37		13.4		
5/2/2017				2.17					
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	13.8	2.36		2.13	36.5				
6/28/2017			23.9			29.8			
6/29/2017							8.81		

# Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-30I (bg)
6/30/2017								1.24	1.13
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	14	2.21		2.15	30.9				
10/4/2017			22.1			29.7			1.09
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				2.3		29.1	8.2		
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				2.3	25.8		9.5 (J)		
10/1/2018	15.1	1.8	19.7			26.9		0.99	
10/2/2018									1.1
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	13.3 (J)	2.2							
3/29/2019								1.1	
4/1/2019			20.4 (J)			30.1			1.3
4/2/2019									
4/3/2019				2.8	24.7 (J)		8.4		
6/12/2019									
9/24/2019	15.8	2.3		2.5	25.8				
9/25/2019			22.4			29.5	9.5	1.1	1.1
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020		2.1						1.1	
3/19/2020	15		21.9			31.5			1.2
3/24/2020				2.5	26.1				
3/25/2020							10.5		



# Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-211 (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44	GWA-2 (bg)
6/1/2016									
6/2/2016									
6/6/2016	6.2	1.4							
6/7/2016			2.2	3.7	2.3				
7/25/2016									
7/26/2016									
7/27/2016	4.73	1.19	2		2.08				
7/28/2016				3.15					
8/30/2016						20.9			
8/31/2016							46.7	27.3	9.31
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		1.5	1.97						
9/19/2016	4.76			3.17	1.97				
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				4.98	2.45				
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				6.28	2.48				
3/7/2017									
3/8/2017									
4/26/2017	4.28	1.05		6.65	2.3				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			1.95						
5/8/2017						14.6		29.9	14.2
5/9/2017							56		
5/26/2017									
6/27/2017									
6/28/2017	4.95	1.06							
6/29/2017			2.02	6.04	2.54				







# Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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: Calcium, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
7/6/2020	105				
8/27/2020					52.3
8/28/2020	102				
9/22/2020					53.5
9/23/2020	104	26.3			
9/24/2020			3.7	4.4	
9/25/2020					
10/7/2020	105				53.8
11/12/2020	110				53.6
3/1/2021					50.6
3/2/2021	110				
3/3/2021		25.6			
3/4/2021			8.2	4.6	
8/19/2021					
8/20/2021					47.9
8/26/2021			14.1		
8/27/2021	108	22.6			
9/1/2021					
9/3/2021				5.6	

# Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-30I (bg)
6/1/2016	1.3	1.6	1.3						
6/2/2016				4.3	7.2	1.4	3.7	4.1	1.9
6/6/2016									
6/7/2016									
7/25/2016		1.4	1.3						1.7
7/26/2016	1.2			4.4	6.6	1.6	3.6	4	
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	1.1	1.3							
9/14/2016			1.3	3.8	6.6		3.4		
9/15/2016						1.5		4.2	
9/16/2016									
9/19/2016									1.6
11/1/2016	1.3		1.4			1.7			1.8
11/2/2016					7.6		4.5	4.9	
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				3.8	6.8				
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	1.3				1.2			
3/3/2017									
3/6/2017							3.6		
3/7/2017				4.5	6.8				
3/8/2017								4.2	
4/26/2017			1.1			1.2		4.1	1.7
4/27/2017	1	1.3							
4/28/2017									
5/1/2017					7.2		4.3		
5/2/2017				4.6					
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	1.1	1.4		4.3	7				
6/28/2017			1.2			1.3			
6/29/2017							4.2		

# Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-30I (bg)
6/30/2017								3.7	1.8
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	1.1	1.7		4.2	6.5				
10/4/2017			1.2			1.5			1.8
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				4.5		1.2	4.4		
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				5.1	4.8		4.8		
10/1/2018	1.1	1.4	1.2			1.5		3.8	
10/2/2018									1.8
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	1.4	1.5							
3/29/2019								4.2	
4/1/2019			1.1			1.2			1.7
4/2/2019									
4/3/2019				4.2	4		4.3		
6/12/2019									
9/24/2019	1.1	1.3		4.5	3.7				
9/25/2019			1.1			1.1	4.5	4.8	1.6
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			1.2			1.8
3/24/2020				4.3	3.5				
3/25/2020							3.9		



# Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44	GWA-2 (bg)
6/1/2016									
6/2/2016									
6/6/2016	6.8	6.4							
6/7/2016			4.5	2.8	1.9				
7/25/2016									
7/26/2016									
7/27/2016	6.7	6.2	4.5		1.9				
7/28/2016				2.6					
8/30/2016						5.2			
8/31/2016							5.8	13	4
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		6.1	4.5						
9/19/2016	7			2.4	1.9				
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				2.5	2.3				
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				2.1	1.9				
3/7/2017									
3/8/2017									
4/26/2017	7	6.5		2.1	2				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			4.6						
5/8/2017						5.8		13	4.2
5/9/2017							4.6		
5/26/2017									
6/27/2017									
6/28/2017	7	6.4							
6/29/2017			4.5	2.8	2.6				







# Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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, Total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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: Chloride, Total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
7/6/2020	25.8				
8/27/2020					3.9
8/28/2020	25.9				
9/22/2020					4.1
9/23/2020	28.1	0.88 (J)			
9/24/2020			2.7	5	
9/25/2020					
10/7/2020	28.2				4
11/12/2020	26.7				3.8
3/1/2021					3.7
3/2/2021	27.4				
3/3/2021		0.86 (J)			
3/4/2021			4.9	4.9	
8/19/2021					
8/20/2021					3.1
8/26/2021			7.2		
8/27/2021	29.3	0.99 (J)			
9/1/2021					
9/3/2021				5.5	

# Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-30I (bg)
6/1/2016	0.12 (J)	<0.1	0.15 (J)						
6/2/2016				<0.1	0.11 (J)	0.62	<0.1	<0.1	<0.1
6/6/2016									
6/7/2016									
7/25/2016		0.06 (J)	0.14 (J)						0.06 (J)
7/26/2016	0.08 (J)			<0.1	0.05 (J)	0.49	<0.1	0.02 (J)	
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	0.11 (J)	<0.1							
9/14/2016			0.18 (J)	<0.1	0.04 (J)		<0.1		
9/15/2016						0.54		<0.1	
9/16/2016									
9/19/2016									<0.1
11/1/2016	<0.1		<0.1			0.68			<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								<0.1	
1/11/2017	0.05 (J)		0.09 (J)			0.49			
1/12/2017				<0.1	0.04 (J)				
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	<0.1				0.48			
3/3/2017									
3/6/2017							<0.1		
3/7/2017				<0.1	<0.1				
3/8/2017								<0.1	
4/26/2017			0.08 (J)			0.48		<0.1	<0.1
4/27/2017	0.04 (J)	0.01 (J)							
4/28/2017									
5/1/2017					<0.1		<0.1		
5/2/2017				<0.1					
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	<0.1	<0.1		<0.1	<0.1				
6/28/2017			0.12 (J)			0.47			
6/29/2017							<0.1		





# Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-211 (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-44	YGWC-45	GWA-2 (bg)
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	<0.1	<0.1		<0.1				
7/28/2016				0.02 (J)					
8/30/2016						0.09 (J)			
8/31/2016							<0.1	0.11 (J)	0.14 (J)
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		<0.1	<0.1						
9/19/2016	<0.1			0.02 (J)	<0.1				
11/1/2016									
11/2/2016					<0.1				
11/3/2016	<0.1	<0.1	<0.1	<0.1					
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	<0.1	<0.1	<0.1						
1/12/2017									
1/13/2017				<0.1	<0.1				
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	<0.1	<0.1							
3/2/2017			<0.1						
3/3/2017									
3/6/2017				<0.1	<0.1				
3/7/2017									
3/8/2017									
4/26/2017	<0.1	<0.1		0.04 (J)	<0.1				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			<0.1						
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	<0.1	<0.1							
6/29/2017			<0.1	<0.1	<0.1				



# Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-211 (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-44	YGWC-45	GWA-2 (bg)
6/30/2017									
7/11/2017						0.07 (J)			
7/13/2017							<0.1	0.11 (J)	
7/17/2017									0.14 (J)
10/3/2017				<0.1					
10/4/2017		<0.1	<0.1		<0.1				
10/5/2017	<0.1								
10/10/2017						<0.1	<0.1	0.39	
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	<0.1	<0.1	<0.1						
3/29/2018				<0.1	<0.1				
4/2/2018						<0.1			
4/3/2018								<0.1	
4/4/2018							<0.1		
6/5/2018				0.13 (J)					
6/6/2018					<0.1				
6/7/2018	<0.1								
6/8/2018									
6/11/2018		<0.1	<0.1						
6/28/2018									
8/6/2018									0.087 (J)
8/7/2018									
9/19/2018						<0.1	<0.1	<0.1	
9/24/2018									
9/25/2018	<0.1	<0.1	<0.1	0 (J)	<0.1				
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		<0.1	<0.1	0.32	<0.1				
3/6/2019	<0.1								
3/26/2019									
3/27/2019						0.081 (J)	<0.1	0.18 (J)	
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			<0.1	0.12 (J)					
4/3/2019	<0.1	<0.1			<0.1				
6/12/2019									0.12 (J)
8/19/2019									<0.1
8/20/2019						<0.1	<0.1	<0.1	



# Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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		<0.1			
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		<0.1			
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, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
6/30/2017					
7/11/2017					
7/13/2017	0.35				
7/17/2017					
10/3/2017		<0.1			
10/4/2017					
10/5/2017					
10/10/2017					
10/11/2017	<0.1		<0.1		
10/12/2017				<0.1	
10/16/2017					
11/20/2017			<0.1	<0.1	
1/10/2018				<0.1	
1/11/2018			<0.1		
2/19/2018				<0.1	
2/20/2018			0.23		
3/27/2018					
3/28/2018		0.31			
3/29/2018					
4/2/2018					
4/3/2018			<0.1	<0.1	
4/4/2018	<0.1				
6/5/2018					
6/6/2018					
6/7/2018		0.11 (J)			
6/8/2018					
6/11/2018					
6/28/2018			<0.1	<0.1	
8/6/2018					
8/7/2018			0.048 (J)	<0.1	
9/19/2018	<0.1				
9/24/2018			<0.1	<0.1	
9/25/2018					
9/26/2018					
10/1/2018		<0.1			
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				<0.1	
3/27/2019	0.12 (J)		<0.1		
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, total (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
8/21/2019	<0.1		<0.1	<0.1	
9/24/2019		0.081 (J)			
9/25/2019					
9/26/2019					
10/8/2019					
10/9/2019	0.12 (J)		<0.1	<0.1	
2/10/2020					
2/11/2020		0.075 (J)			
2/12/2020			<0.1	<0.1	
3/17/2020	<0.1				
3/18/2020					
3/19/2020		0.093 (J)			
3/24/2020				<0.1	
3/25/2020			<0.1		
7/6/2020	0.12				
8/26/2020					
8/27/2020					<0.1
8/28/2020	0.12				
9/22/2020					<0.1
9/23/2020	0.12	0.08 (J)			
9/24/2020			<0.1	<0.1	
9/25/2020					
10/7/2020	0.13				<0.1
11/12/2020	0.084 (J)				<0.1
2/8/2021					
2/9/2021					
2/10/2021		0.094 (J)	<0.1	<0.1	
2/11/2021					
2/12/2021					
3/1/2021					<0.1
3/2/2021	0.12				
3/3/2021		0.085 (J)			
3/4/2021			<0.1	<0.1	
8/19/2021					
8/20/2021					<0.1
8/26/2021			0.063 (J)		
8/27/2021	0.13	0.12			
9/1/2021					
9/3/2021				<0.1	



# Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	GWA-2 (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-14S (bg)	YGWA-5D (bg)	YGWA-30I (bg)	YGWA-5I (bg)
3/7/2017							7.43		5.66
3/8/2017						5.41			
4/26/2017			7.4		7.45	5.02		5.56	
4/27/2017		6.09		6.99					
4/28/2017									
5/1/2017							7.22		
5/2/2017									5.65
5/8/2017	6.12								
5/9/2017									
5/26/2017									
6/27/2017		6.21		6.87			7.32		5.7
6/28/2017			7.5		7.65				
6/29/2017									
6/30/2017						5.39		5.72	
7/11/2017									
7/13/2017									
7/17/2017	6.03								
10/3/2017		5.98		6.81			7.48		5.79
10/4/2017			7.45		7.49			5.87	
10/5/2017						5.49			
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		5.83	
3/28/2018			7.74		7.91				
3/29/2018				7.38			7.02		5.63
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018				7.16					
6/6/2018		6.17					7.43		
6/7/2018					7.69				5.63
6/8/2018			7.64			5.45			
6/11/2018								5.69	
6/28/2018									
8/6/2018	6.01								
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018							7.13		5.63
10/1/2018		5.9	7.47	6.8	7.39	5.39			
10/2/2018								5.39	
2/25/2019	6.51								
2/26/2019						5.46		5.77	
2/27/2019		5.8	7.54	6.84	7.55				





# Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-4I (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	6.36								
6/6/2016		5.71	6.17						
6/7/2016				5.62	6.1	5.77			
7/25/2016									
7/26/2016	6.22								
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	6.23								
9/15/2016									
9/16/2016				5.58					
9/19/2016		5.59	6.04		6.12	5.73			
11/1/2016									
11/2/2016	6.08					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	6.19				6.41	5.79			
1/16/2017									
2/21/2017									
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	6.2				6.34	5.63			





# Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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, Field (S.U.) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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, Field (S.U.) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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			5.97	5.3	
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					
7/6/2020	6.89				
8/26/2020					
8/27/2020					5.8
8/28/2020	7.05				
9/22/2020					5.91
9/23/2020	6.81	7.22			
9/24/2020			5.7	5.43	
9/25/2020					
10/7/2020	7.06				5.87
2/8/2021					
2/9/2021					
2/10/2021		7.29	5.8	5.19	
2/11/2021					
2/12/2021					
3/1/2021					5.84
3/2/2021	6.72				
3/3/2021		7.92			
3/4/2021			5.54	5.23	
8/19/2021					
8/20/2021					6.71
8/26/2021			6.91		
8/27/2021	6.83	7.14			
9/1/2021					
9/3/2021				4.75	

# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-30I (bg)
6/1/2016	5	4.2	12						
6/2/2016				1.9	20	5.8	8	6.6	1.3
6/6/2016									
6/7/2016									
7/25/2016		3.7	8.4						1.2
7/26/2016	5.4			1.8	20	6.7	7.7	6.1	
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	2.9	5.2							
9/14/2016			8.6	1.8	19		7.5		
9/15/2016						6		6.1	
9/16/2016									
9/19/2016									1.2
11/1/2016	3.9		8.9			4.9			1.3
11/2/2016					20		8.2	6.3	
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	3.7		8.6			4.5			
1/12/2017				1.9	19				
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	4.6	7.4				4.4			
3/3/2017									
3/6/2017							8		
3/7/2017				2.1	20				
3/8/2017								7	
4/26/2017			11			5.1		7	1.4
4/27/2017	5.2	7.4							
4/28/2017									
5/1/2017					20		8.4		
5/2/2017				2					
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	5.9	6.4		2.1	18				
6/28/2017			12			5.4			
6/29/2017							9.2		

# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-30I (bg)
6/30/2017								6.5	<1
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	6.6	5.9		2.3	16				
10/4/2017			12			6.2			1.4
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				2		6.7	8.5		
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				2.3	7.9		10.2		
10/1/2018	5.6	4	9.1			7.1		6.8	
10/2/2018									1
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	8	4.3							
3/29/2019								7.3	
4/1/2019			8.5			7.2			0.96 (J)
4/2/2019									
4/3/2019				2.1	7		8.5		
6/12/2019									
9/24/2019	5.3	4.3		2.4	5.5				
9/25/2019			13.8			7	8.5	6.6	0.81 (J)
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020		5.3						8.1	
3/19/2020	10		12.9			9			1.6
3/24/2020				2.1	5.9				
3/25/2020							8.8		





# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44	GWA-2 (bg)
6/1/2016									
6/2/2016									
6/6/2016	1.2	1.8							
6/7/2016			4.4	5.2	<1				
7/25/2016									
7/26/2016									
7/27/2016	1.7	1.9	4.7		0.08 (J)				
7/28/2016				5.1					
8/30/2016						160			
8/31/2016							190	150	29
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		1.7	4.8						
9/19/2016	1.8			4.8	0.08 (J)				
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				4.3	<1				
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				4.5	<1				
3/7/2017									
3/8/2017									
4/26/2017	1.6	1.9		4.9	<1				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			5						
5/8/2017						120		150	60
5/9/2017							190		
5/26/2017									
6/27/2017									
6/28/2017	<1	<1							
6/29/2017			5.2	5.5	<1				





# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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 as SO4 (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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: Sulfate as SO4 (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
7/6/2020	385				
8/27/2020					144
8/28/2020	394				
9/22/2020					156
9/23/2020	430	11.8			
9/24/2020			11.7	22.9	
9/25/2020					
10/7/2020	427				156
11/12/2020	385				147
3/1/2021					139
3/2/2021	387				
3/3/2021		10.6			
3/4/2021			12	21.5	
8/19/2021					
8/20/2021					122
8/26/2021			19.2		
8/27/2021	423	16.7			
9/1/2021					
9/3/2021				21.3	

# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-30I (bg)
6/1/2016	120	54	150						
6/2/2016				66	160	130	96	46	36
6/6/2016									
6/7/2016									
7/25/2016		48	135						50
7/26/2016	94			78	177	141	92	54	
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	105	67							
9/14/2016			127	73	187		102		
9/15/2016						153		54	
9/16/2016									
9/19/2016									35
11/1/2016	44		75			92			<25
11/2/2016					181		115	71	
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	107		148			159			
1/12/2017				86	202				
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	98	61				117			
3/3/2017									
3/6/2017							159		
3/7/2017				108	257				
3/8/2017								178	
4/26/2017			92			181		52	55
4/27/2017	116	31							
4/28/2017									
5/1/2017					165		107		
5/2/2017				103					
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	89	42		73	189				
6/28/2017			126			169			
6/29/2017							79		



# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-30I (bg)
6/30/2017								45	42
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	119	58		89	170				
10/4/2017			147			141			31
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				142		95	90		
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				86	144		116		
10/1/2018	117	60	138			165		50	
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)			149			54
4/2/2019									
4/3/2019				83	142		111		
6/12/2019									
9/24/2019	124	54		79	129				
9/25/2019			159			157	117	64	51
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020		35						57	
3/19/2020	116		148			146			47
3/24/2020				68	139				
3/25/2020							146		



# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-211 (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44	GWA-2 (bg)
6/1/2016									
6/2/2016									
6/6/2016	120	58							
6/7/2016			28	60	38				
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	332	209
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		35	67						
9/19/2016	92			68	45				
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				76	46				
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				167	164				
3/7/2017									
3/8/2017									
4/26/2017	162	36		50	34				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			142						
5/8/2017						194		296	145
5/9/2017							388		
5/26/2017									
6/27/2017									
6/28/2017	98	45							
6/29/2017			53	94	68				





# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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 [TDS] (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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		

# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:58 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
7/6/2020	793				
8/27/2020					349
8/28/2020	838				
9/22/2020					296
9/23/2020	832	161			
9/24/2020			170	77	
9/25/2020					
10/7/2020	842				336
11/12/2020	760				317
3/1/2021					265
3/2/2021	782				
3/3/2021		138			
3/4/2021			168	57	
8/19/2021					
8/20/2021					289
8/26/2021			249		
8/27/2021	810	150			
9/1/2021					
9/3/2021				88	



FIGURE E.

# Appendix III Trend Tests - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 11/2/2021, 5:03 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	YGWA-47 (bg)	-0.000923	-50	-48	Yes	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-40 (bg)	-0.01963	-52	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-47 (bg)	-1.845	-69	-48	Yes	14	7.143	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-17S (bg)	0.12	74	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-18S (bg)	-0.07527	-79	-63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-211 (bg)	1.218	82	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-5D (bg)	-2.169	-74	-63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	GWA-2 (bg)	4.423	71	53	Yes	15	6.667	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-1D (bg)	0.7142	68	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-11 (bg)	-0.1058	-73	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-47 (bg)	-0.4824	-58	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-17S (bg)	0.4027	92	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-20S (bg)	0.1782	82	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-5D (bg)	-0.8704	-97	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-3D (bg)	-0.05961	-72	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-3I (bg)	-0.05007	-72	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-47 (bg)	-21.6	-78	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-39 (bg)	-3.378	-51	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-40 (bg)	-10.75	-65	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5D (bg)	-3.658	-104	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5I (bg)	0.09609	85	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	GWA-2 (bg)	23.3	74	53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-1D (bg)	1.025	88	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-3D (bg)	0.4885	74	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWC-46A	-69.55	-92	-68	Yes	18	5.556	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-47 (bg)	-15.69	-67	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-40 (bg)	-16.17	-53	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-5D (bg)	-17	-86	-63	Yes	17	0	n/a	n/a	0.01	NP

# Appendix III Trend Tests - All Results

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 11/2/2021, 5:03 PM

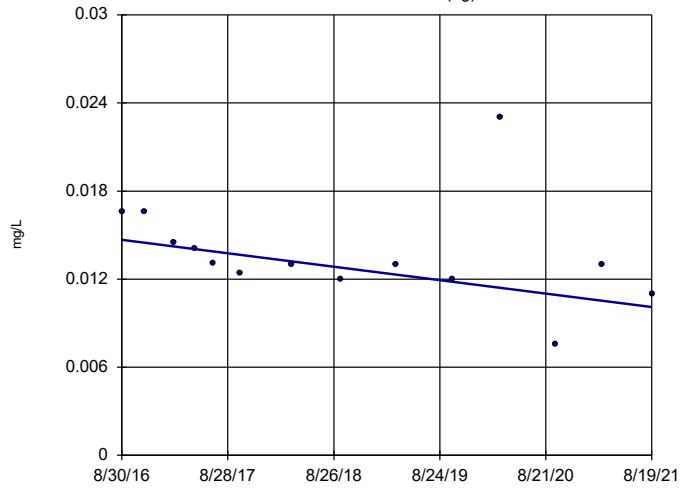
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
<b>Boron, total (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-0.000923</b>	<b>-50</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron, total (mg/L)	YGWC-44	-0.0226	-36	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWC-45	0	-3	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-17S (bg)	0	1	63	No	17	11.76	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18I (bg)	0	-30	-63	No	17	76.47	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18S (bg)	0	0	63	No	17	17.65	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-20S (bg)	0	-13	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-21I (bg)	-0.005469	-53	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-39 (bg)	0.004253	27	48	No	14	7.143	n/a	n/a	0.01	NP
<b>Boron, total (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-0.01963</b>	<b>-52</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron, total (mg/L)	YGWA-4I (bg)	0	-11	-63	No	17	64.71	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5D (bg)	0.0001974	14	63	No	17	11.76	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5I (bg)	0	-39	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron, total (mg/L)	GWA-2 (bg)	0	11	53	No	15	60	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-14S (bg)	-0.0008768	-36	-63	No	17	11.76	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1D (bg)	0.00007668	10	63	No	17	29.41	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1I (bg)	0	-18	-63	No	17	70.59	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-2I (bg)	0	-14	-63	No	17	76.47	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-30I (bg)	0	-25	-63	No	17	82.35	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3D (bg)	0	-1	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3I (bg)	0	-21	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWC-46A	0.03192	15	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-1.845</b>	<b>-69</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>7.143</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWC-45	-0.04198	-5	-48	No	14	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-17S (bg)</b>	<b>0.12</b>	<b>74</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-18I (bg)	0.02122	10	63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-18S (bg)</b>	<b>-0.07527</b>	<b>-79</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-20S (bg)	0.06963	56	63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-21I (bg)</b>	<b>1.218</b>	<b>82</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-39 (bg)	0.6588	26	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-40 (bg)	-0.8022	-47	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-4I (bg)	0.2132	21	63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-2.169</b>	<b>-74</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-5I (bg)	0.07389	58	63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>GWA-2 (bg)</b>	<b>4.423</b>	<b>71</b>	<b>53</b>	<b>Yes</b>	<b>15</b>	<b>6.667</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-14S (bg)	-0.01957	-45	-63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-1D (bg)</b>	<b>0.7142</b>	<b>68</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium, total (mg/L)</b>	<b>YGWA-1I (bg)</b>	<b>-0.1058</b>	<b>-73</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-2I (bg)	0.3107	22	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-30I (bg)	0	0	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3D (bg)	0.5989	46	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3I (bg)	0.5549	41	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWC-46A	2.626	47	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWC-52	-4.486	-5	-14	No	6	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-0.4824</b>	<b>-58</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWC-44	0.2235	31	48	No	14	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-17S (bg)</b>	<b>0.4027</b>	<b>92</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWA-18I (bg)	0.06344	47	63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-18S (bg)	0.2062	62	63	No	17	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-20S (bg)</b>	<b>0.1782</b>	<b>82</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWA-21I (bg)	-0.1349	-41	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-39 (bg)	0.3996	26	48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-40 (bg)	0.2116	37	48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-4I (bg)	0.1004	41	63	No	17	0	n/a	n/a	0.01	NP

# Appendix III Trend Tests - All Results

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 11/2/2021, 5:03 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
<b>Chloride, Total (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-0.8704</b>	<b>-97</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWA-5I (bg)	0	-3	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	GWA-2 (bg)	0.1877	43	53	No	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-14S (bg)	0.1776	42	63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-1D (bg)	-0.002869	-40	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-11 (bg)	-0.02701	-41	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-2I (bg)	-0.04401	-47	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-30I (bg)	-0.02202	-32	-63	No	17	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-3D (bg)</b>	<b>-0.05961</b>	<b>-72</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride, Total (mg/L)</b>	<b>YGWA-3I (bg)</b>	<b>-0.05007</b>	<b>-72</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWC-46A	-1.396	-49	-68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-21.6</b>	<b>-78</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-17S (bg)	0.1098	59	63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-18I (bg)	-0.1768	-60	-63	No	17	23.53	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-18S (bg)	-0.1647	-50	-63	No	17	11.76	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-20S (bg)	0	30	63	No	17	64.71	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-21I (bg)	-0.1968	-22	-63	No	17	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-39 (bg)</b>	<b>-3.378</b>	<b>-51</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-10.75</b>	<b>-65</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-4I (bg)	0.1495	44	63	No	17	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-3.658</b>	<b>-104</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-5I (bg)</b>	<b>0.09609</b>	<b>85</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>GWA-2 (bg)</b>	<b>23.3</b>	<b>74</b>	<b>53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-14S (bg)	0.08247	21	63	No	17	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-1D (bg)</b>	<b>1.025</b>	<b>88</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-11 (bg)	-0.2433	-23	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-2I (bg)	0.4455	27	63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-30I (bg)	-0.07072	-31	-63	No	17	11.76	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-3D (bg)</b>	<b>0.4885</b>	<b>74</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-3I (bg)	1.181	61	63	No	17	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-46A</b>	<b>-69.55</b>	<b>-92</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>5.556</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-15.69</b>	<b>-67</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWC-44	-11.5	-37	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-45	-3.103	-16	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-17S (bg)	5.4	32	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18I (bg)	-1.272	-13	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18S (bg)	0.4413	9	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-20S (bg)	3.135	31	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-21I (bg)	13.94	56	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-39 (bg)	25.58	41	48	No	14	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-16.17</b>	<b>-53</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWA-4I (bg)	0.3992	4	63	No	17	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-17</b>	<b>-86</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWA-5I (bg)	0	-1	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	GWA-2 (bg)	25.14	48	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-14S (bg)	1.46	17	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-1D (bg)	0.915	10	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-11 (bg)	-3.586	-32	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-2I (bg)	-2.761	-35	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-30I (bg)	1.885	20	63	No	17	11.76	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3D (bg)	1.346	10	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3I (bg)	1.702	14	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-46A	-83.44	-59	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-52	-70.72	-9	-14	No	6	0	n/a	n/a	0.01	NP

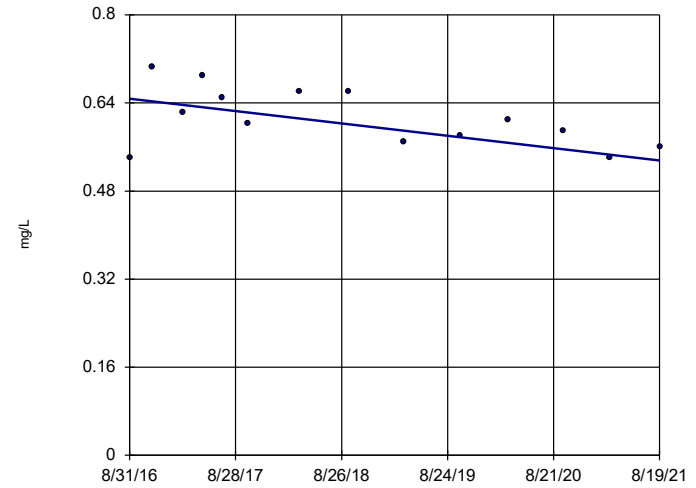
Sen's Slope Estimator  
YGWA-47 (bg)



n = 14  
Slope = -0.000923  
units per year.  
Mann-Kendall  
statistic = -50  
critical = -48  
Decreasing trend  
significant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

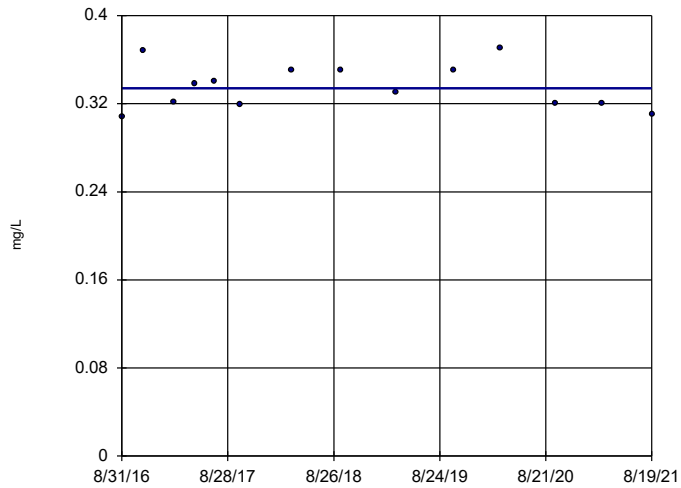
Sen's Slope Estimator  
YGWC-44



n = 14  
Slope = -0.0226  
units per year.  
Mann-Kendall  
statistic = -36  
critical = -48  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

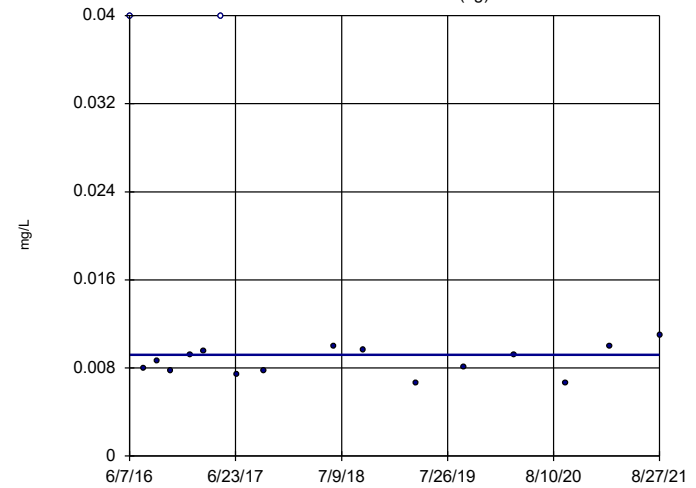
Sen's Slope Estimator  
YGWC-45



n = 14  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = -3  
critical = -48  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-17S (bg)

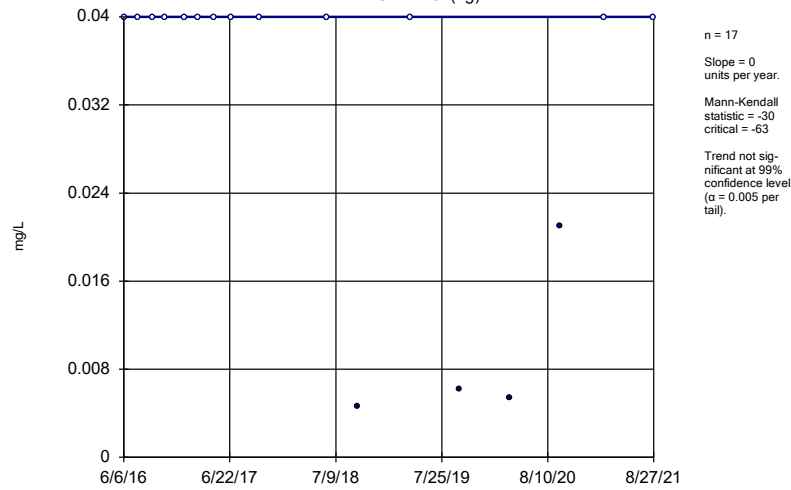


n = 17  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 1  
critical = 63  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

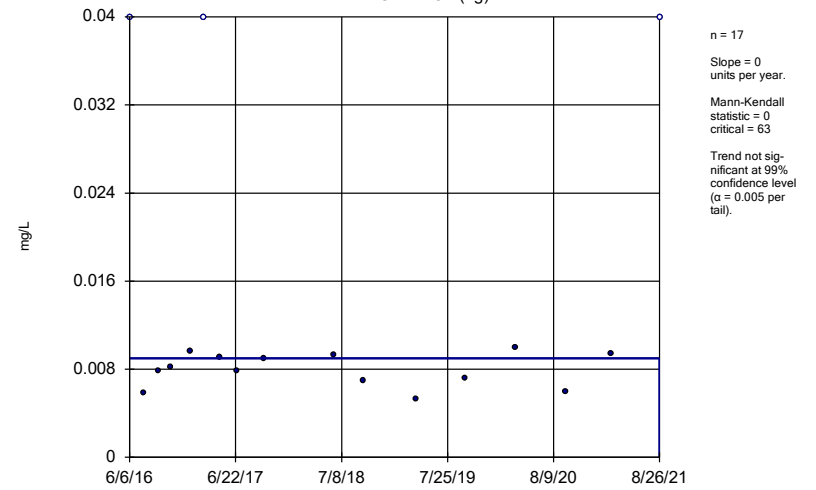
YGWA-18I (bg)



Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

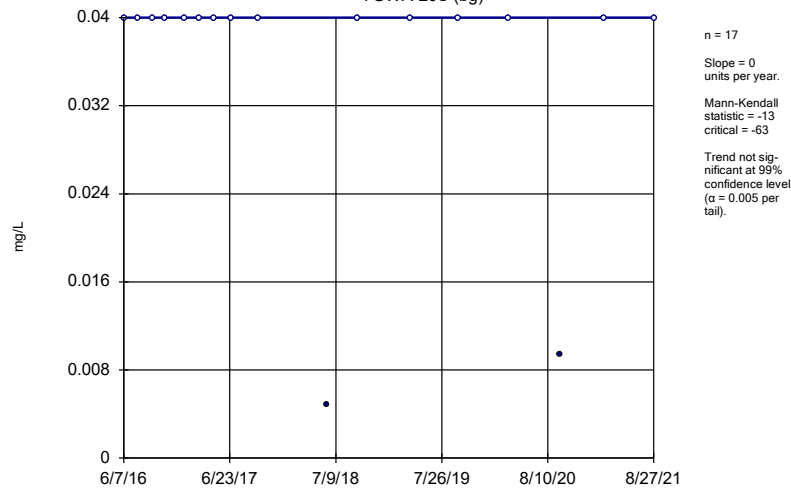
YGWA-18S (bg)



Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

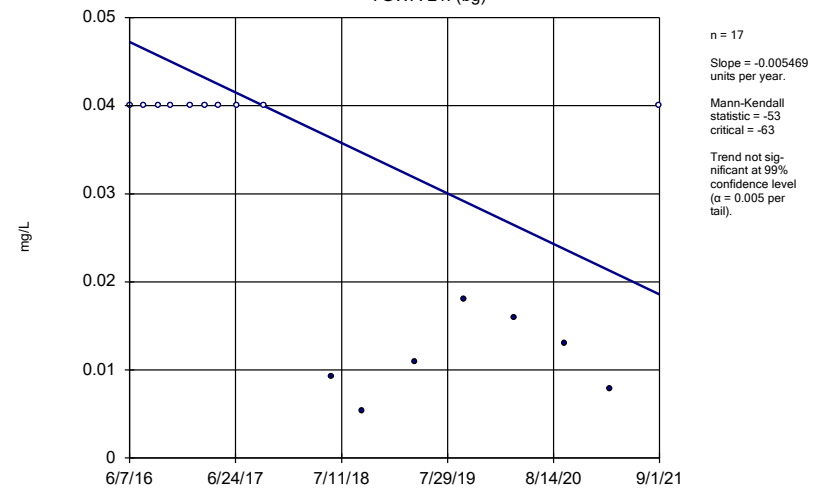
YGWA-20S (bg)



Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

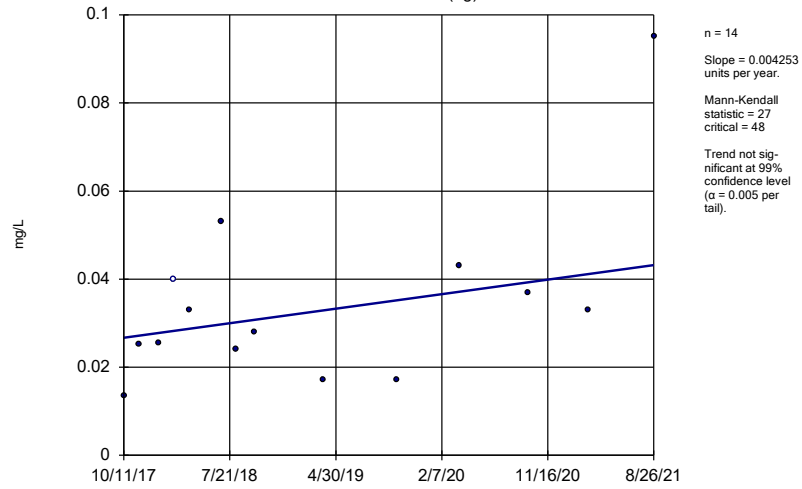
### Sen's Slope Estimator

YGWA-21I (bg)



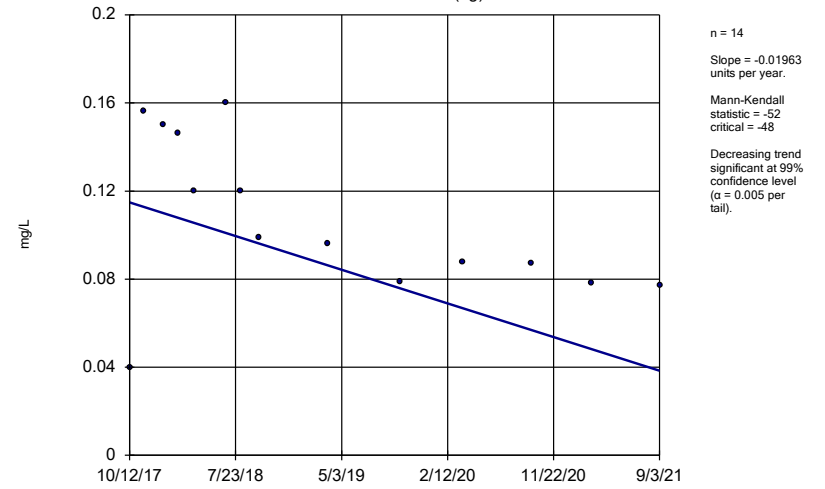
Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-39 (bg)



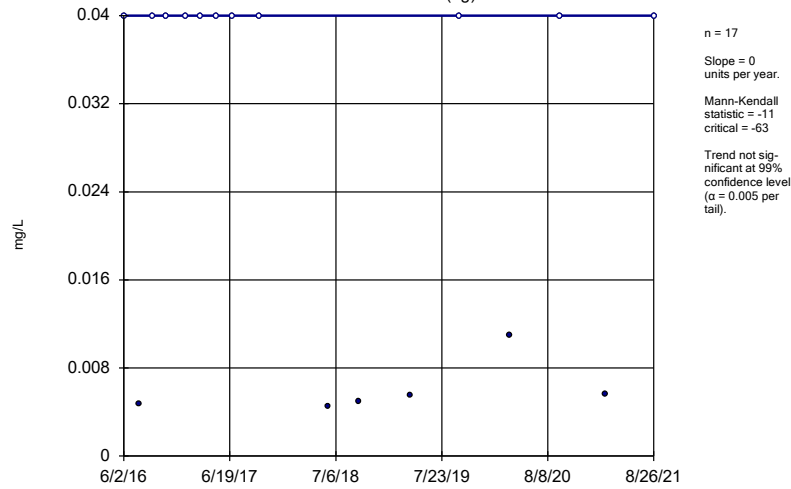
Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-40 (bg)



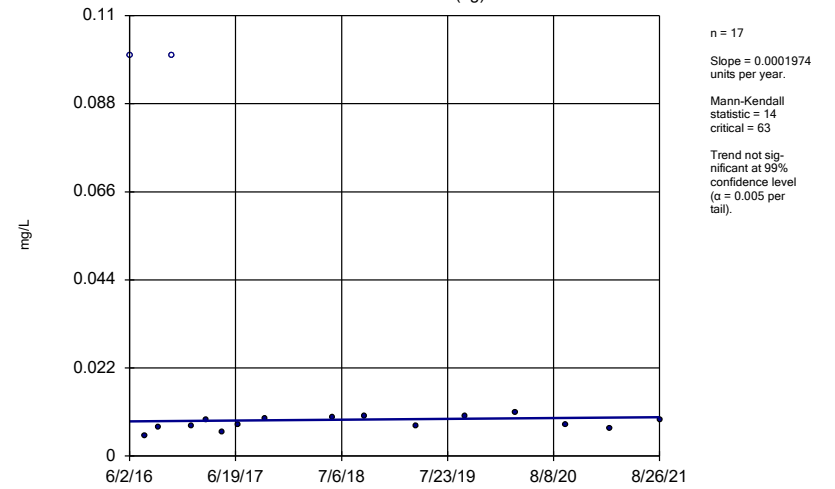
Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-41 (bg)



Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

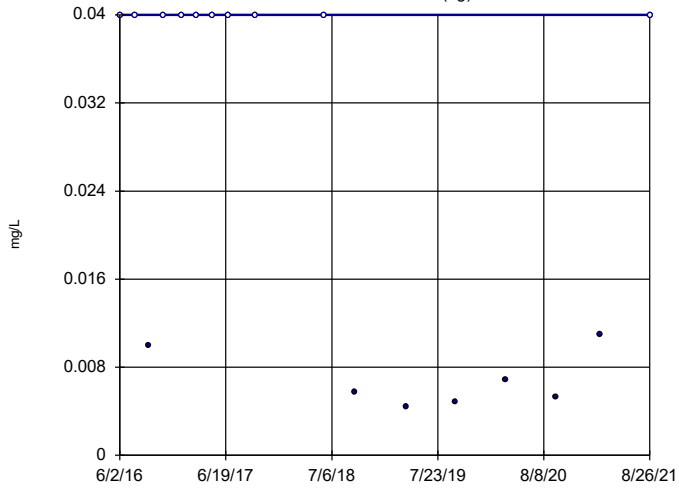
Sen's Slope Estimator  
YGWA-5D (bg)



Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-5I (bg)

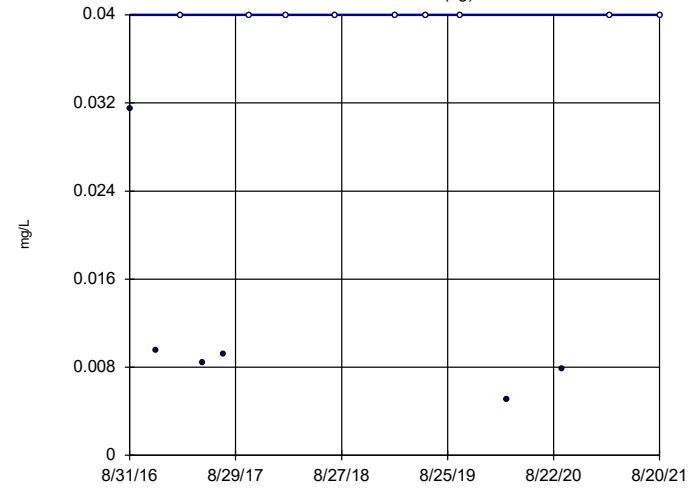


n = 17  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = -39  
critical = -63  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

GWA-2 (bg)

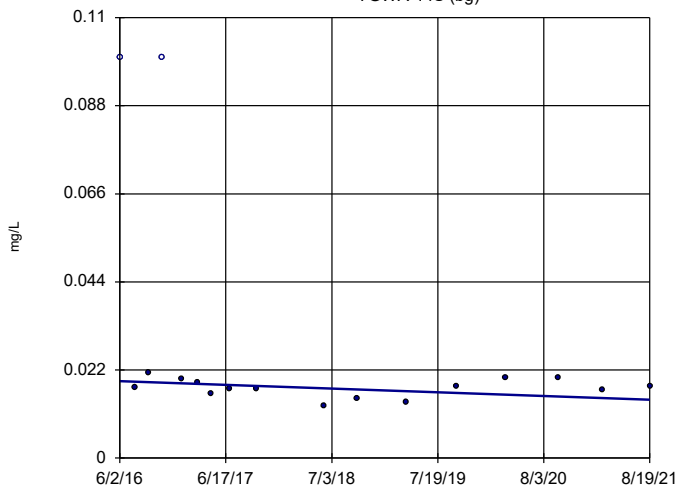


n = 15  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 11  
critical = 53  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-14S (bg)

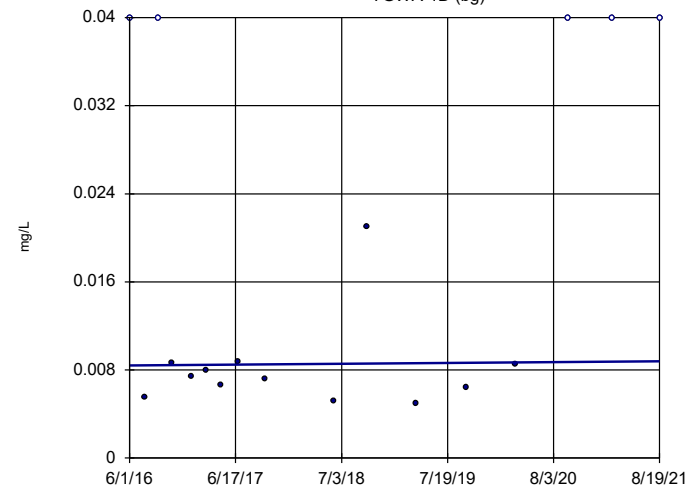


n = 17  
Slope = -0.0008768  
units per year.  
Mann-Kendall  
statistic = -36  
critical = -63  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-1D (bg)



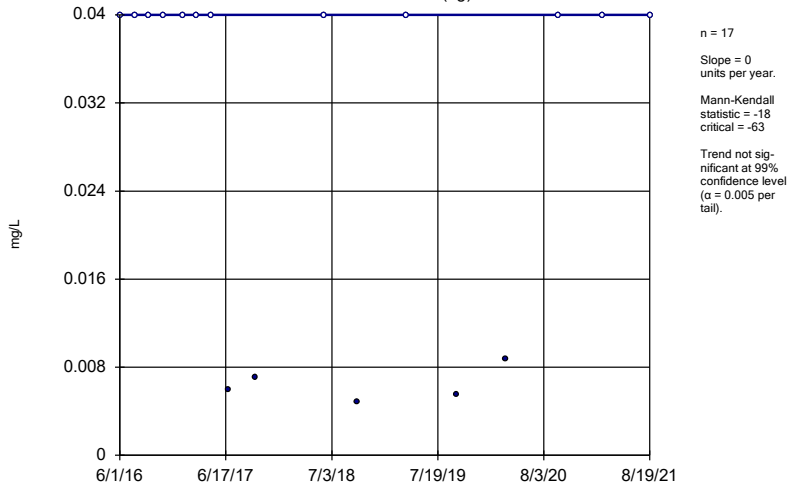
n = 17  
Slope = 0.00007668  
units per year.  
Mann-Kendall  
statistic = 10  
critical = 63  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1



### Sen's Slope Estimator

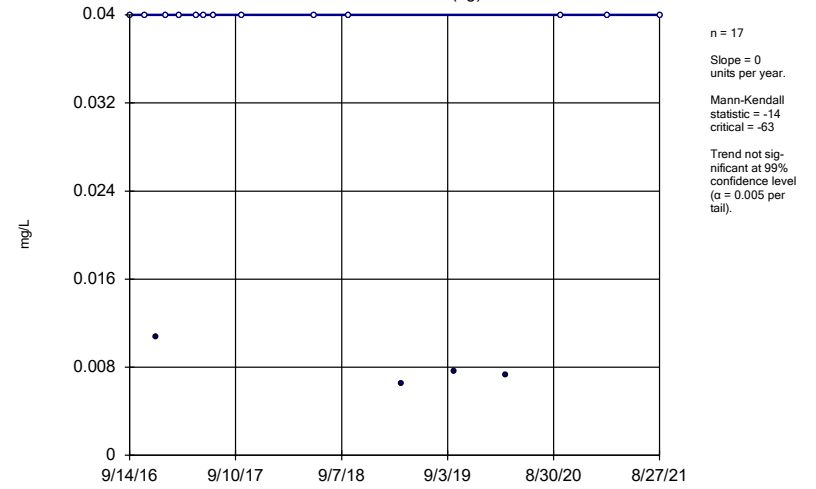
YGWA-11 (bg)



Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

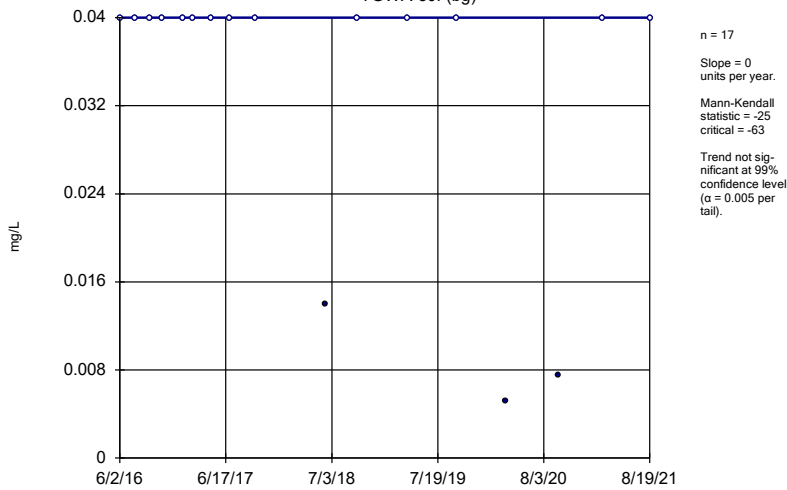
YGWA-21 (bg)



Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

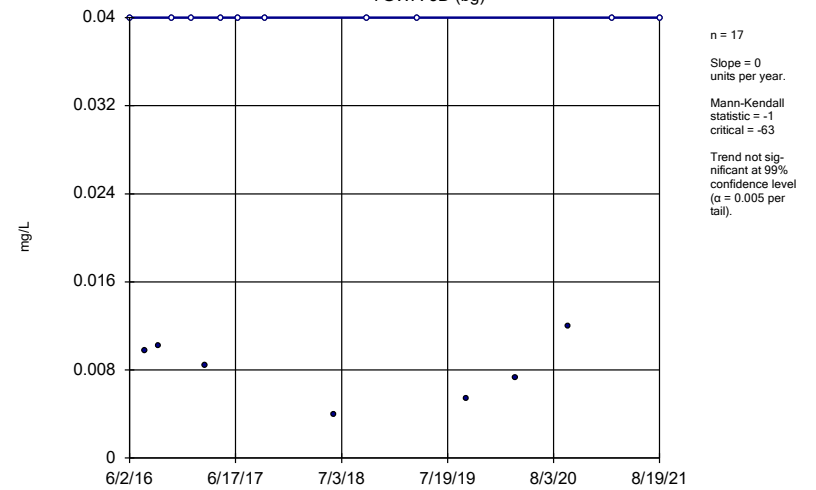
YGWA-30I (bg)



Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

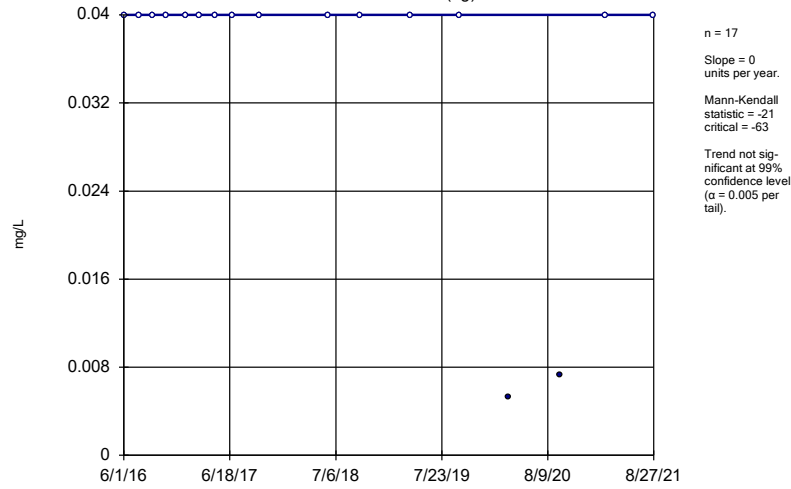
YGWA-3D (bg)



Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

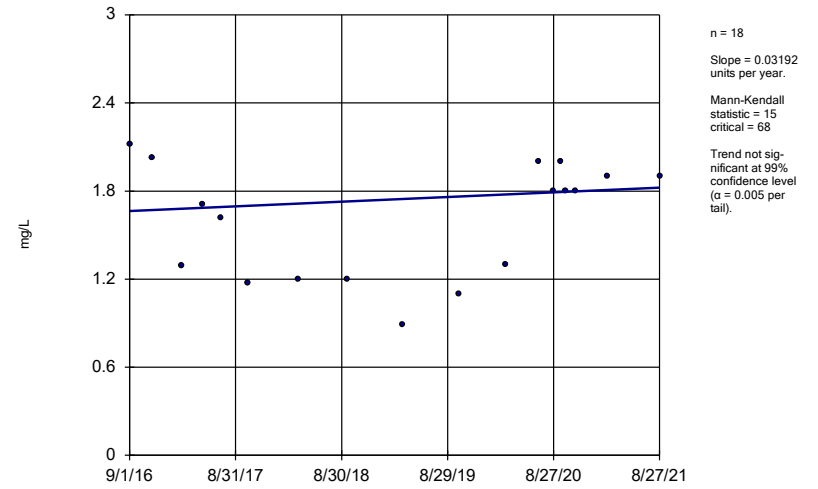
YGWA-3l (bg)



Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

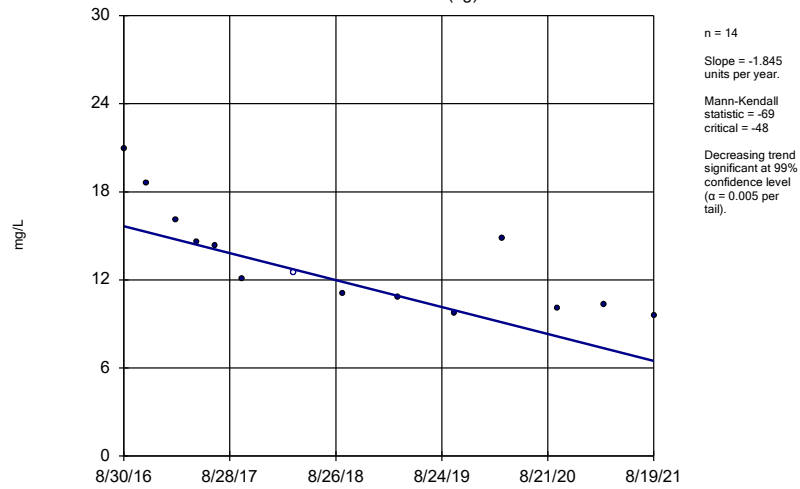
YGWC-46A



Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

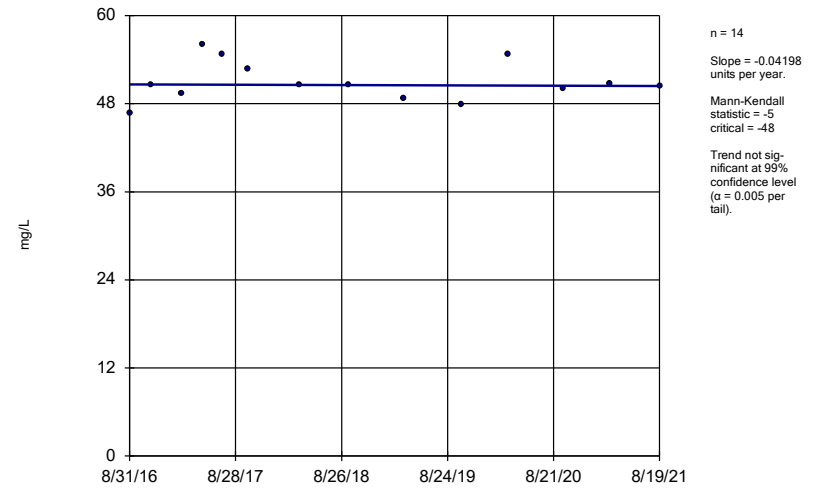
YGWA-47 (bg)



Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

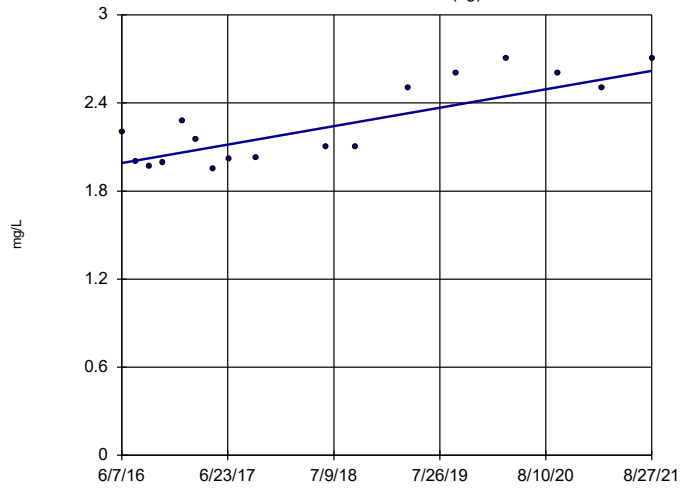
YGWC-45



Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-17S (bg)

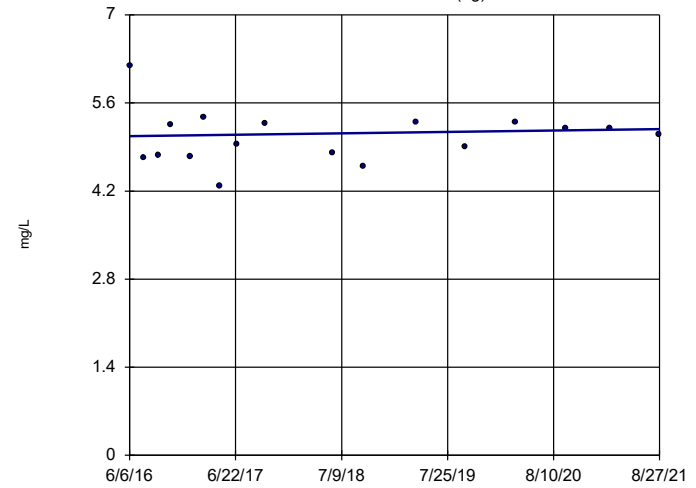


n = 17  
 Slope = 0.12 units per year.  
 Mann-Kendall statistic = 74  
 critical = 63  
 Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-18I (bg)

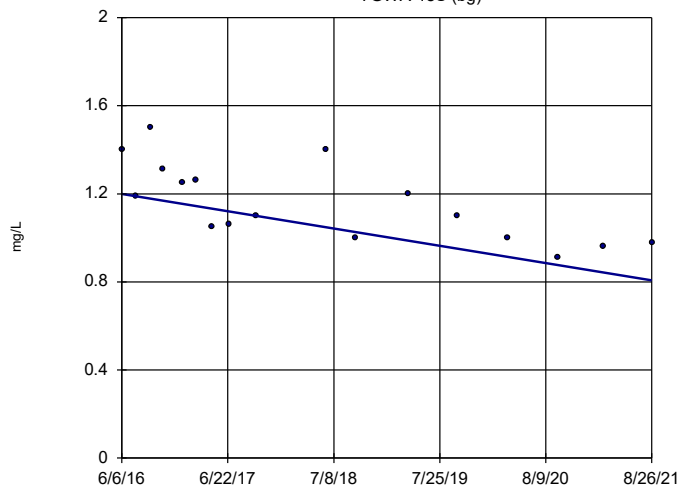


n = 17  
 Slope = 0.02122 units per year.  
 Mann-Kendall statistic = 10  
 critical = 63  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-18S (bg)

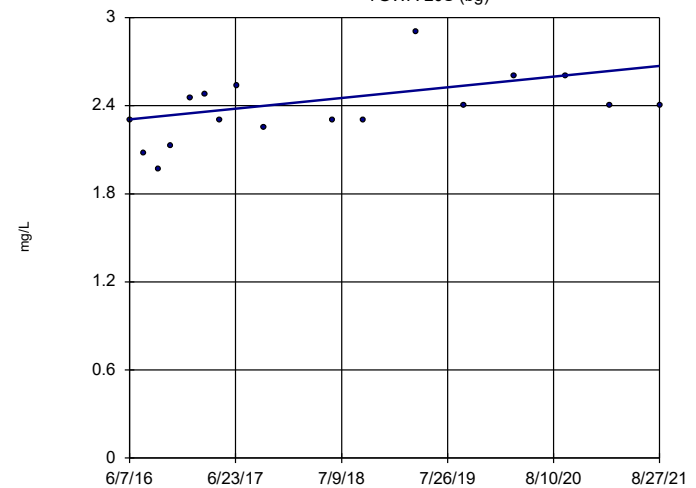


n = 17  
 Slope = -0.07527 units per year.  
 Mann-Kendall statistic = -79  
 critical = -63  
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-20S (bg)

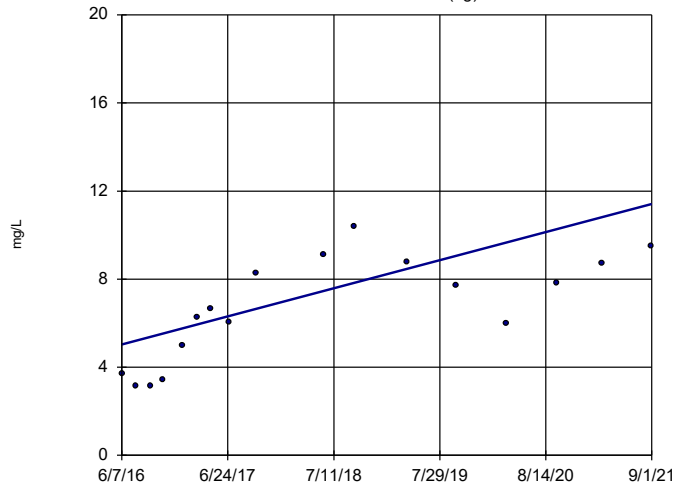


n = 17  
 Slope = 0.06963 units per year.  
 Mann-Kendall statistic = 56  
 critical = 63  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-21I (bg)

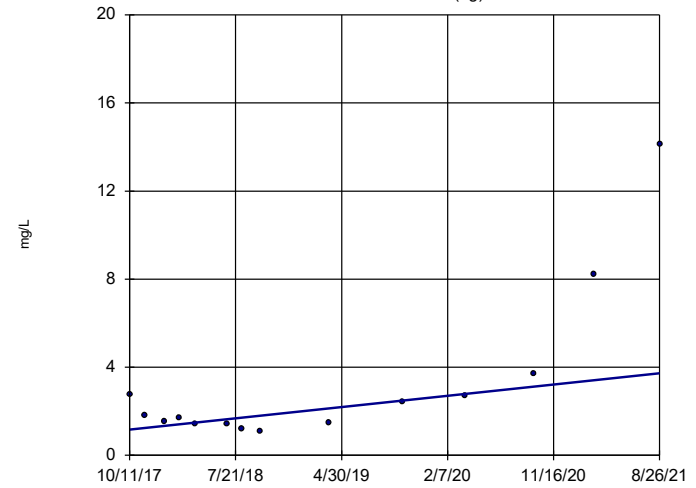


n = 17  
 Slope = 1.218  
 units per year.  
 Mann-Kendall  
 statistic = 82  
 critical = 63  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-39 (bg)

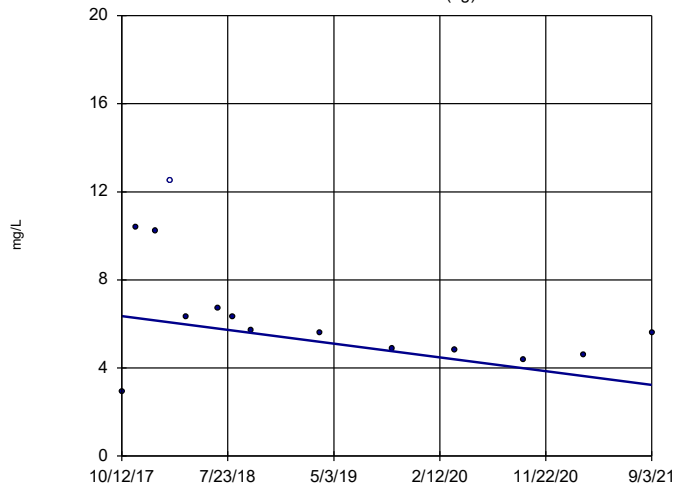


n = 14  
 Slope = 0.6588  
 units per year.  
 Mann-Kendall  
 statistic = 26  
 critical = 48  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-40 (bg)

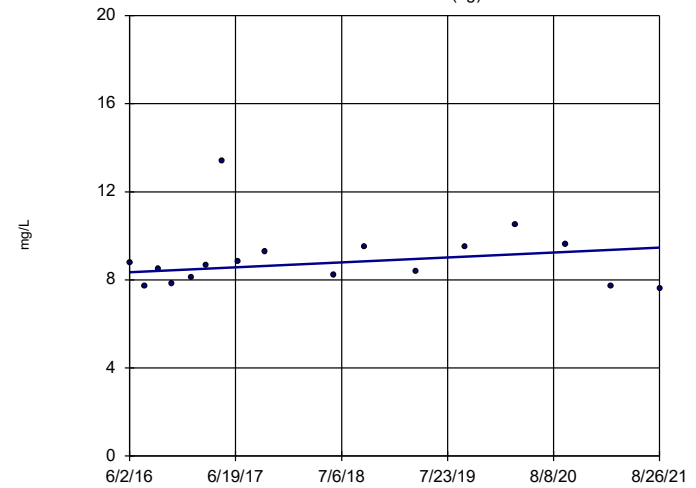


n = 14  
 Slope = -0.8022  
 units per year.  
 Mann-Kendall  
 statistic = -47  
 critical = -48  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

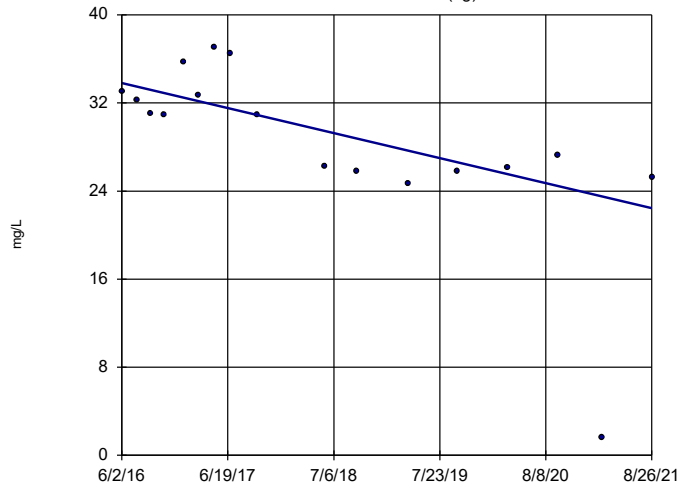
### Sen's Slope Estimator

YGWA-4I (bg)



### Sen's Slope Estimator

YGWA-5D (bg)

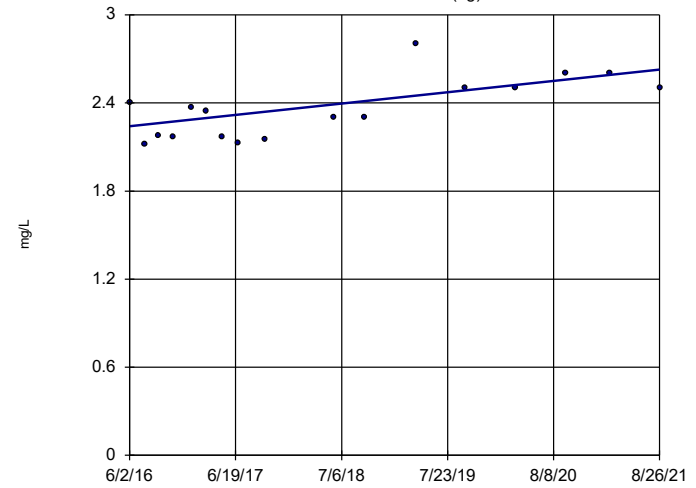


n = 17  
 Slope = -2.169 units per year.  
 Mann-Kendall statistic = -74  
 critical = -63  
 Decreasing trend significant at 99% confidence level ( $\alpha = 0.005$  per tail).

Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-5I (bg)

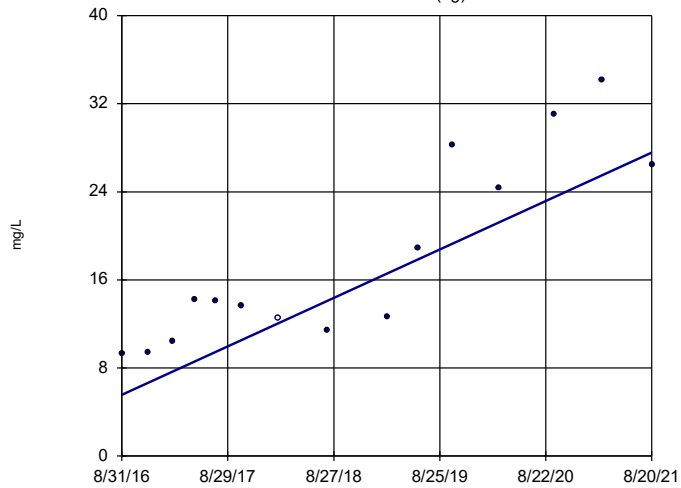


n = 17  
 Slope = 0.07389 units per year.  
 Mann-Kendall statistic = 58  
 critical = 63  
 Trend not significant at 99% confidence level ( $\alpha = 0.005$  per tail).

Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

GWA-2 (bg)

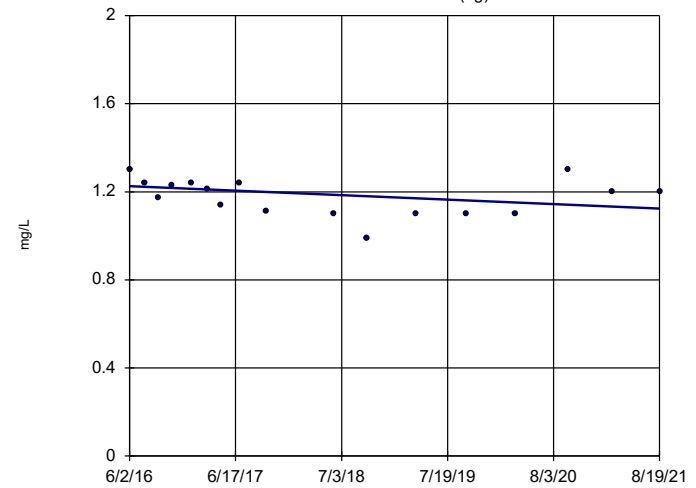


n = 15  
 Slope = 4.423 units per year.  
 Mann-Kendall statistic = 71  
 critical = 53  
 Increasing trend significant at 99% confidence level ( $\alpha = 0.005$  per tail).

Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

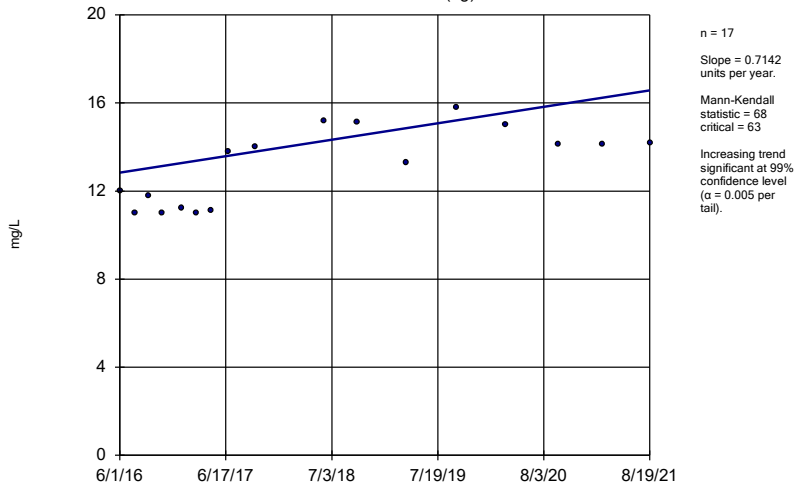
YGWA-14S (bg)



n = 17  
 Slope = -0.01957 units per year.  
 Mann-Kendall statistic = -45  
 critical = -63  
 Trend not significant at 99% confidence level ( $\alpha = 0.005$  per tail).

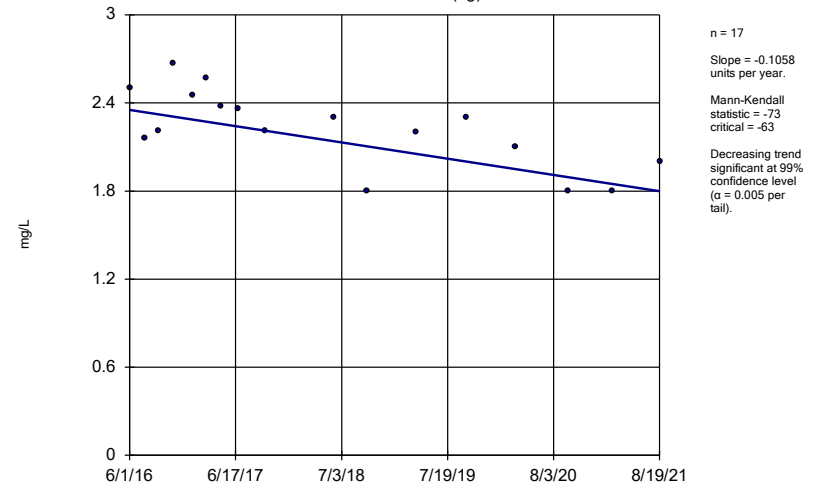
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-1D (bg)



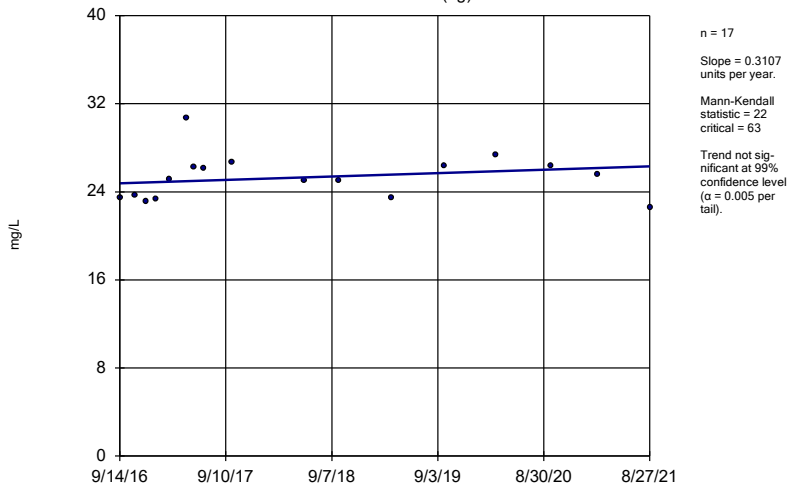
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-1I (bg)



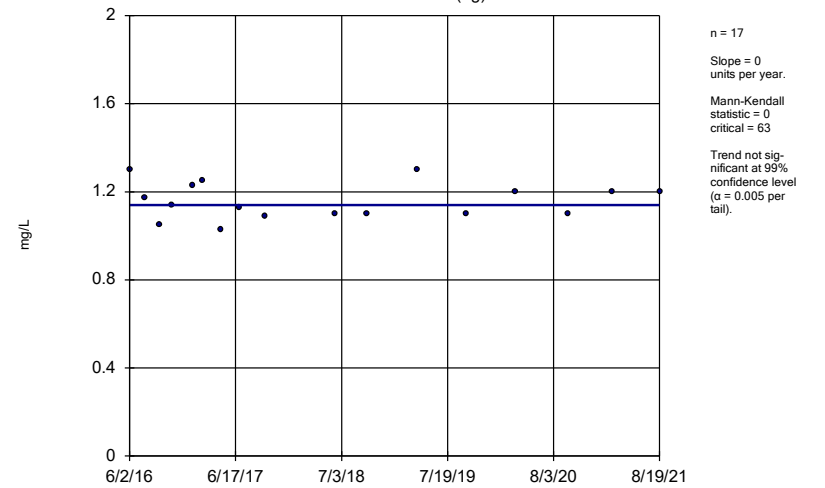
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-2I (bg)



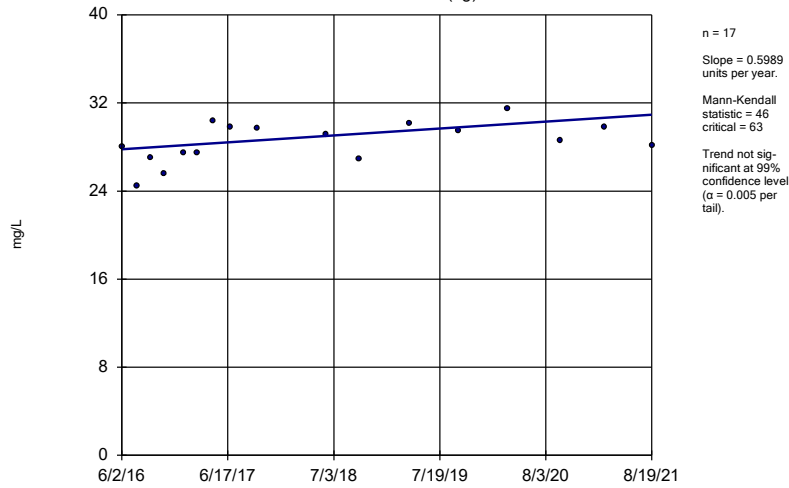
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-30I (bg)



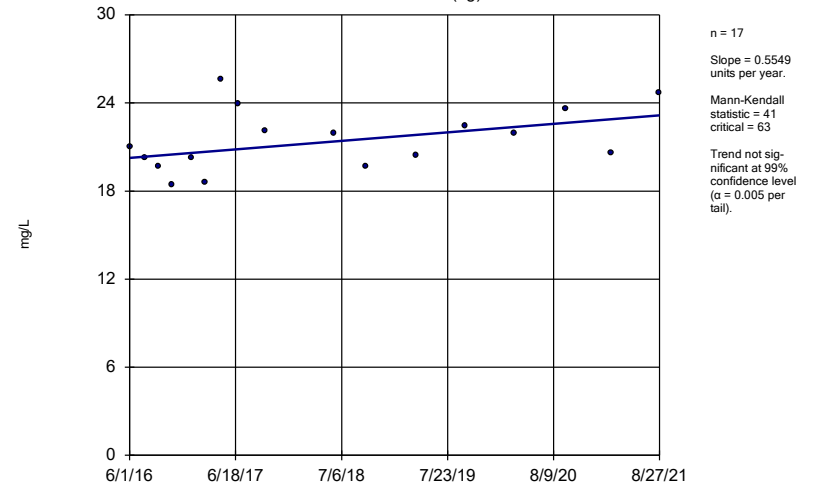
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator YGWA-3D (bg)



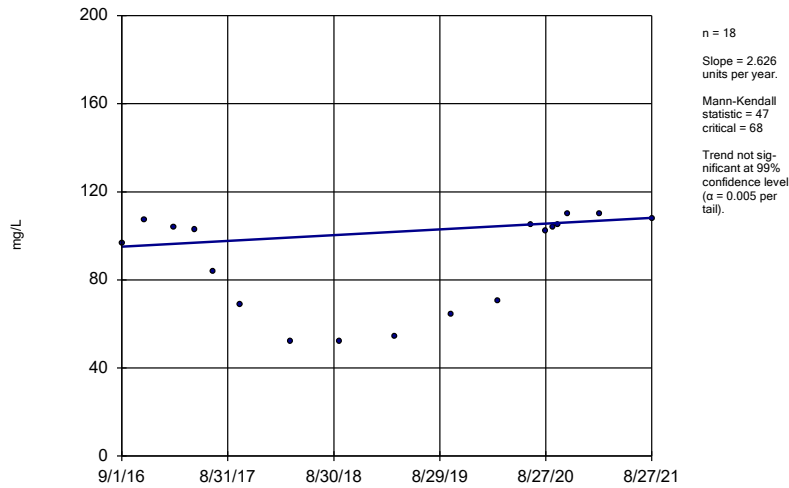
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator YGWA-3I (bg)



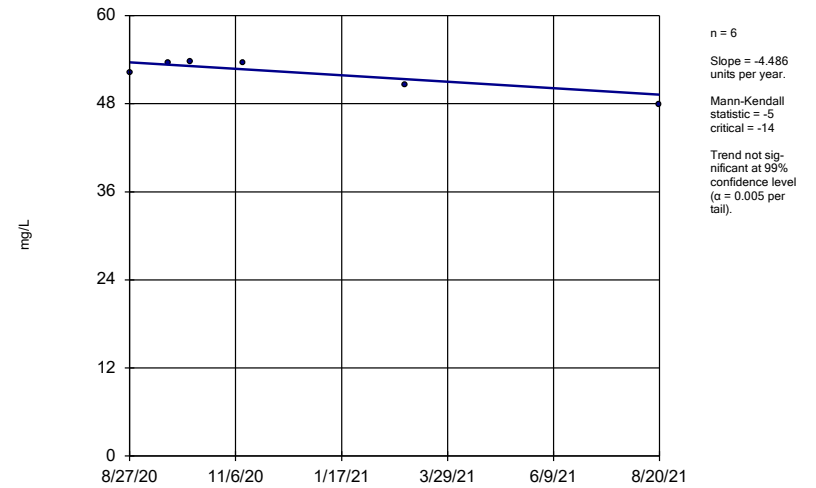
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator YGWC-46A



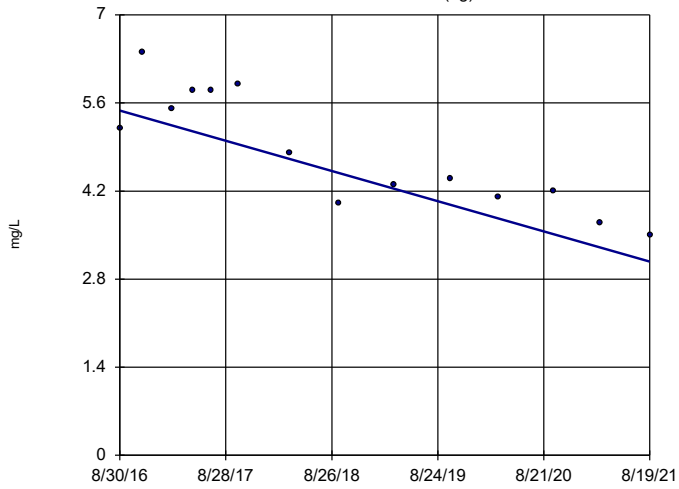
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator YGWC-52



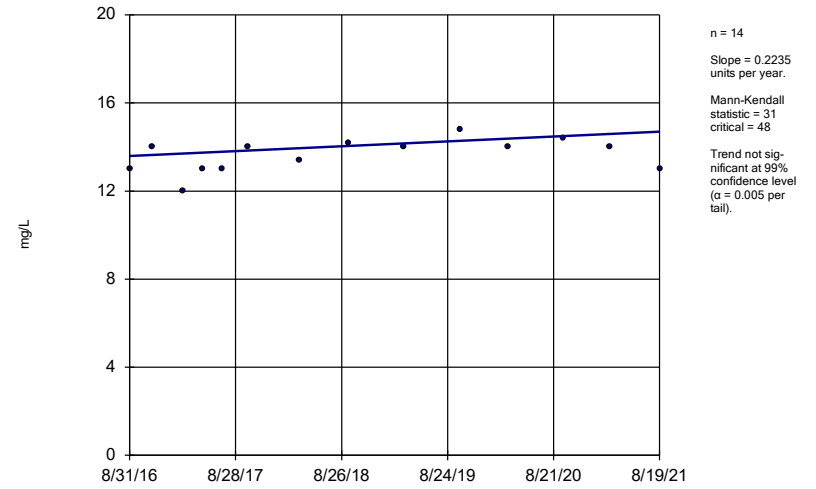
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-47 (bg)



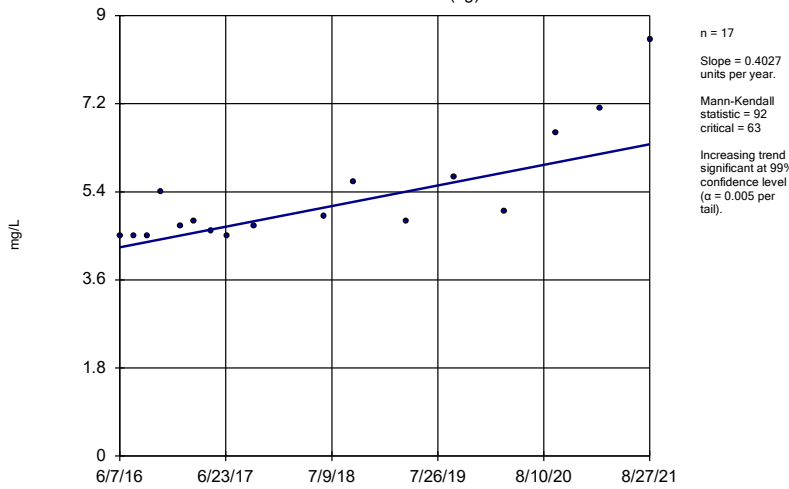
Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWC-44



Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

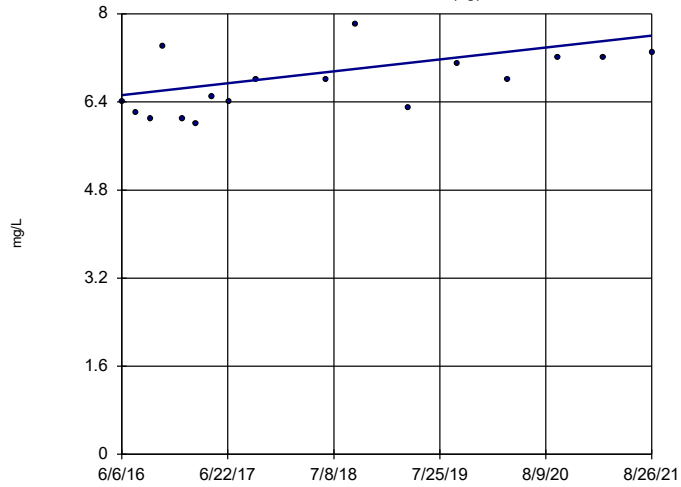
Sen's Slope Estimator  
YGWA-17S (bg)





### Sen's Slope Estimator

YGWA-18S (bg)

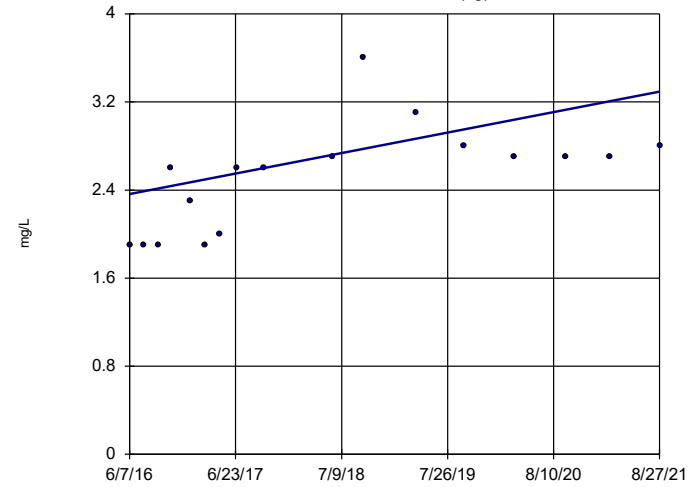


n = 17  
 Slope = 0.2062  
 units per year.  
 Mann-Kendall  
 statistic = 62  
 critical = 63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-20S (bg)

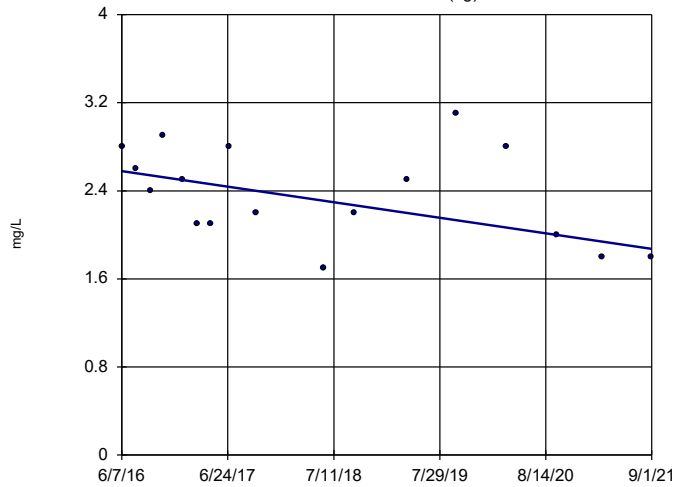


n = 17  
 Slope = 0.1782  
 units per year.  
 Mann-Kendall  
 statistic = 82  
 critical = 63  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-21I (bg)

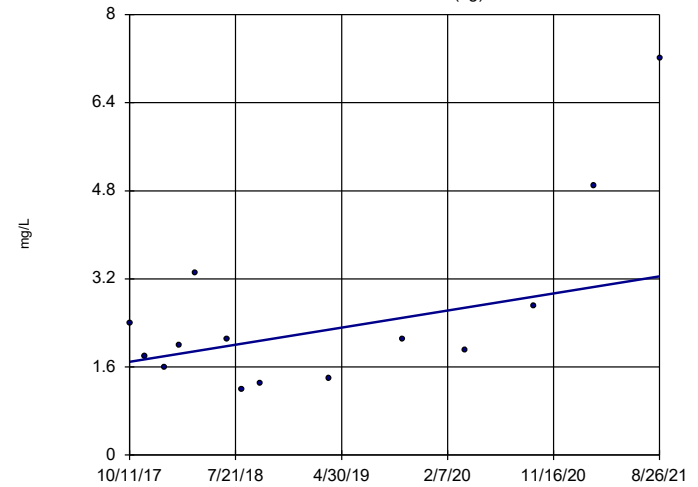


n = 17  
 Slope = -0.1349  
 units per year.  
 Mann-Kendall  
 statistic = -41  
 critical = -63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

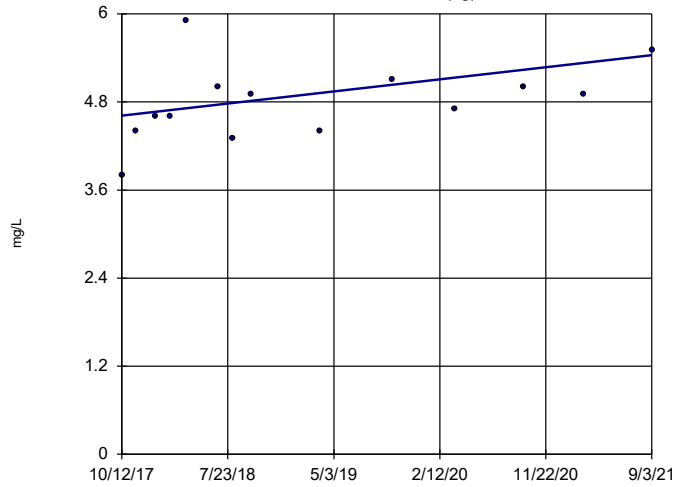
### Sen's Slope Estimator

YGWA-39 (bg)



### Sen's Slope Estimator

YGWA-40 (bg)

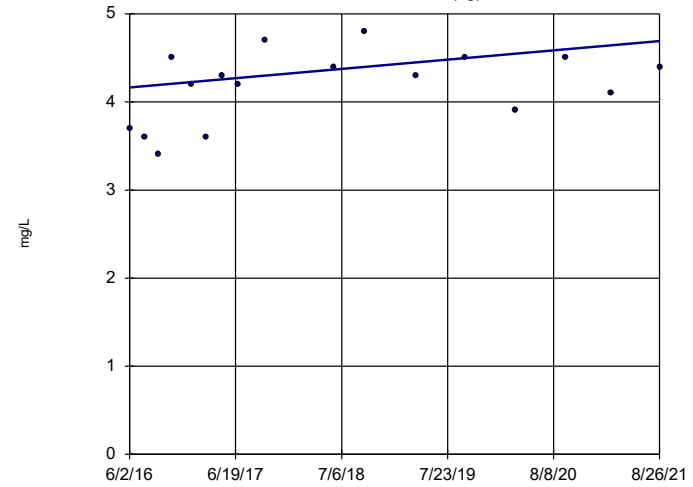


n = 14  
 Slope = 0.2116 units per year.  
 Mann-Kendall statistic = 37  
 critical = 48  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-4I (bg)

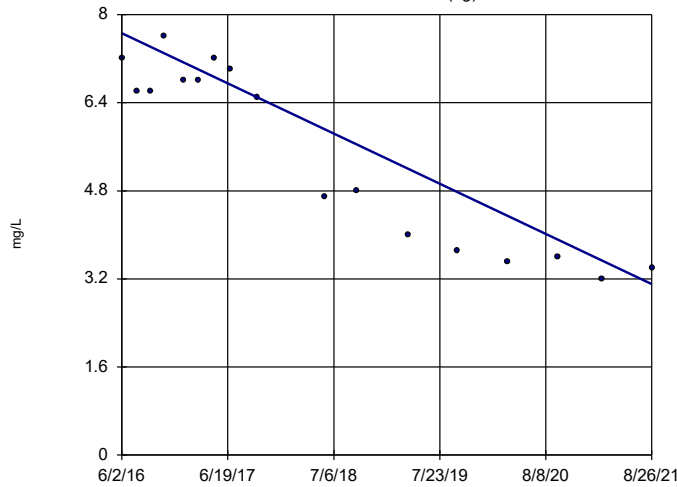


n = 17  
 Slope = 0.1004 units per year.  
 Mann-Kendall statistic = 41  
 critical = 63  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-5D (bg)

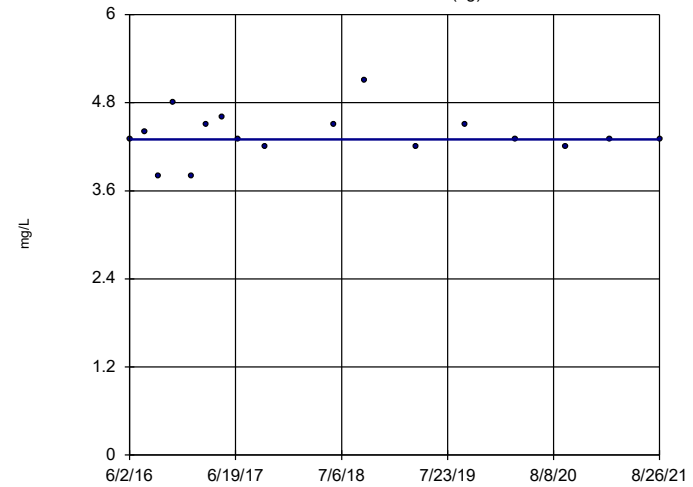


n = 17  
 Slope = -0.8704 units per year.  
 Mann-Kendall statistic = -97  
 critical = -63  
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

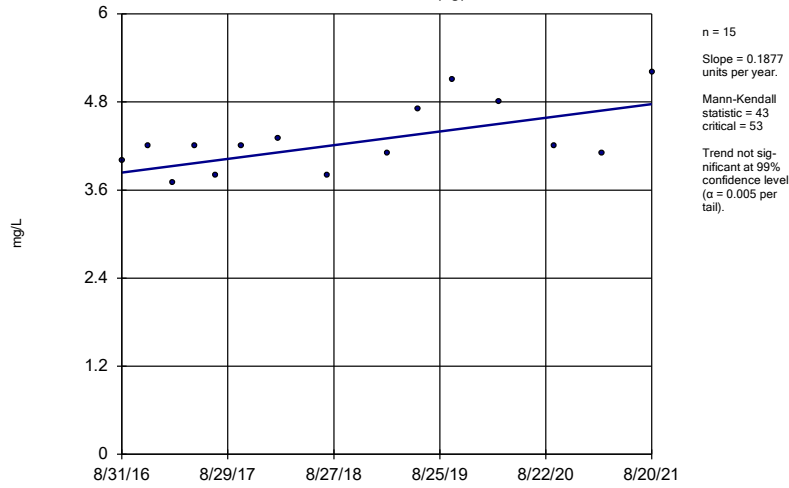
YGWA-5I (bg)



n = 17  
 Slope = 0 units per year.  
 Mann-Kendall statistic = -3  
 critical = -63  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

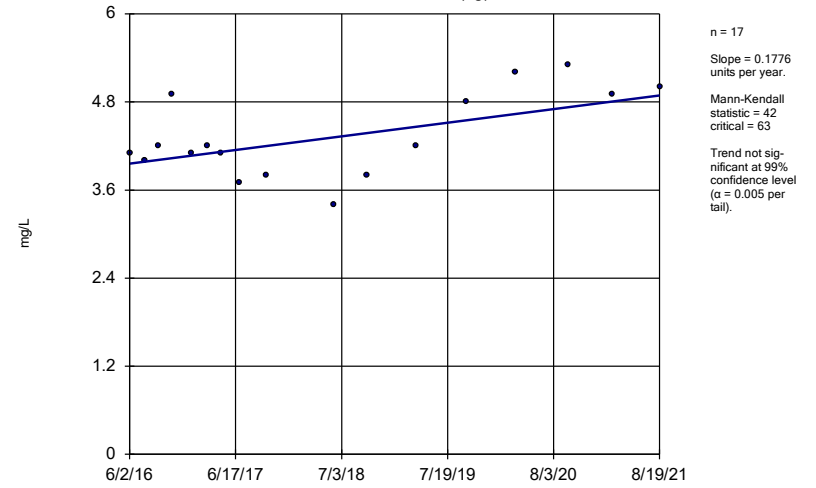
Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
GWA-2 (bg)



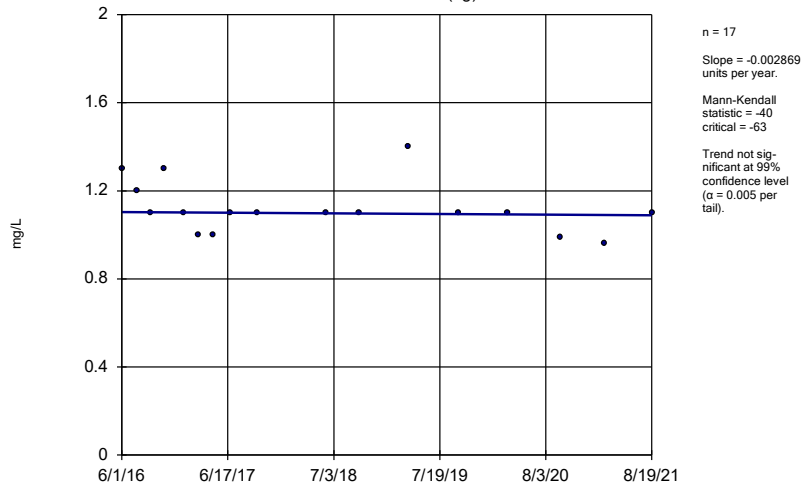
Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-14S (bg)



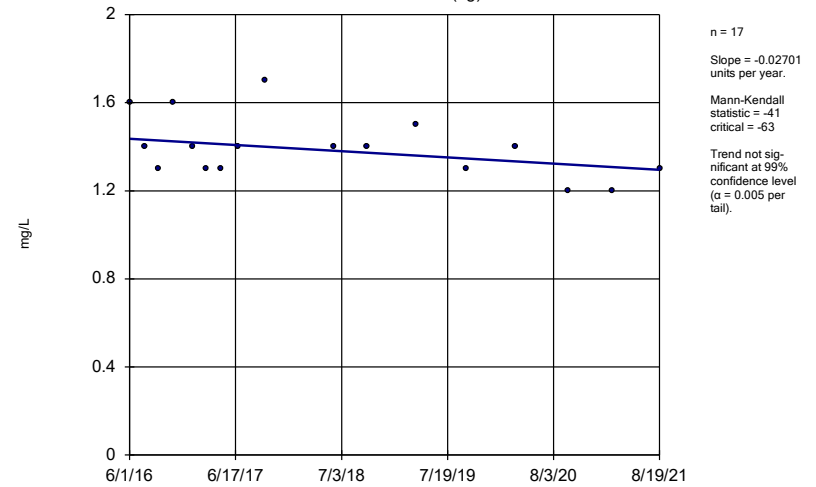
Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-1D (bg)



Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

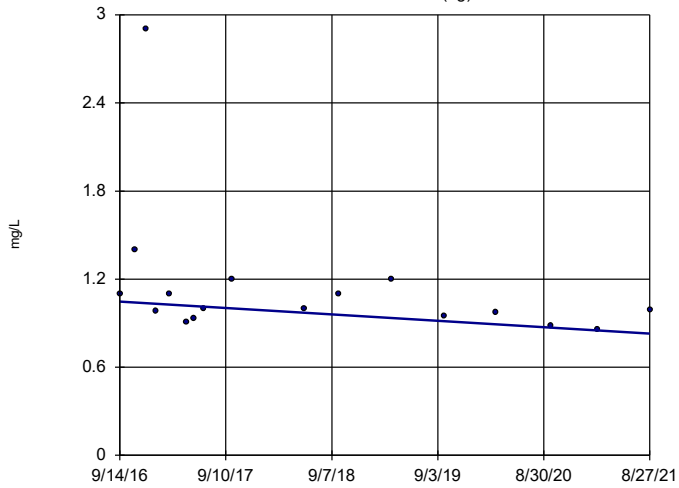
Sen's Slope Estimator  
YGWA-11 (bg)



Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-2l (bg)

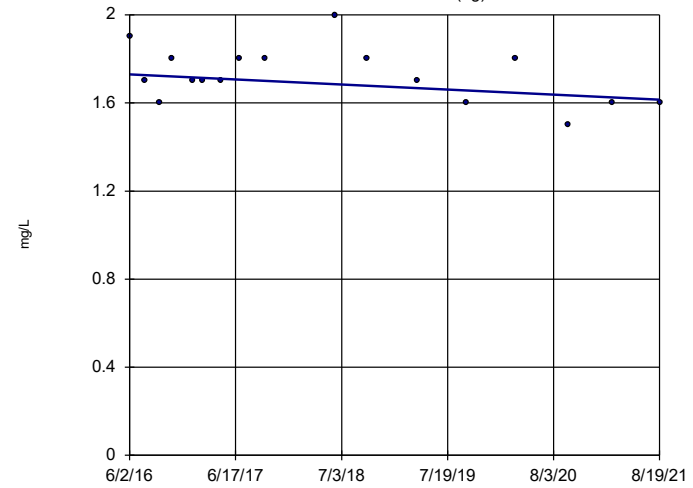


n = 17  
 Slope = -0.04401 units per year.  
 Mann-Kendall statistic = -47  
 critical = -63  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

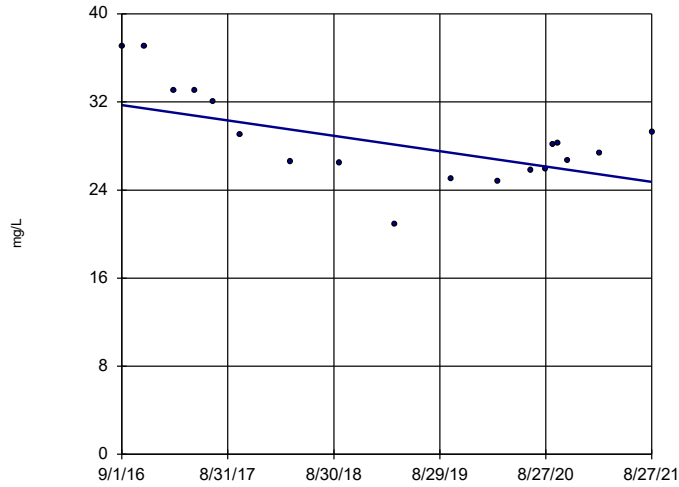
### Sen's Slope Estimator

YGWA-30l (bg)



### Sen's Slope Estimator

YGWC-46A

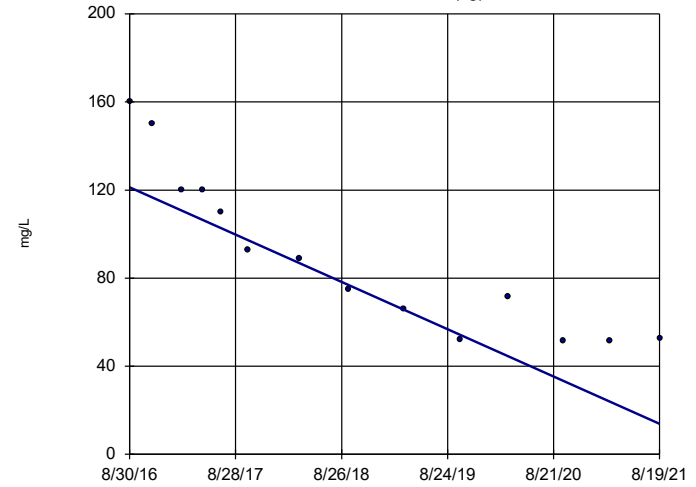


n = 18  
 Slope = -1.396  
 units per year.  
 Mann-Kendall  
 statistic = -49  
 critical = -68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-47 (bg)

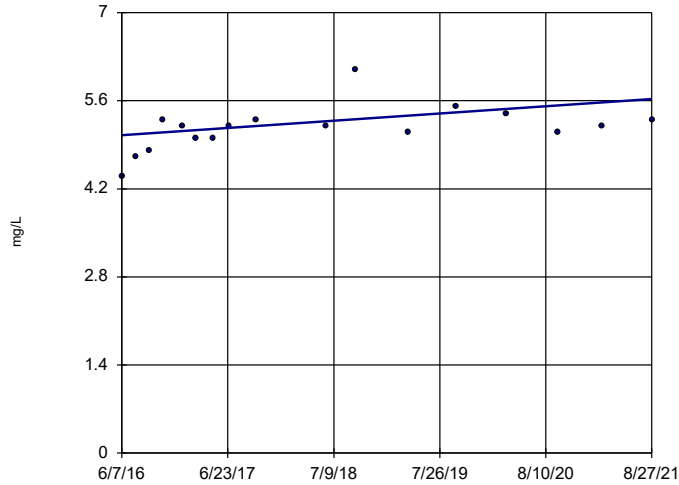


n = 14  
 Slope = -21.6  
 units per year.  
 Mann-Kendall  
 statistic = -78  
 critical = -48  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-17S (bg)

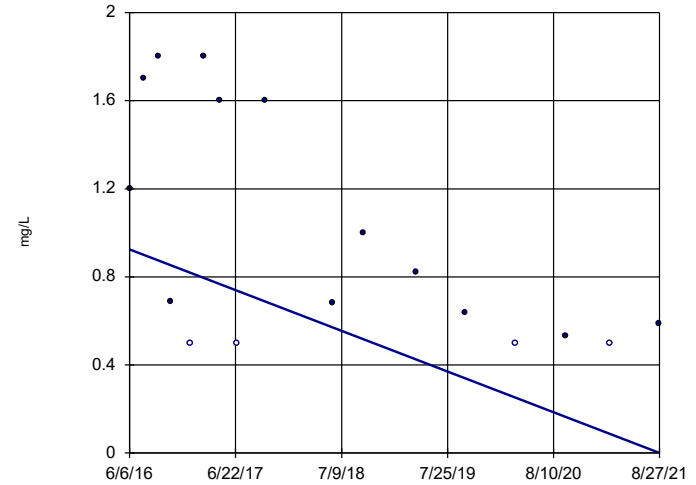


n = 17  
 Slope = 0.1098  
 units per year.  
 Mann-Kendall  
 statistic = 59  
 critical = 63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

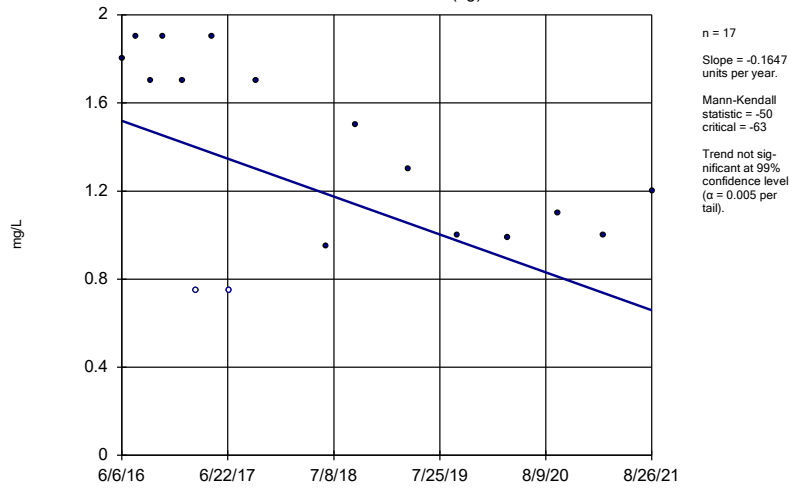
YGWA-18I (bg)



n = 17  
 Slope = -0.1768  
 units per year.  
 Mann-Kendall  
 statistic = -60  
 critical = -63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

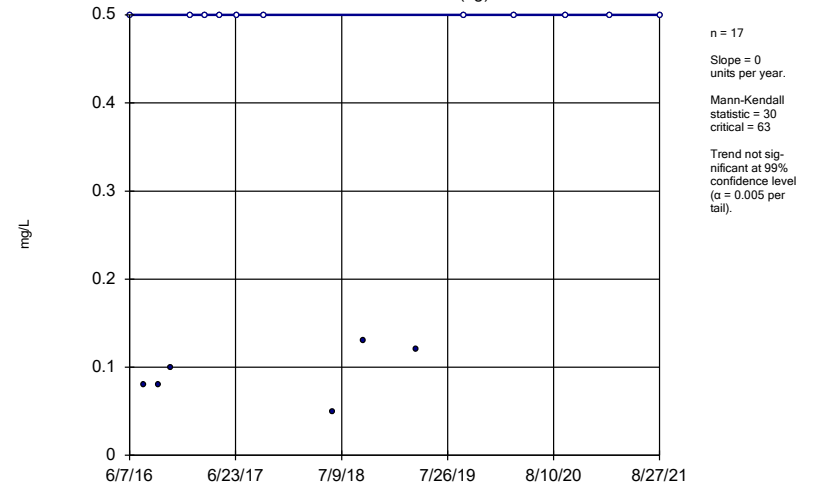
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-18S (bg)



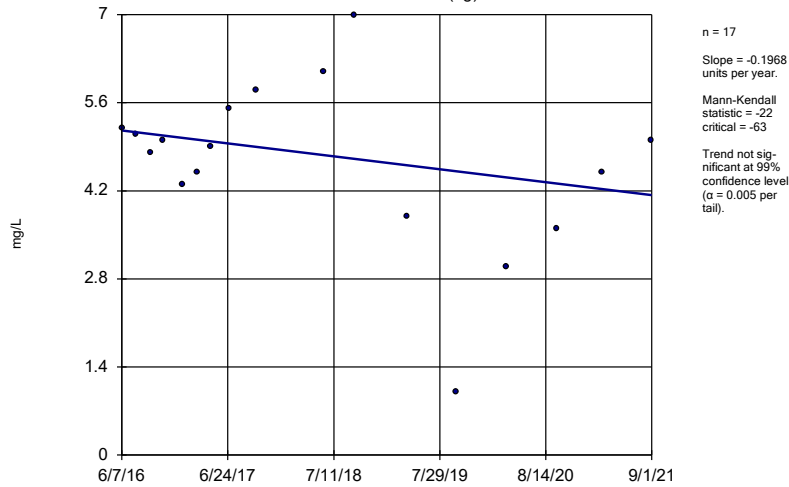
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-20S (bg)



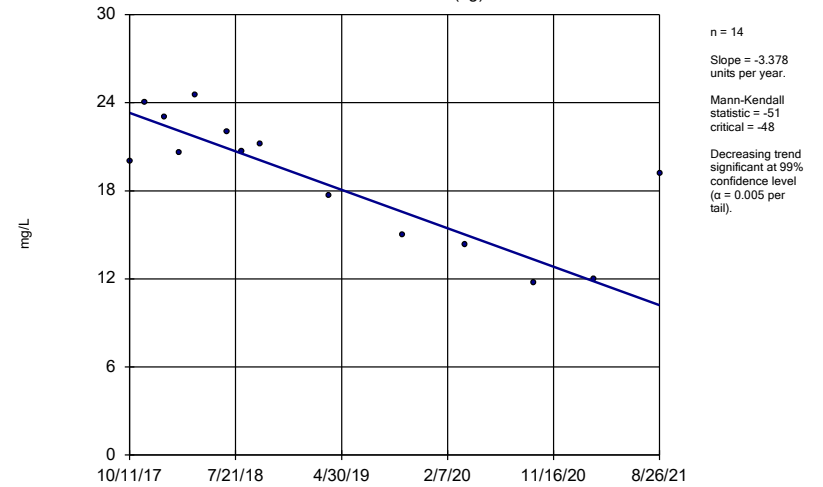
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-21I (bg)



Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

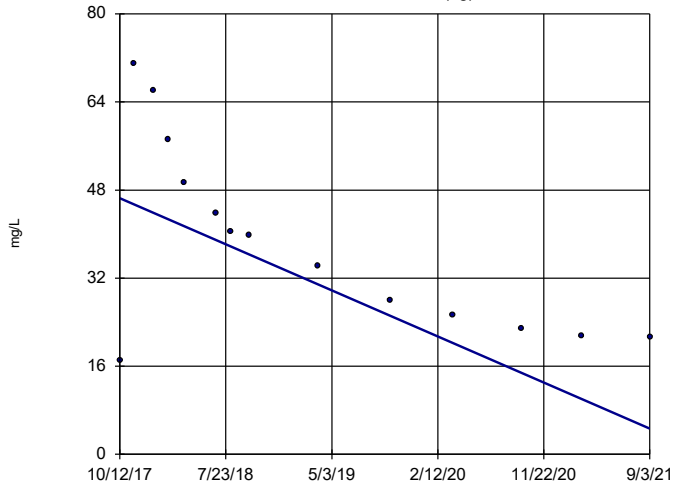
Sen's Slope Estimator  
YGWA-39 (bg)



Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-40 (bg)

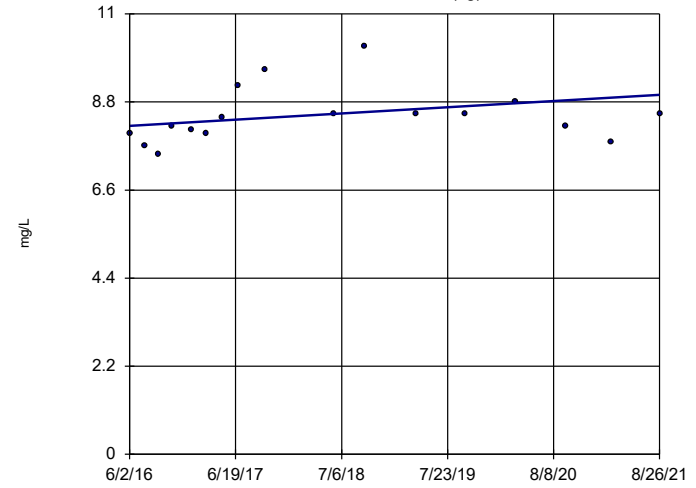


n = 14  
 Slope = -10.75  
 units per year.  
 Mann-Kendall  
 statistic = -65  
 critical = -48  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-4I (bg)

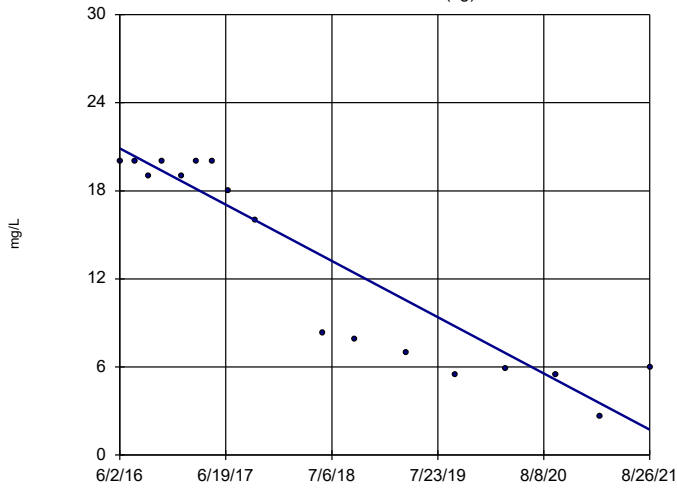


n = 17  
 Slope = 0.1495  
 units per year.  
 Mann-Kendall  
 statistic = 44  
 critical = 63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-5D (bg)

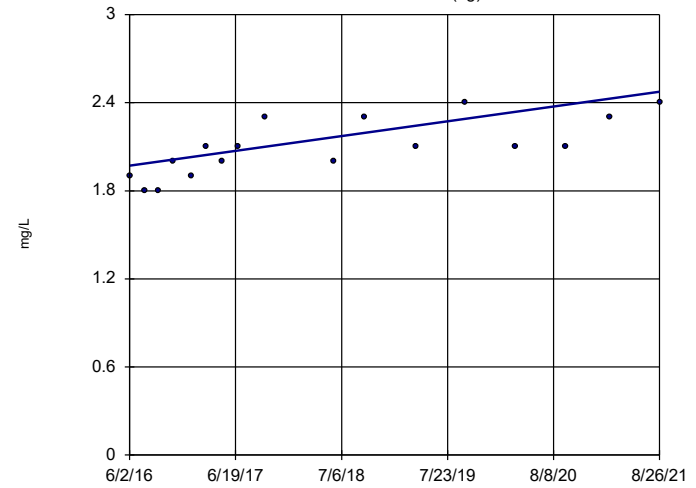


n = 17  
 Slope = -3.658  
 units per year.  
 Mann-Kendall  
 statistic = -104  
 critical = -63  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

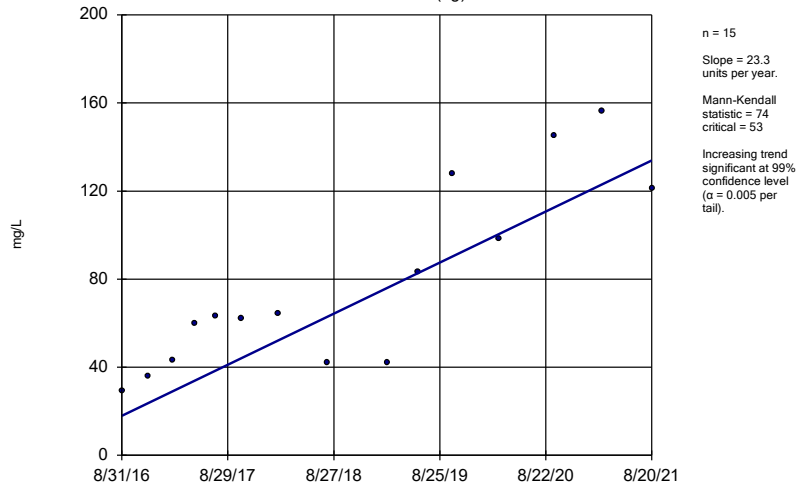
YGWA-5I (bg)



n = 17  
 Slope = 0.09609  
 units per year.  
 Mann-Kendall  
 statistic = 85  
 critical = 63  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

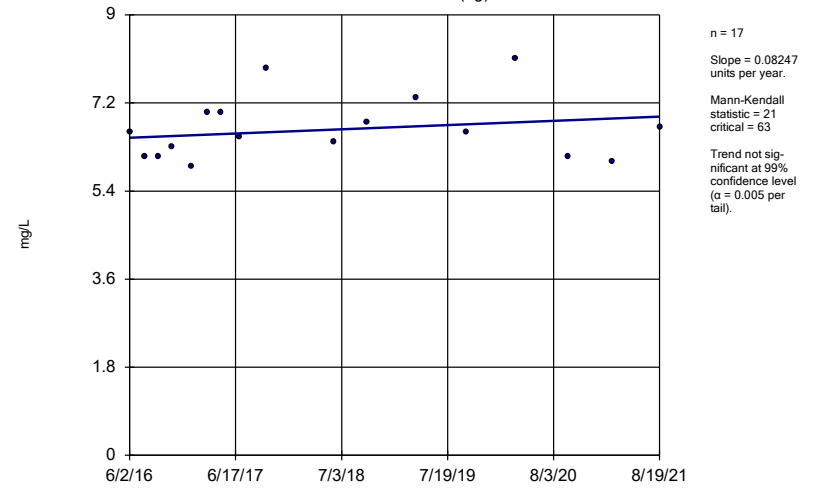
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
GWA-2 (bg)



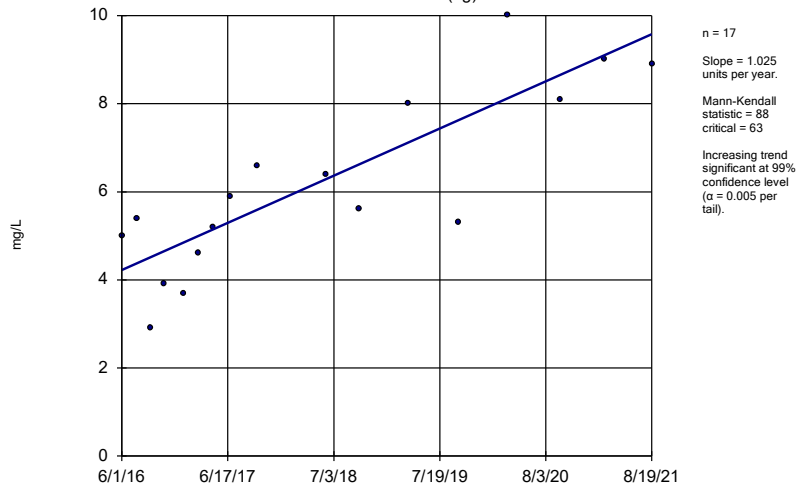
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-14S (bg)



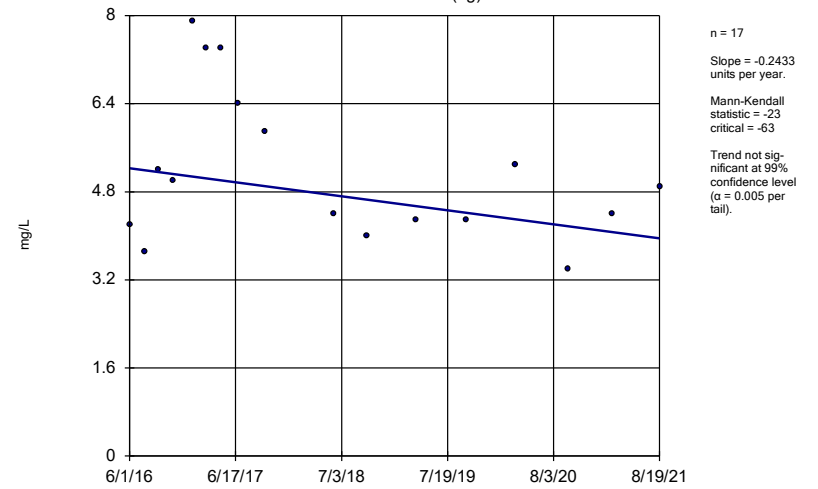
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-1D (bg)



Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-11 (bg)

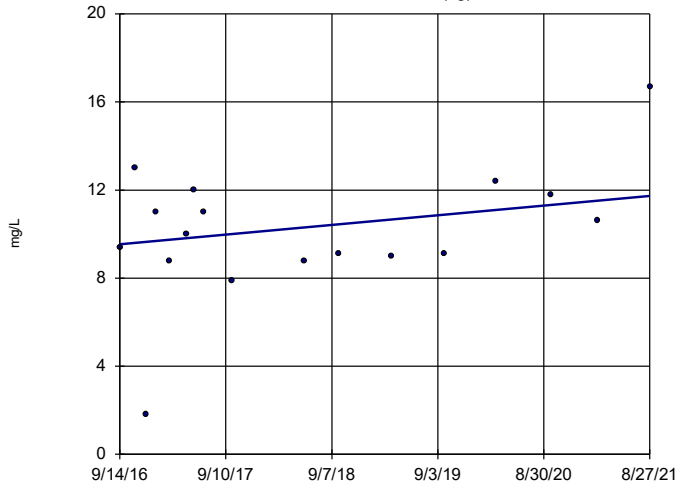


Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1



### Sen's Slope Estimator

YGWA-2I (bg)



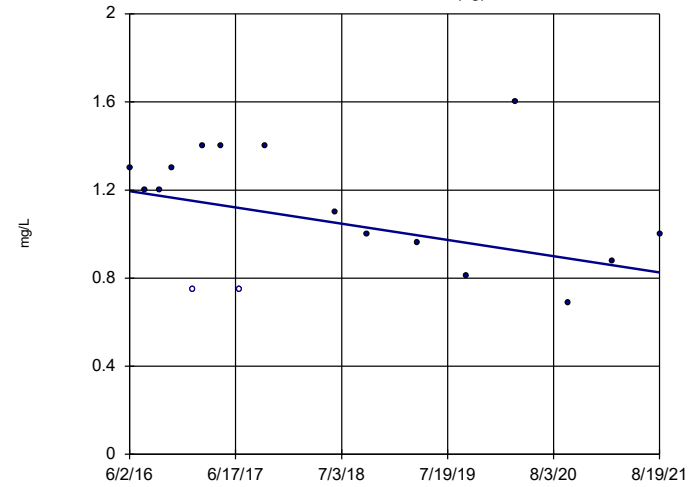
n = 17  
 Slope = 0.4455  
 units per year.  
 Mann-Kendall  
 statistic = 27  
 critical = 63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Hollow symbols indicate censored values.

### Sen's Slope Estimator

YGWA-30I (bg)

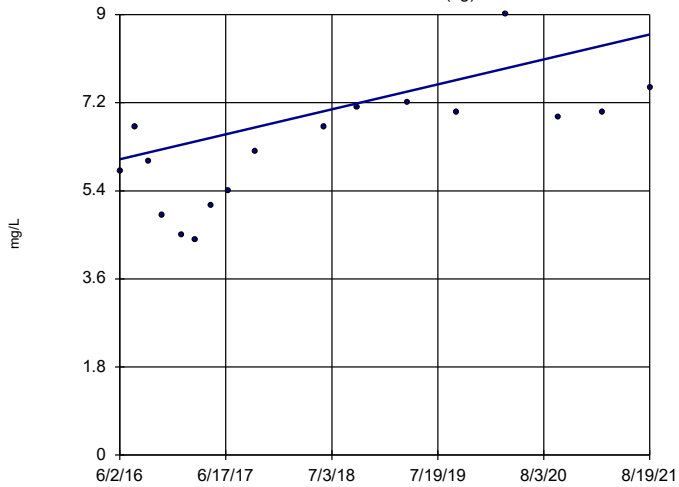


n = 17  
 Slope = -0.07072  
 units per year.  
 Mann-Kendall  
 statistic = -31  
 critical = -63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-3D (bg)

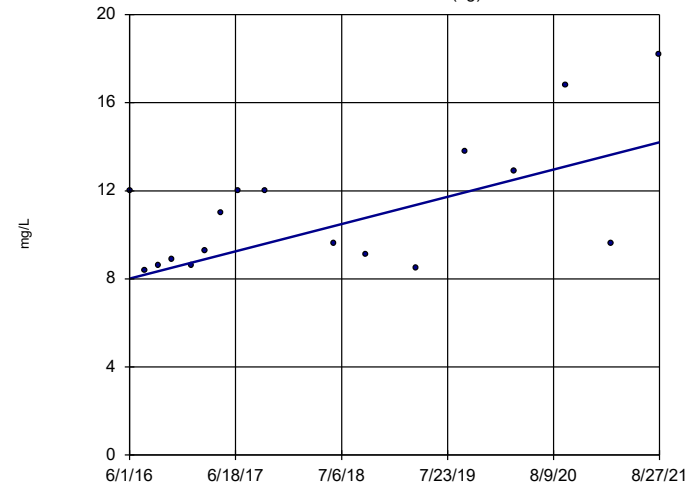


n = 17  
 Slope = 0.4885  
 units per year.  
 Mann-Kendall  
 statistic = 74  
 critical = 63  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

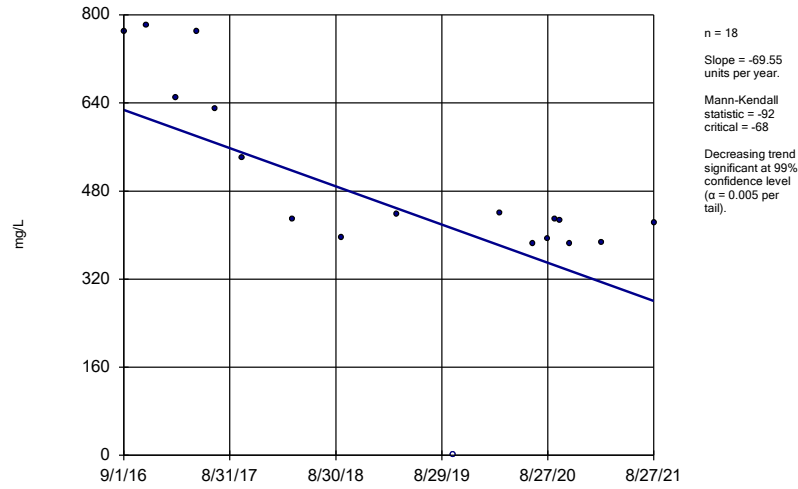
YGWA-3I (bg)



n = 17  
 Slope = 1.181  
 units per year.  
 Mann-Kendall  
 statistic = 61  
 critical = 63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

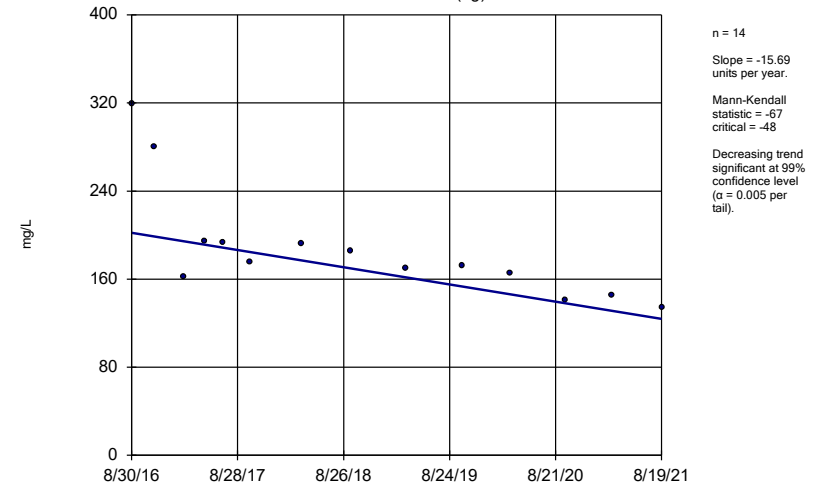
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
 YGWC-46A



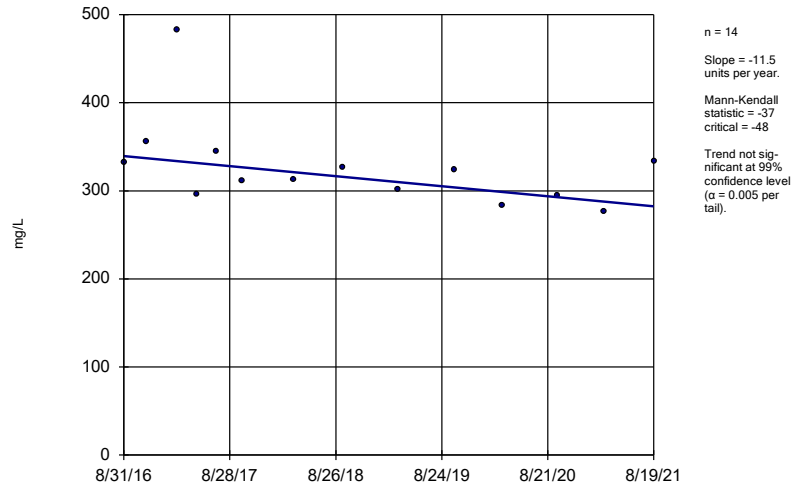
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
 YGWA-47 (bg)



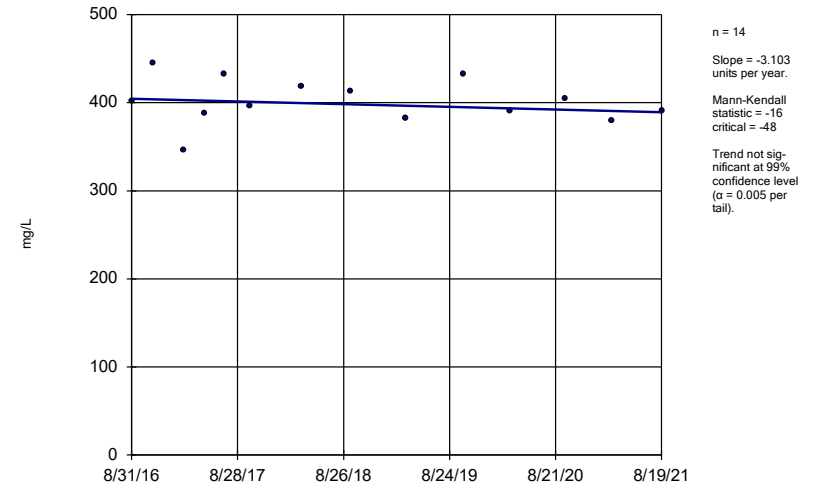
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
 YGWC-44



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

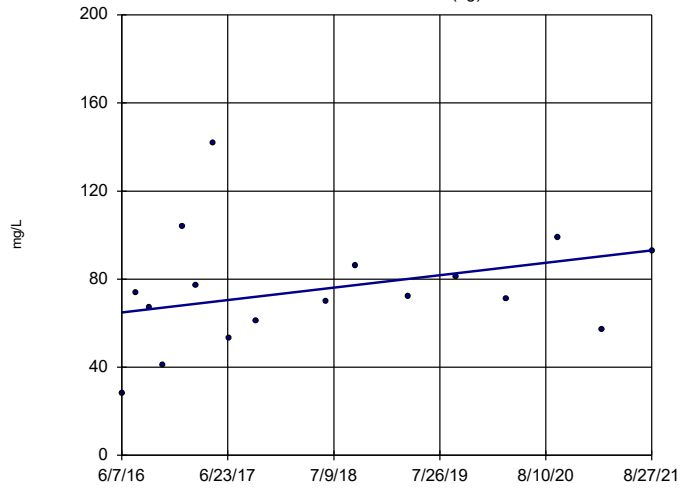
Sen's Slope Estimator  
 YGWC-45



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-17S (bg)

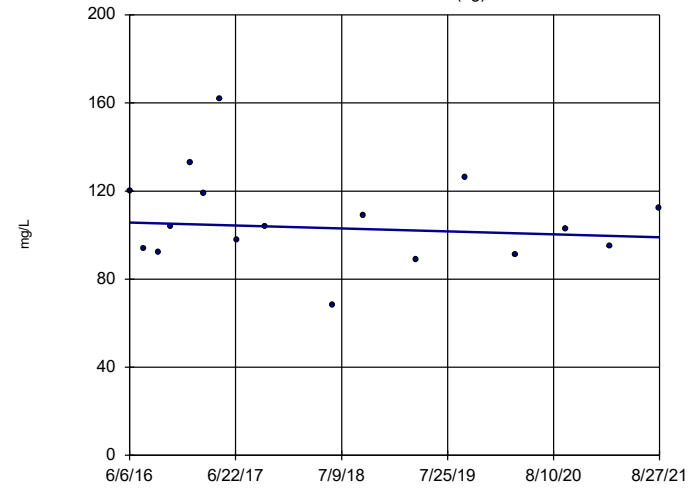


n = 17  
 Slope = 5.4  
 units per year.  
 Mann-Kendall  
 statistic = 32  
 critical = 63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-18I (bg)

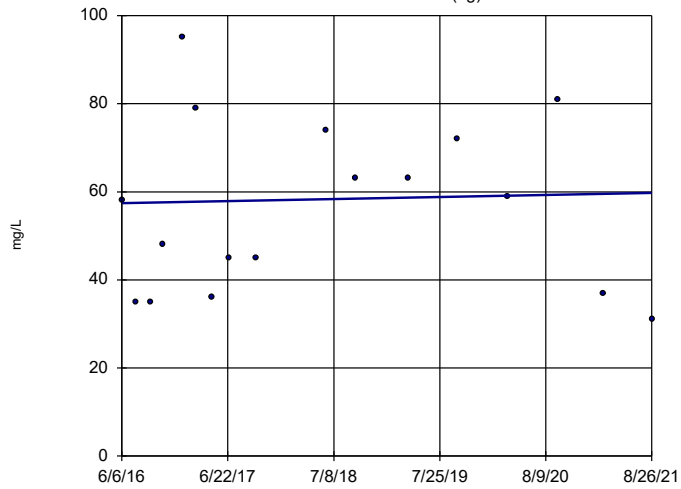


n = 17  
 Slope = -1.272  
 units per year.  
 Mann-Kendall  
 statistic = -13  
 critical = -63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-18S (bg)

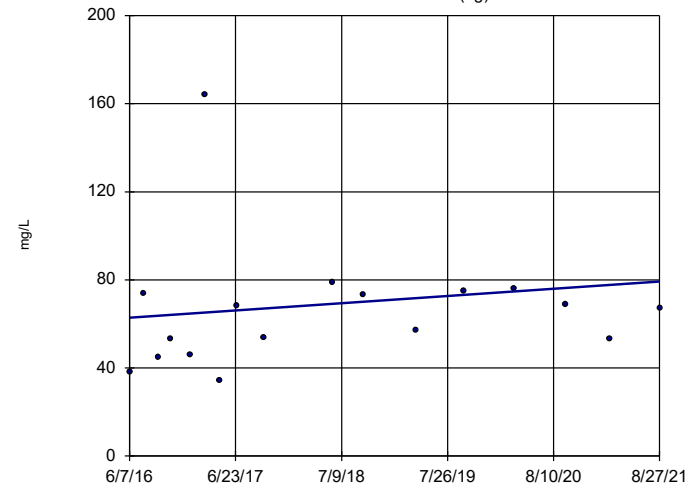


n = 17  
 Slope = 0.4413  
 units per year.  
 Mann-Kendall  
 statistic = 9  
 critical = 63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-20S (bg)

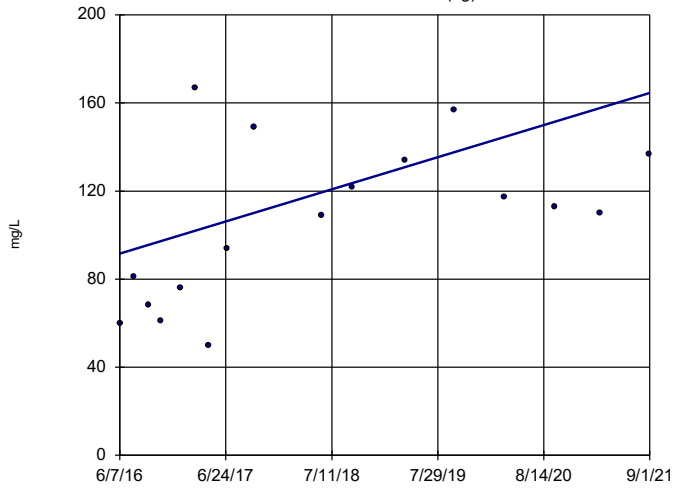


n = 17  
 Slope = 3.135  
 units per year.  
 Mann-Kendall  
 statistic = 31  
 critical = 63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-21I (bg)

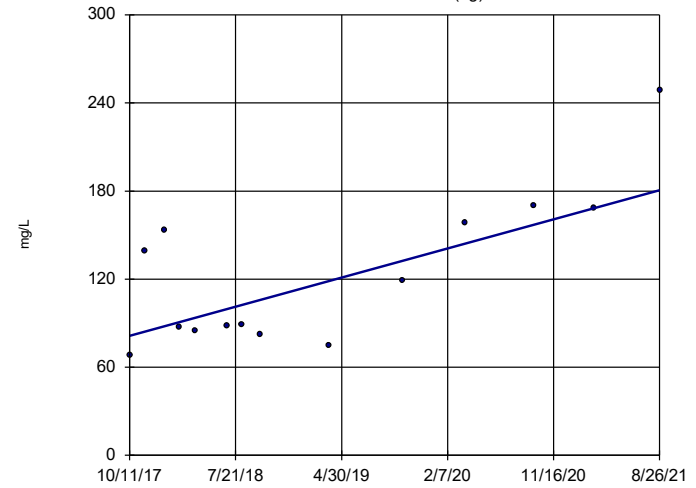


n = 17  
 Slope = 13.94 units per year.  
 Mann-Kendall statistic = 56  
 critical = 63  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-39 (bg)

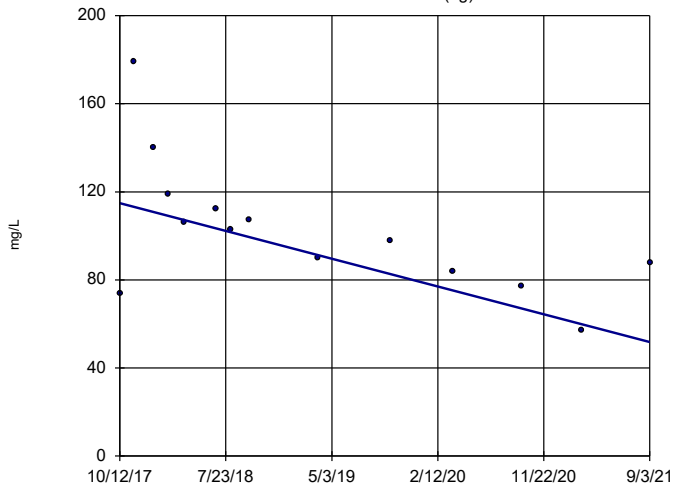


n = 14  
 Slope = 25.58 units per year.  
 Mann-Kendall statistic = 41  
 critical = 48  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-40 (bg)

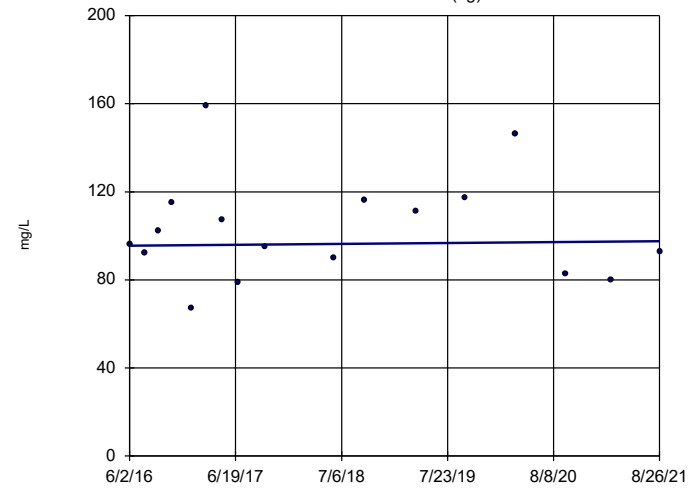


n = 14  
 Slope = -16.17 units per year.  
 Mann-Kendall statistic = -53  
 critical = -48  
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

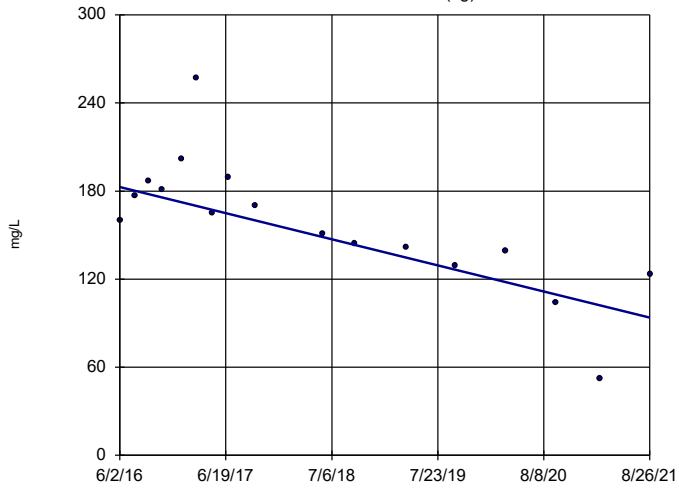
YGWA-4I (bg)



n = 17  
 Slope = 0.3992 units per year.  
 Mann-Kendall statistic = 4  
 critical = 63  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

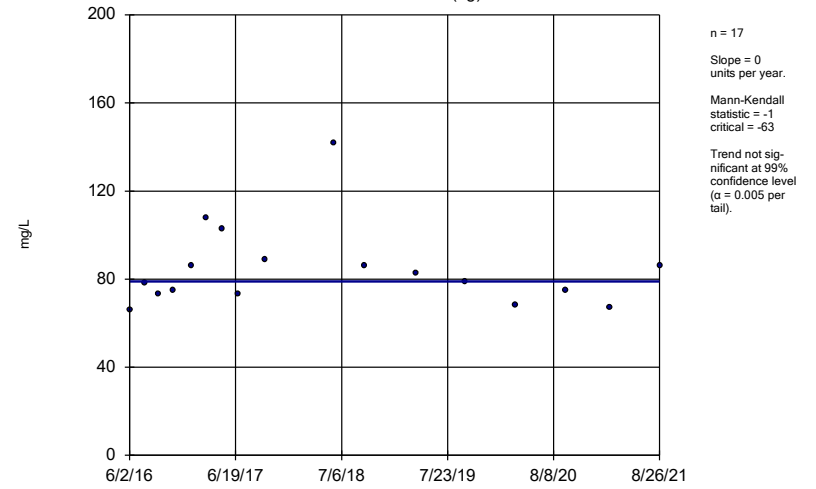
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator YGWA-5D (bg)



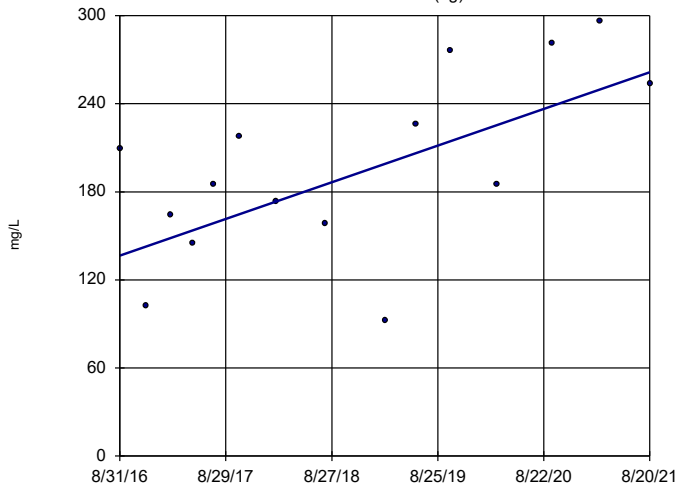
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator YGWA-5I (bg)



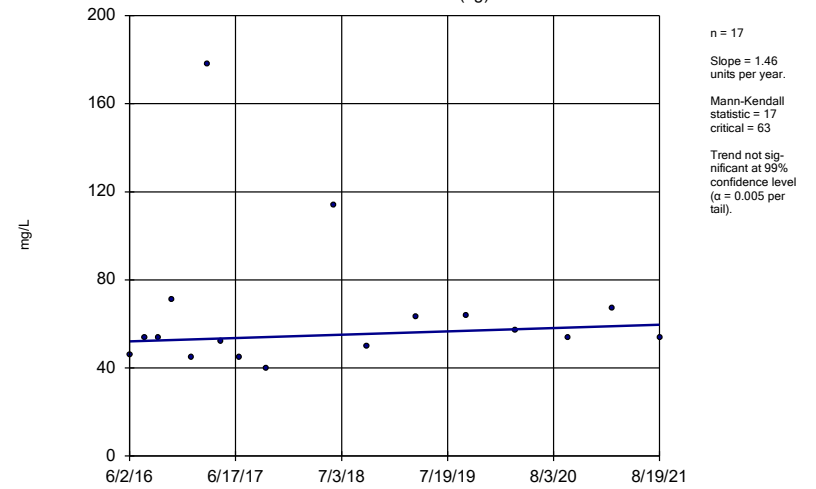
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator GWA-2 (bg)



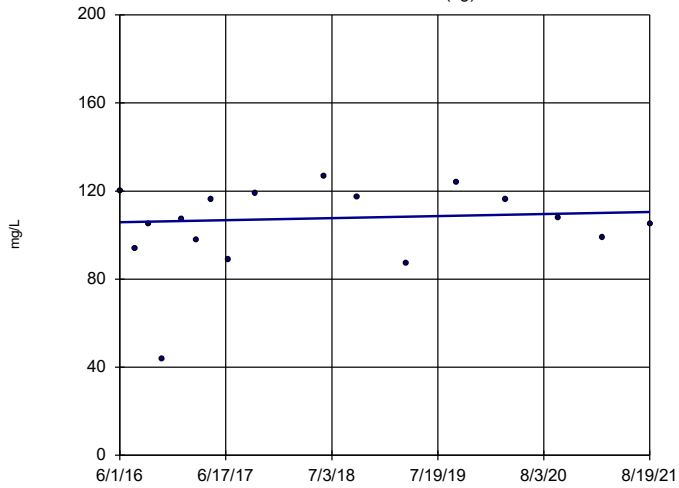
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator YGWA-14S (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

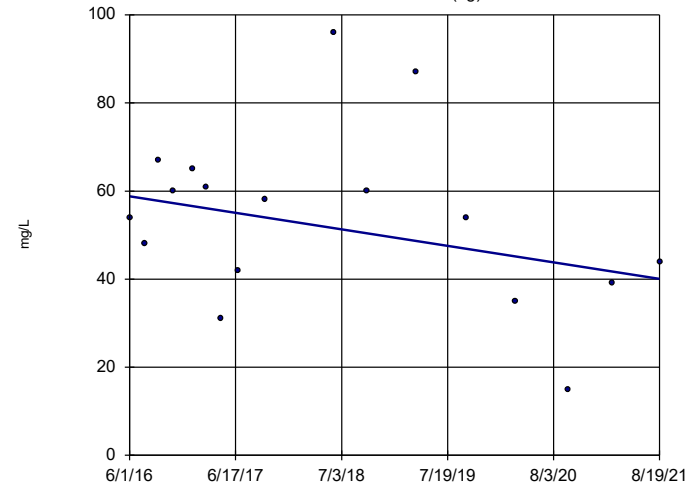
Sen's Slope Estimator  
YGWA-1D (bg)



n = 17  
Slope = 0.915  
units per year.  
Mann-Kendall  
statistic = 10  
critical = 63  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

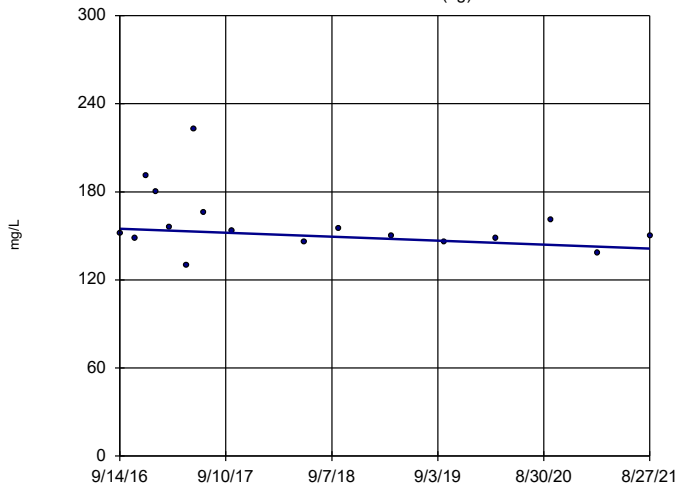
Sen's Slope Estimator  
YGWA-1I (bg)



n = 17  
Slope = -3.586  
units per year.  
Mann-Kendall  
statistic = -32  
critical = -63  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

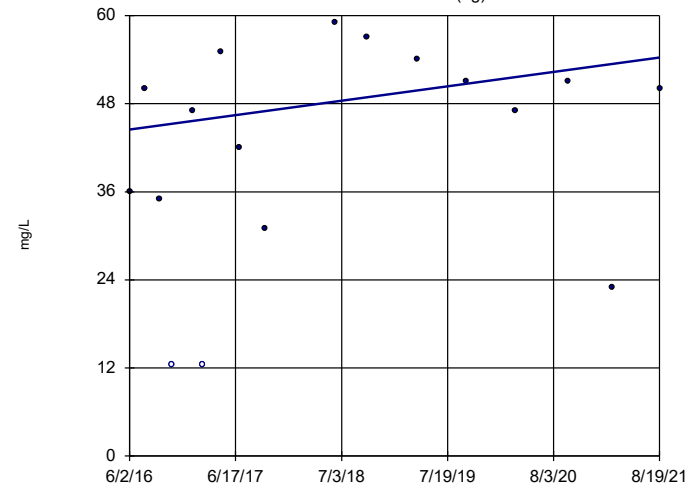
Sen's Slope Estimator  
YGWA-2I (bg)



n = 17  
Slope = -2.761  
units per year.  
Mann-Kendall  
statistic = -35  
critical = -63  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-30I (bg)

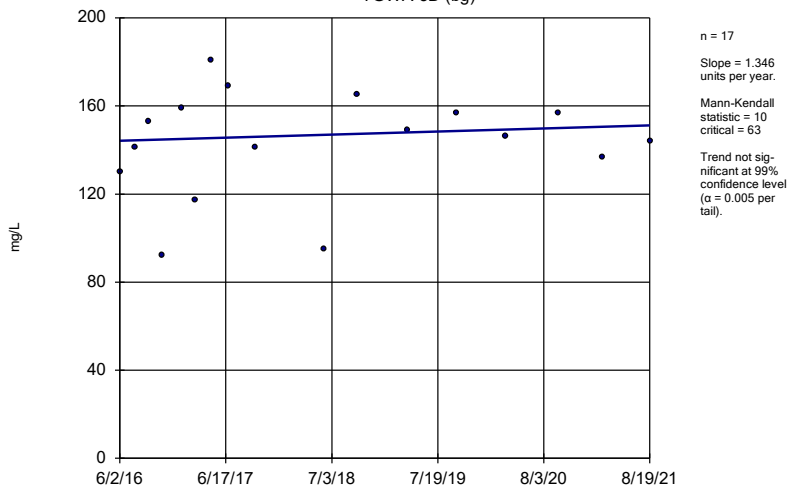


n = 17  
Slope = 1.885  
units per year.  
Mann-Kendall  
statistic = 20  
critical = 63  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

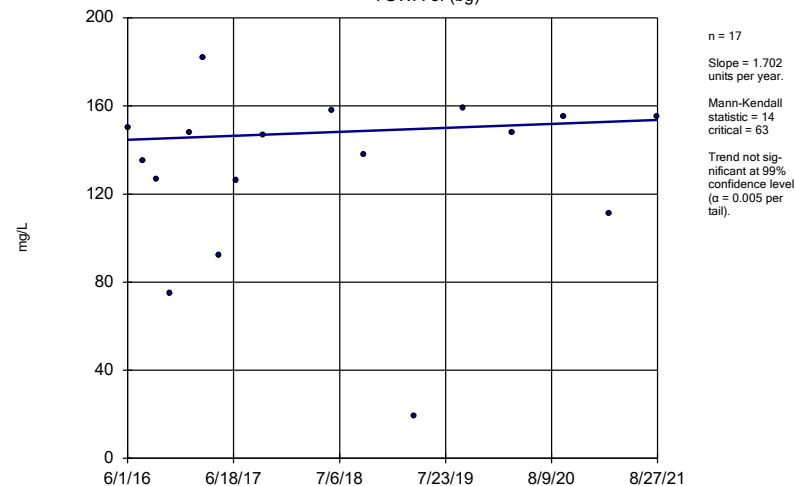
YGWA-3D (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

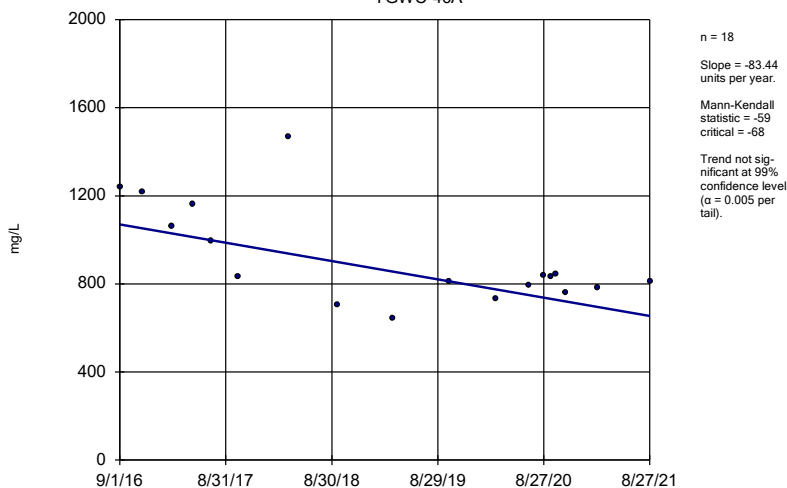
YGWA-3I (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

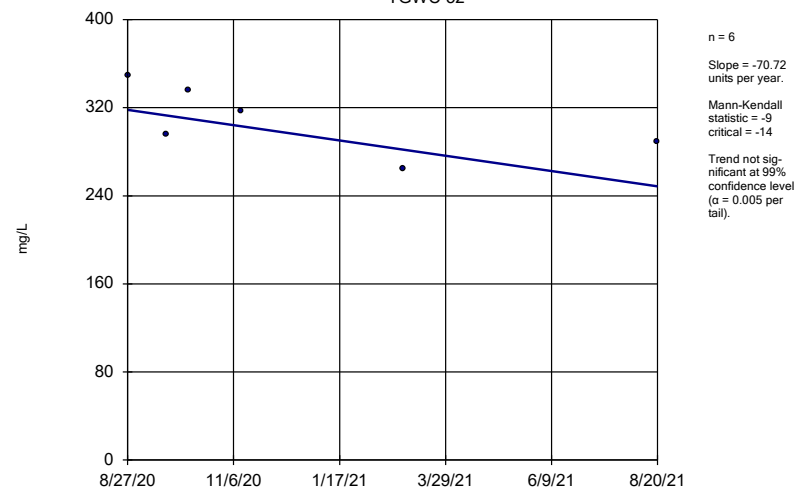
YGWC-46A



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWC-52



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

FIGURE F.



# Upper Tolerance Limits Summary Table

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 11/2/2021, 5:13 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0047	n/a	n/a	n/a	334	n/a	n/a	86.83	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	382	n/a	n/a	78.8	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.071	n/a	n/a	n/a	382	n/a	n/a	2.88	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	366	n/a	n/a	80.87	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	366	n/a	n/a	95.63	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0093	n/a	n/a	n/a	334	n/a	n/a	78.74	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.035	n/a	n/a	n/a	378	n/a	n/a	69.31	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.92	n/a	n/a	n/a	361	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride, total (mg/L)	n/a	0.68	n/a	n/a	n/a	381	n/a	n/a	67.98	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	336	n/a	n/a	83.63	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	361	n/a	n/a	27.15	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	290	n/a	n/a	93.1	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.014	n/a	n/a	n/a	325	n/a	n/a	60	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	364	n/a	n/a	92.03	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	300	n/a	n/a	96.67	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		0.0047	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		0.0005	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.92	6.92	6.92
Fluoride, Total (mg/L)	4		0.68	4	4
Lead, Total (mg/L)		0.015	0.0013	0.015	0.0013
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03
Mercury, Total (mg/L)	0.002		0.0002	0.002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014
Selenium, Total (mg/L)	0.05		0.005	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*

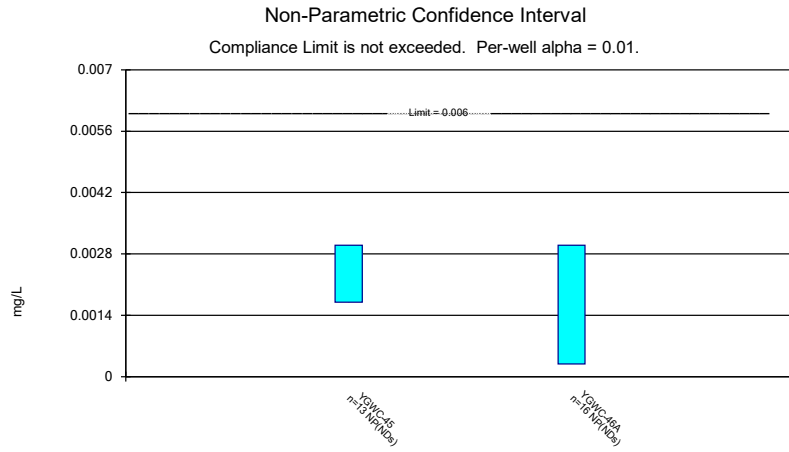
*\*GWPS = Groundwater Protection Standard*

FIGURE H.

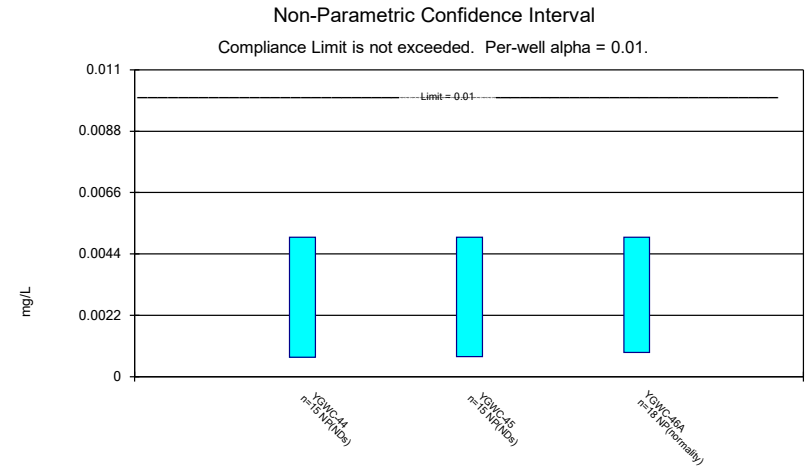
# Federal Confidence Intervals - All Results (No Significant)

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 11/2/2021, 5:21 PM

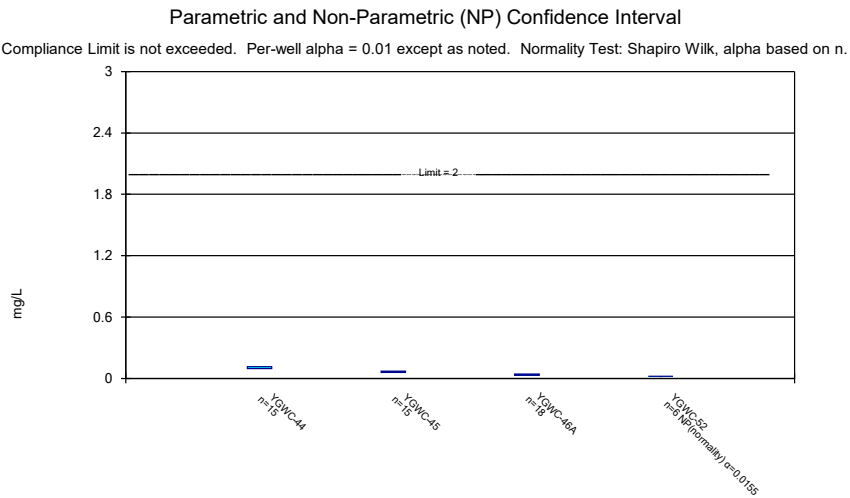
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-45	0.003	0.0017	0.006	No	13	0.0029	0.0003606	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-46A	0.003	0.00029	0.006	No	16	0.002831	0.0006775	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-44	0.005	0.0007	0.01	No	15	0.003575	0.002088	66.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00072	0.01	No	15	0.003847	0.001979	73.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-46A	0.005	0.00087	0.01	No	18	0.002228	0.001804	27.78	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-44	0.1153	0.09674	2	No	15	0.106	0.01366	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.07154	0.05813	2	No	15	0.06483	0.009899	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46A	0.04138	0.03051	2	No	18	0.03594	0.008986	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-52	0.021	0.019	2	No	6	0.01967	0.001033	0	None	No	0.0155	NP (normality)
Cadmium (mg/L)	YGWC-46A	0.0005	0.00012	0.005	No	15	0.0004227	0.0001602	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-45	0.0061	0.0006	0.1	No	13	0.004406	0.001721	76.92	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-52	0.005	0.00073	0.1	No	6	0.002922	0.002278	50	None	No	0.0155	NP (normality)
Cobalt (mg/L)	YGWC-44	0.004	0.0017	0.035	No	15	0.0033	0.002706	6.667	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0008626	0.0006388	0.035	No	14	0.0007507	0.000158	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46A	0.02754	0.007995	0.035	No	18	0.01777	0.01615	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-52	0.002193	0.001174	0.035	No	6	0.001683	0.000371	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.063	0.2869	6.92	No	15	0.7386	0.6373	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.556	0.9342	6.92	No	15	1.245	0.459	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46A	1.706	0.9912	6.92	No	18	1.349	0.5911	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-52	0.852	0.268	6.92	No	5	0.6562	0.2633	0	None	No	0.031	NP (normality)
Fluoride, total (mg/L)	YGWC-44	0.12	0.07	4	No	16	0.09563	0.0175	81.25	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	YGWC-45	0.22	0.075	4	No	16	0.1685	0.1664	25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	YGWC-46A	0.13	0.08	4	No	19	0.1099	0.067	26.32	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-45	0.001	0.0001	0.015	No	13	0.0009308	0.0002496	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-46A	0.001	0.000044	0.015	No	16	0.0009403	0.000239	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-52	0.001	0.00006	0.015	No	6	0.0003838	0.0004774	33.33	None	No	0.0155	NP (normality)
Lithium (mg/L)	YGWC-44	0.01344	0.01238	0.04	No	15	0.01291	0.0007842	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.0147	0.012	0.04	No	15	0.01328	0.001594	0	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-46A	0.01176	0.008917	0.04	No	18	0.01034	0.00235	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-52	0.004758	0.004076	0.04	No	6	0.004417	0.0002483	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0002	0.0002	0.002	No	11	0.0001883	0.00003889	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-46A	0.0002	0.00007	0.002	No	13	0.00019	0.00003606	92.31	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.0005	0.1	No	15	0.009367	0.002453	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.01	0.0012	0.1	No	15	0.00316	0.003555	20	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-46A	0.0039	0.0015	0.1	No	18	0.0034	0.003118	16.67	None	No	0.01	NP (normality)
Thallium (mg/L)	YGWC-44	0.001	0.00008	0.002	No	13	0.0009292	0.0002552	92.31	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-46A	0.001	0.000073	0.002	No	15	0.0009382	0.0002394	93.33	None	No	0.01	NP (NDs)



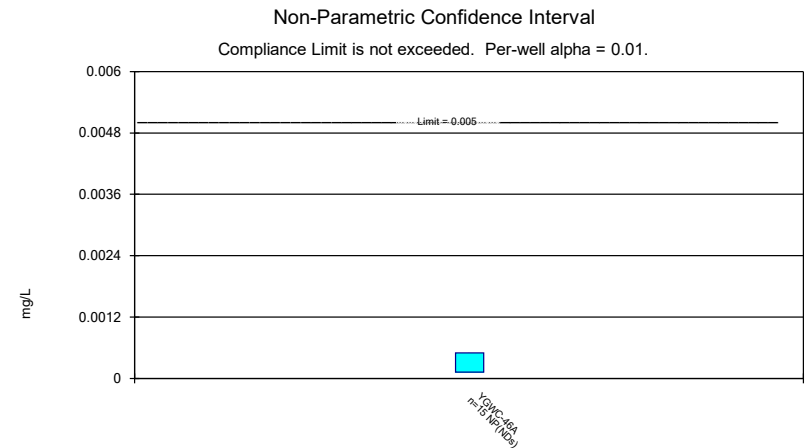
Constituent: Antimony Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1



Constituent: Arsenic Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1



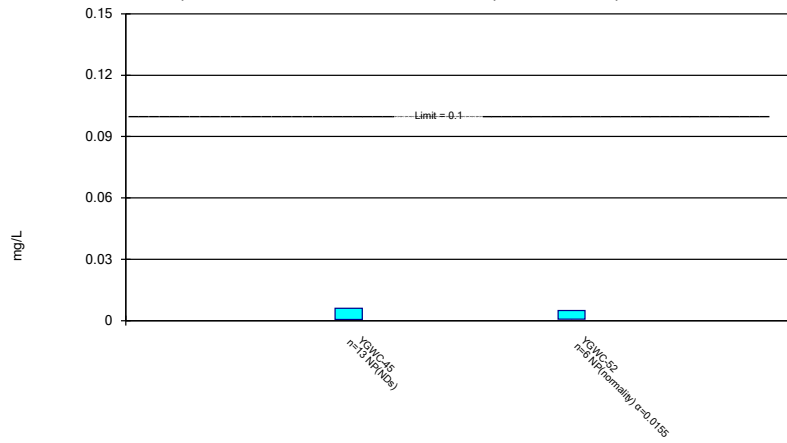
Constituent: Barium Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1



Constituent: Cadmium Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

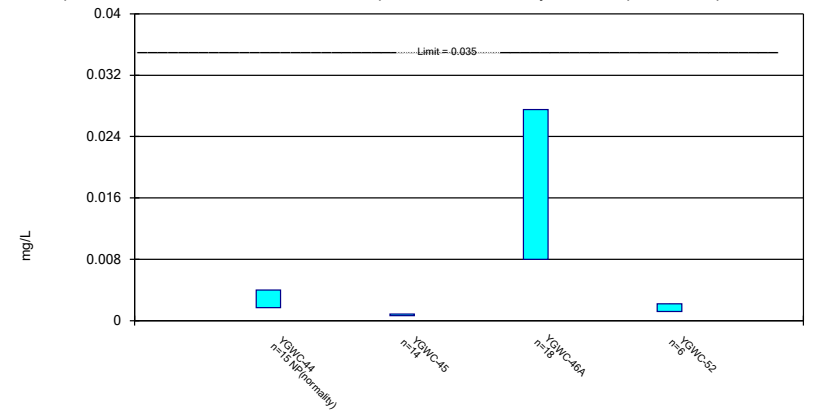
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Parametric and Non-Parametric (NP) Confidence Interval

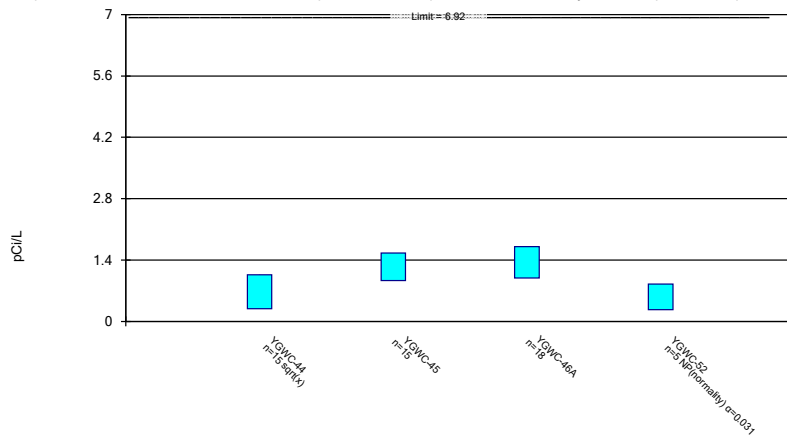
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Parametric and Non-Parametric (NP) Confidence Interval

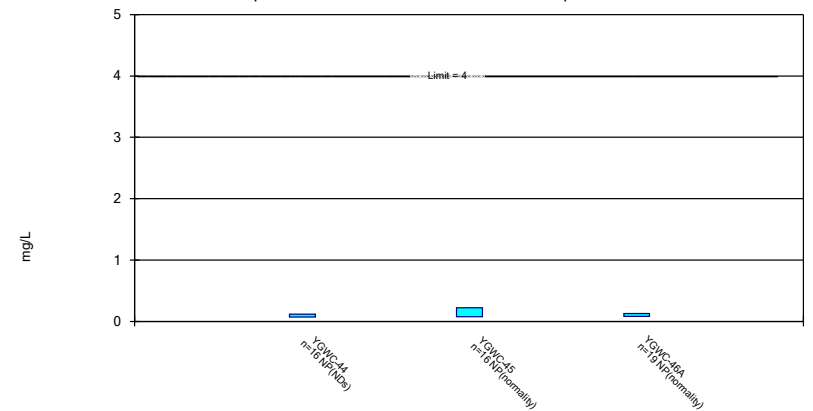
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

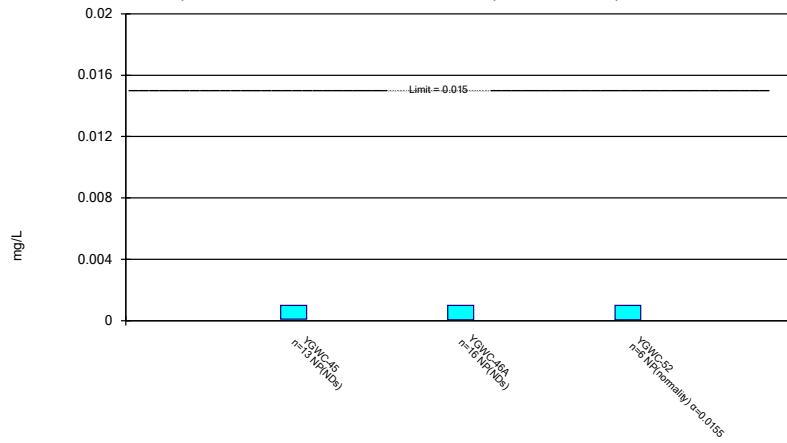
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Fluoride, total Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

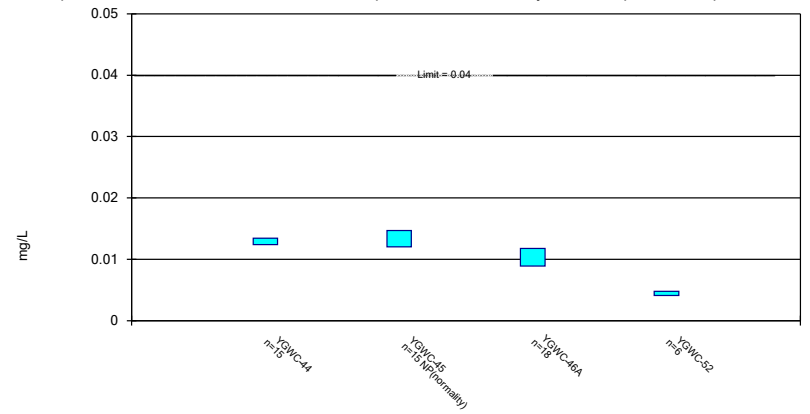
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Parametric and Non-Parametric (NP) Confidence Interval

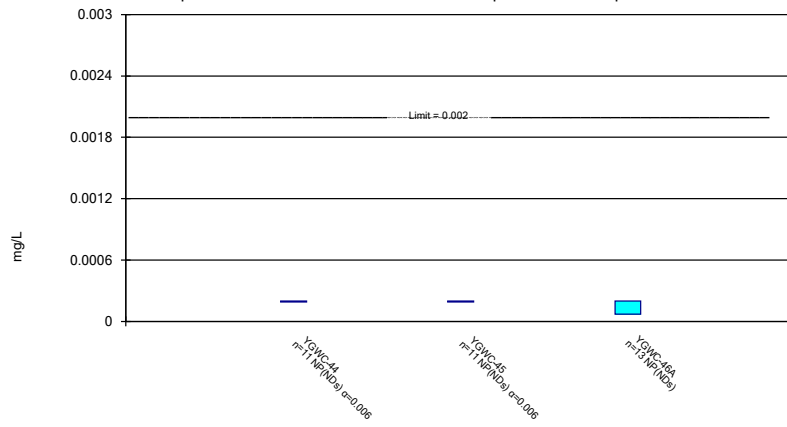
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

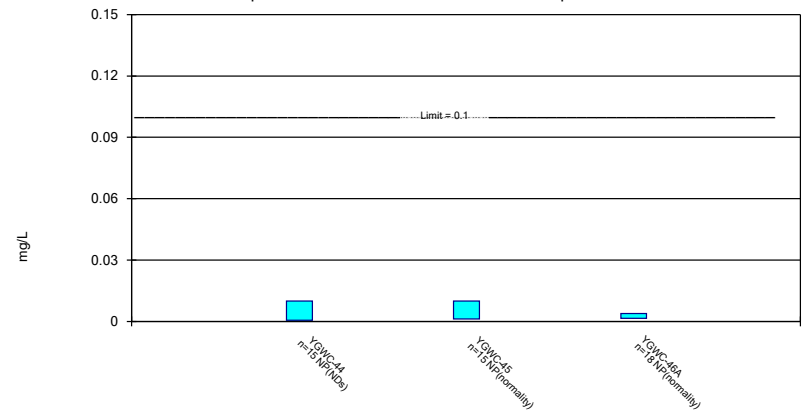
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Mercury Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

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

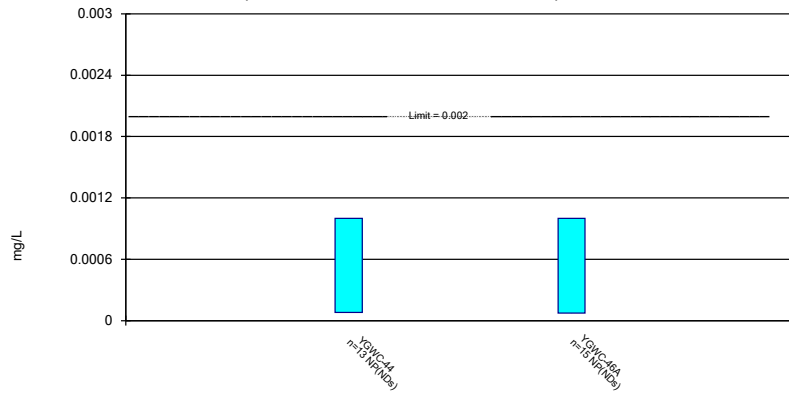


Constituent: Molybdenum Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1



### Non-Parametric Confidence Interval

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



Constituent: Thallium Analysis Run 11/2/2021 5:20 PM View: Appendix IV  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-45	YGWC-46A
8/31/2016	<0.003	
9/1/2016		<0.003
11/14/2016	<0.003	
11/16/2016		<0.003
2/27/2017	<0.003	<0.003
5/8/2017		<0.003
5/9/2017	<0.003	
7/13/2017	<0.003	<0.003
10/10/2017	<0.003	
10/11/2017		<0.003
4/3/2018	<0.003	
4/4/2018		<0.003
9/19/2018	<0.003	<0.003
8/20/2019	<0.003	
8/21/2019		<0.003
7/6/2020		<0.003
8/28/2020	0.0017 (J)	0.00029 (J)
9/23/2020	<0.003	<0.003
10/7/2020		<0.003
11/12/2020		<0.003
3/1/2021	<0.003	
3/2/2021		<0.003
8/19/2021	<0.003	
8/27/2021		<0.003
Mean	0.0029	0.002831
Std. Dev.	0.0003606	0.0006775
Upper Lim.	0.003	0.003
Lower Lim.	0.0017	0.00029

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
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
3/17/2020	<0.005	<0.005	<0.005
7/6/2020			0.00079 (J)
8/27/2020	<0.005		
8/28/2020		<0.005	0.0015 (J)
9/22/2020	<0.005		
9/23/2020		<0.005	0.00091 (J)
10/7/2020			0.001 (J)
11/12/2020			0.0014 (J)
3/1/2021	<0.005	<0.005	
3/2/2021			0.0016 (J)
8/19/2021	<0.005	<0.005	
8/27/2021			0.0022 (J)
Mean	0.003575	0.003847	0.002228
Std. Dev.	0.002088	0.001979	0.001804
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.0007	0.00072	0.00087

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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	
3/17/2020	0.099	0.061	0.022	
7/6/2020			0.048	
8/27/2020	0.086			0.021
8/28/2020		0.053	0.05	
9/22/2020	0.096			0.021
9/23/2020		0.052	0.045	
10/7/2020			0.042	0.019
11/12/2020			0.042	0.019
3/1/2021	0.087	0.055		0.019
3/2/2021			0.044	
8/19/2021	0.089	0.055		
8/20/2021				0.019
8/27/2021			0.043	
Mean	0.106	0.06483	0.03594	0.01967
Std. Dev.	0.01366	0.009899	0.008986	0.001033
Upper Lim.	0.1153	0.07154	0.04138	0.021
Lower Lim.	0.09674	0.05813	0.03051	0.019

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A
9/1/2016	<0.0005
11/16/2016	<0.0005
2/27/2017	<0.0005
5/8/2017	0.0001 (J)
7/13/2017	<0.0005
10/11/2017	<0.0005
4/4/2018	<0.0005
9/19/2018	<0.0005
8/21/2019	0.00012 (J)
10/9/2019	<0.0005
3/17/2020	0.00012 (J)
7/6/2020	<0.0005
8/28/2020	<0.0005
11/12/2020	<0.0005
8/27/2021	<0.0005
Mean	0.0004227
Std. Dev.	0.0001602
Upper Lim.	0.0005
Lower Lim.	0.00012

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-45	YGWC-52
8/31/2016	<0.005	
11/14/2016	0.0061 (J)	
2/27/2017	<0.005	
5/9/2017	<0.005	
7/13/2017	0.0006 (J)	
10/10/2017	<0.005	
4/3/2018	<0.005	
9/19/2018	<0.005	
8/20/2019	<0.005	
8/27/2020		<0.005
8/28/2020	<0.005	
9/22/2020		0.00073 (J)
9/23/2020	0.00058 (J)	
10/7/2020		0.00086 (J)
11/12/2020		<0.005
3/1/2021	<0.005	0.00094 (J)
8/19/2021	<0.005	
8/20/2021		<0.005
Mean	0.004406	0.002922
Std. Dev.	0.001721	0.002278
Upper Lim.	0.0061	0.005
Lower Lim.	0.0006	0.00073

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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	<0.005		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	
3/17/2020	0.004 (J)	0.00081 (J)	0.022	
7/6/2020			0.0041 (J)	
8/27/2020	0.003 (J)			0.0022 (J)
8/28/2020		0.00055 (J)	0.0038 (J)	
9/22/2020	0.0065			0.0019 (J)
9/23/2020		0.00053 (J)	0.0015 (J)	
10/7/2020			0.0014 (J)	0.0019 (J)
11/12/2020			0.001 (J)	0.0015 (J)
3/1/2021	0.0033 (J)	0.00062 (J)		0.0013 (J)
3/2/2021			0.00096 (J)	
8/19/2021	0.0014 (J)	0.00048 (J)		
8/20/2021				0.0013 (J)
8/27/2021			0.00056 (J)	
Mean	0.0033	0.0007507	0.01777	0.001683
Std. Dev.	0.002706	0.000158	0.01615	0.000371
Upper Lim.	0.004	0.0008626	0.02754	0.002193
Lower Lim.	0.0017	0.0006388	0.007995	0.001174

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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)	
3/17/2020	1.37	1.44	1.74	
7/6/2020			2.27	
8/27/2020	0.0859 (U)			0.852 (U)
8/28/2020		0.983 (U)	2.34	
9/22/2020	0.327 (U)			0.268 (U)
9/23/2020		0.746 (U)	0.575 (U)	
10/7/2020			1.81	0.819 (U)
3/1/2021	0.0694 (U)	1.28		0.846 (U)
3/2/2021			1.64	
8/19/2021	0.261 (U)	1.38		
8/20/2021				0.496 (U)
8/27/2021			1.83	
Mean	0.7386	1.245	1.349	0.6562
Std. Dev.	0.6373	0.459	0.5911	0.2633
Upper Lim.	1.063	1.556	1.706	0.852
Lower Lim.	0.2869	0.9342	0.9912	0.268



# Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
8/31/2016	<0.1	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	<0.1	0.11 (J)	0.35
10/10/2017	<0.1	0.39	
10/11/2017			<0.1
4/3/2018		<0.1	
4/4/2018	<0.1		<0.1
9/19/2018	<0.1	<0.1	<0.1
3/27/2019	<0.1	0.18 (J)	0.12 (J)
8/20/2019	<0.1	<0.1	
8/21/2019			<0.1
10/8/2019	<0.1		
10/9/2019		<0.1	0.12 (J)
3/17/2020	<0.1	0.076 (J)	<0.1
7/6/2020			0.12
8/27/2020	<0.1		
8/28/2020		0.07 (J)	0.12
9/22/2020	<0.1		
9/23/2020		0.082 (J)	0.12
10/7/2020			0.13
11/12/2020			0.084 (J)
3/1/2021	<0.1	0.073 (J)	
3/2/2021			0.12
8/19/2021	<0.1	0.075 (J)	
8/27/2021			0.13
Mean	0.09563	0.1685	0.1099
Std. Dev.	0.0175	0.1664	0.067
Upper Lim.	0.12	0.22	0.13
Lower Lim.	0.07	0.075	0.08

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-45	YGWC-46A	YGWC-52
8/31/2016	<0.001		
9/1/2016		<0.001	
11/14/2016	<0.001		
11/16/2016		<0.001	
2/27/2017	<0.001	<0.001	
5/8/2017		<0.001	
5/9/2017	0.0001 (J)		
7/13/2017	<0.001	<0.001	
10/10/2017	<0.001		
10/11/2017		<0.001	
4/3/2018	<0.001		
4/4/2018		<0.001	
9/19/2018	<0.001	<0.001	
8/20/2019	<0.001		
8/21/2019		<0.001	
7/6/2020		<0.001	
8/27/2020			9.2E-05 (J)
8/28/2020	<0.001	<0.001	
9/22/2020			6E-05 (J)
9/23/2020	<0.001	<0.001	
10/7/2020		<0.001	<0.001
11/12/2020		4.4E-05 (J)	6.4E-05 (J)
3/1/2021	<0.001		8.7E-05 (J)
3/2/2021		<0.001	
8/19/2021	<0.001		
8/20/2021			<0.001
8/27/2021		<0.001	
Mean	0.0009308	0.0009403	0.0003838
Std. Dev.	0.0002496	0.000239	0.0004774
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.0001	4.4E-05	6E-05

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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)	
3/17/2020	0.013 (J)	0.014 (J)	0.0071 (J)	
7/6/2020			0.011 (J)	
8/27/2020	0.013 (J)			0.0048 (J)
8/28/2020		0.012 (J)	0.012 (J)	
9/22/2020	0.013 (J)			0.0046 (J)
9/23/2020		0.012 (J)	0.013 (J)	
10/7/2020			0.011 (J)	0.0041 (J)
11/12/2020			0.014 (J)	0.0044 (J)
3/1/2021	0.013 (J)	0.012 (J)		0.0043 (J)
3/2/2021			0.013 (J)	
8/19/2021	0.013 (J)	0.012 (J)		
8/20/2021				0.0043 (J)
8/27/2021			0.014 (J)	
Mean	0.01291	0.01328	0.01034	0.004417
Std. Dev.	0.0007842	0.001594	0.00235	0.0002483
Upper Lim.	0.01344	0.0147	0.01176	0.004758
Lower Lim.	0.01238	0.012	0.008917	0.004076

# Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
8/31/2016	<0.0002	<0.0002	
9/1/2016			<0.0002
11/14/2016		<0.0002	
11/15/2016	<0.0002		
11/16/2016			<0.0002
2/27/2017		<0.0002	<0.0002
2/28/2017	<0.0002		
5/8/2017	<0.0002		<0.0002
5/9/2017		<0.0002	
7/13/2017	<0.0002	<0.0002	<0.0002
10/10/2017	<0.0002	<0.0002	
10/11/2017			<0.0002
4/3/2018		<0.0002	
4/4/2018	<0.0002		<0.0002
9/19/2018	6E-05 (J)	7.1E-05 (J)	7E-05 (J)
8/20/2019	<0.0002	<0.0002	
8/21/2019			<0.0002
7/6/2020			<0.0002
8/27/2020	<0.0002		
8/28/2020		<0.0002	<0.0002
11/12/2020			<0.0002
8/19/2021	<0.0002	<0.0002	
8/27/2021			<0.0002
Mean	0.0001873	0.0001883	0.00019
Std. Dev.	4.221E-05	3.889E-05	3.606E-05
Upper Lim.	0.0002	0.0002	0.0002
Lower Lim.	0.0002	0.0002	7E-05

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
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)
3/17/2020	<0.01	0.0016 (J)	0.0015 (J)
7/6/2020			0.0026 (J)
8/27/2020	<0.01		
8/28/2020		0.0013 (J)	0.003 (J)
9/22/2020	<0.01		
9/23/2020		0.0011 (J)	0.0025 (J)
10/7/2020			0.0024 (J)
11/12/2020			0.0019 (J)
3/1/2021	<0.01	0.0012 (J)	
3/2/2021			0.0023 (J)
8/19/2021	<0.01	0.0012 (J)	
8/27/2021			0.0022 (J)
Mean	0.009367	0.00316	0.0034
Std. Dev.	0.002453	0.003555	0.003118
Upper Lim.	0.01	0.01	0.0039
Lower Lim.	0.0005	0.0012	0.0015

# Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 11/2/2021 5:21 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-44	YGWC-46A
8/31/2016	<0.001	
9/1/2016		<0.001
11/15/2016	<0.001	
11/16/2016		<0.001
2/27/2017		<0.001
2/28/2017	<0.001	
5/8/2017	<0.001	<0.001
7/13/2017	<0.001	<0.001
10/10/2017	<0.001	
10/11/2017		<0.001
4/4/2018	<0.001	<0.001
9/19/2018	<0.001	<0.001
8/20/2019	<0.001	
8/21/2019		<0.001
10/8/2019	<0.001	
10/9/2019		<0.001
3/17/2020	8E-05 (J)	<0.001
7/6/2020		7.3E-05 (J)
8/27/2020	<0.001	
8/28/2020		<0.001
11/12/2020		<0.001
8/19/2021	<0.001	
8/27/2021		<0.001
Mean	0.0009292	0.0009382
Std. Dev.	0.0002552	0.0002394
Upper Lim.	0.001	0.001
Lower Lim.	8E-05	7.3E-05

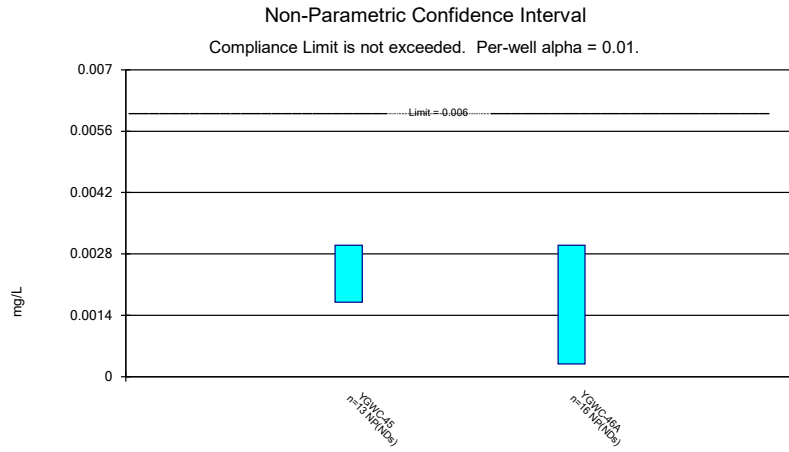
FIGURE I.

# State Confidence Intervals - All Results (No Significant)

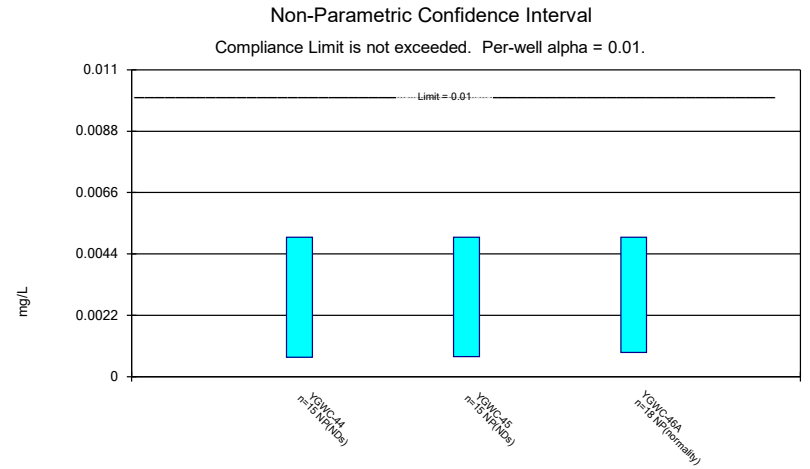
Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 11/2/2021, 5:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-45	0.003	0.0017	0.006	No	13	0.0029	0.0003606	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-46A	0.003	0.00029	0.006	No	16	0.002831	0.0006775	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-44	0.005	0.0007	0.01	No	15	0.003575	0.002088	66.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00072	0.01	No	15	0.003847	0.001979	73.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-46A	0.005	0.00087	0.01	No	18	0.002228	0.001804	27.78	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-44	0.1153	0.09674	2	No	15	0.106	0.01366	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.07154	0.05813	2	No	15	0.06483	0.009899	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46A	0.04138	0.03051	2	No	18	0.03594	0.008986	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-52	0.021	0.019	2	No	6	0.01967	0.001033	0	None	No	0.0155	NP (normality)
Cadmium (mg/L)	YGWC-46A	0.0005	0.00012	0.005	No	15	0.0004227	0.0001602	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-45	0.0061	0.0006	0.1	No	13	0.004406	0.001721	76.92	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-52	0.005	0.00073	0.1	No	6	0.002922	0.002278	50	None	No	0.0155	NP (normality)
Cobalt (mg/L)	YGWC-44	0.004	0.0017	0.035	No	15	0.0033	0.002706	6.667	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0008626	0.0006388	0.035	No	14	0.0007507	0.000158	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46A	0.02754	0.007995	0.035	No	18	0.01777	0.01615	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-52	0.002193	0.001174	0.035	No	6	0.001683	0.000371	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.063	0.2869	6.92	No	15	0.7386	0.6373	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.556	0.9342	6.92	No	15	1.245	0.459	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46A	1.706	0.9912	6.92	No	18	1.349	0.5911	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-52	0.852	0.268	6.92	No	5	0.6562	0.2633	0	None	No	0.031	NP (normality)
Fluoride, total (mg/L)	YGWC-44	0.12	0.07	4	No	16	0.09563	0.0175	81.25	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	YGWC-45	0.22	0.075	4	No	16	0.1685	0.1664	25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	YGWC-46A	0.13	0.08	4	No	19	0.1099	0.067	26.32	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-45	0.001	0.0001	0.0013	No	13	0.0009308	0.0002496	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-46A	0.001	0.000044	0.0013	No	16	0.0009403	0.000239	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-52	0.001	0.00006	0.0013	No	6	0.0003838	0.0004774	33.33	None	No	0.0155	NP (normality)
Lithium (mg/L)	YGWC-44	0.01344	0.01238	0.03	No	15	0.01291	0.0007842	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.0147	0.012	0.03	No	15	0.01328	0.001594	0	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-46A	0.01176	0.008917	0.03	No	18	0.01034	0.00235	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-52	0.004758	0.004076	0.03	No	6	0.004417	0.0002483	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0002	0.0002	0.002	No	11	0.0001883	0.00003889	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-46A	0.0002	0.00007	0.002	No	13	0.00019	0.00003606	92.31	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.0005	0.014	No	15	0.009367	0.002453	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.01	0.0012	0.014	No	15	0.00316	0.003555	20	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-46A	0.0039	0.0015	0.014	No	18	0.0034	0.003118	16.67	None	No	0.01	NP (normality)
Thallium (mg/L)	YGWC-44	0.001	0.00008	0.002	No	13	0.0009292	0.0002552	92.31	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-46A	0.001	0.000073	0.002	No	15	0.0009382	0.0002394	93.33	None	No	0.01	NP (NDs)

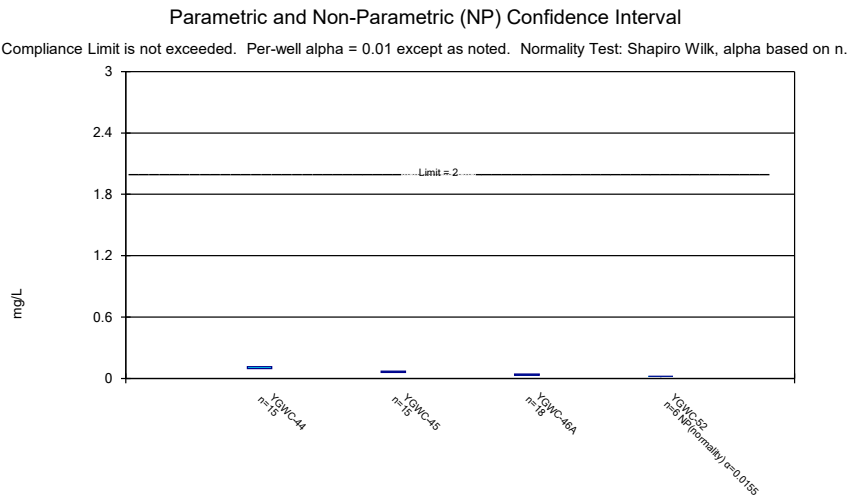




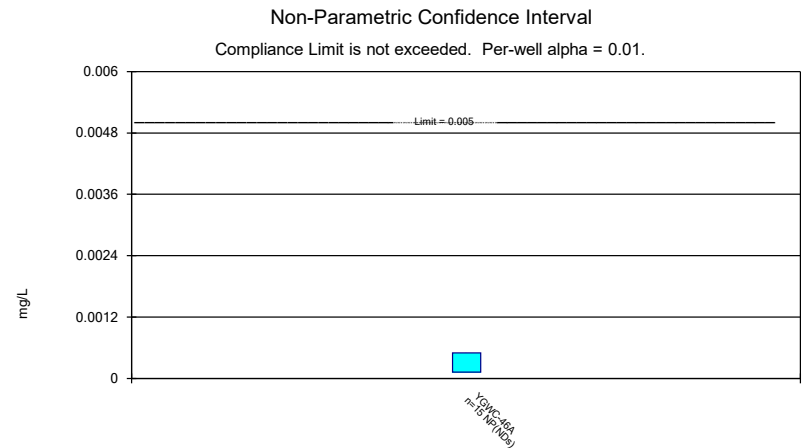
Constituent: Antimony Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1



Constituent: Arsenic Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1



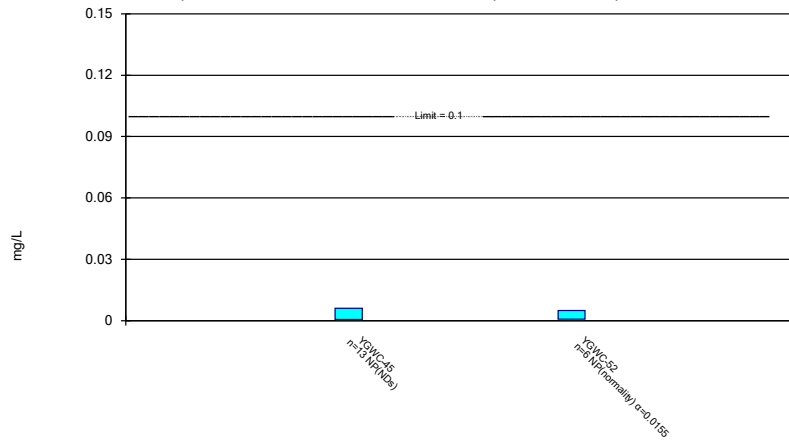
Constituent: Barium Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1



Constituent: Cadmium Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

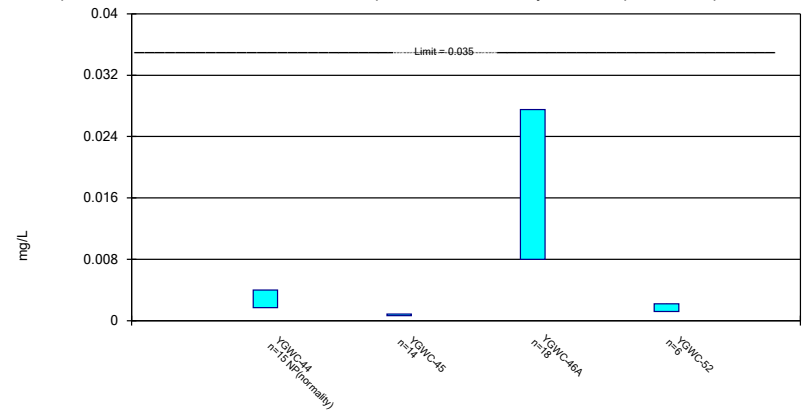
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Parametric and Non-Parametric (NP) Confidence Interval

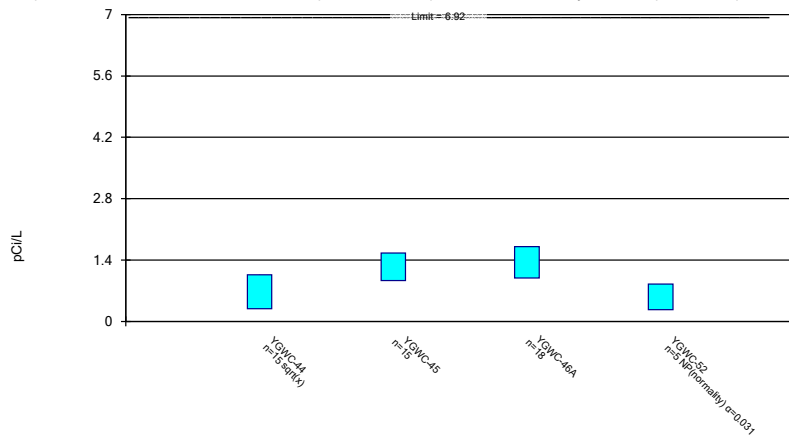
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Parametric and Non-Parametric (NP) Confidence Interval

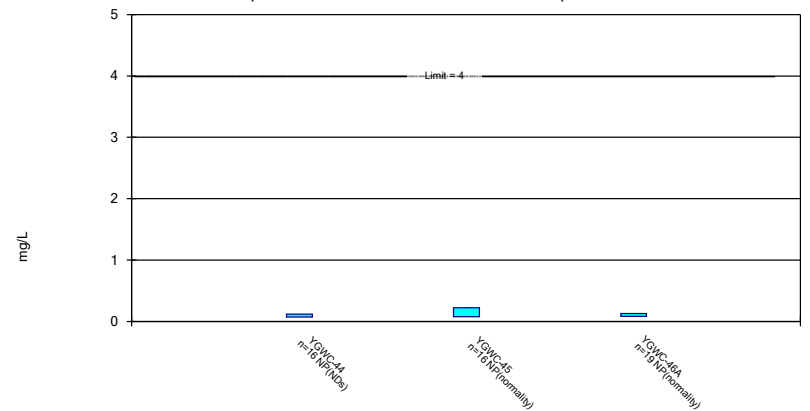
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

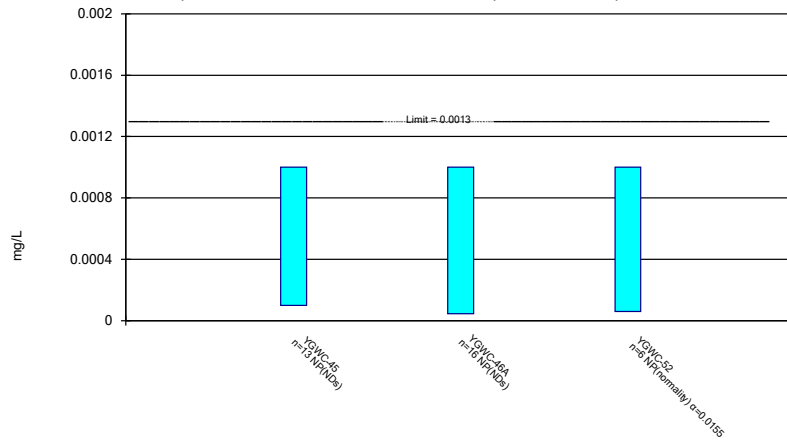
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Fluoride, total Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

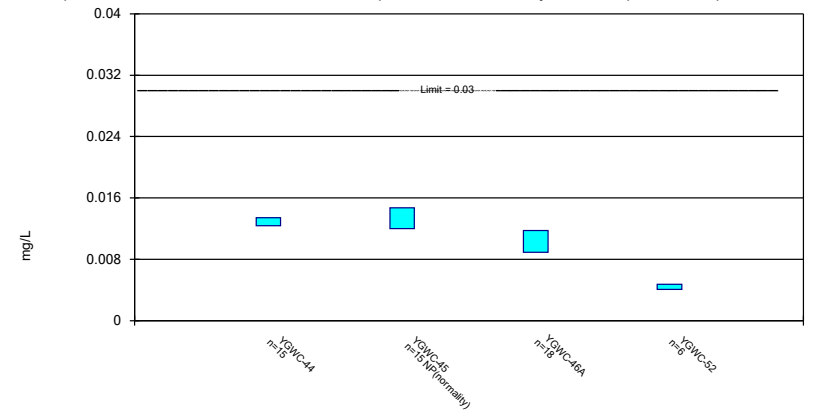
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Parametric and Non-Parametric (NP) Confidence Interval

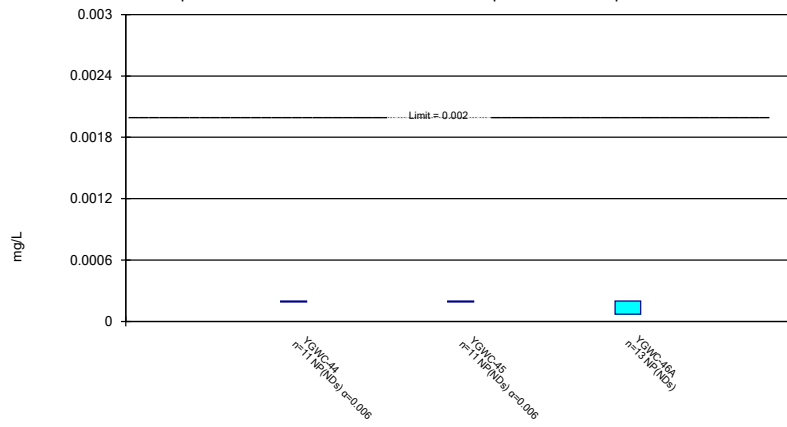
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

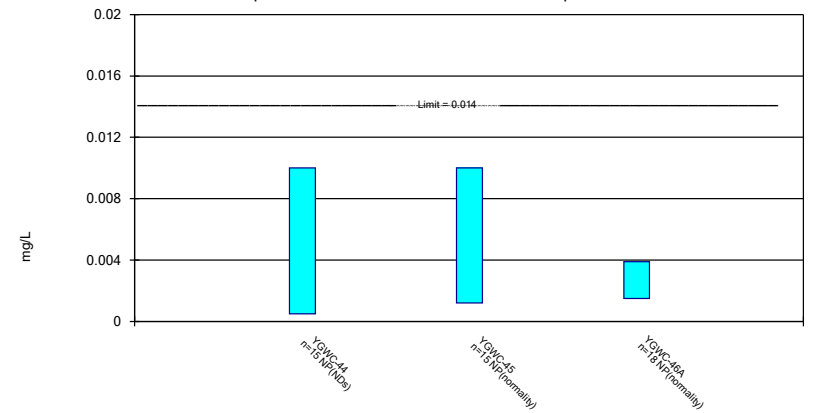
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Mercury Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

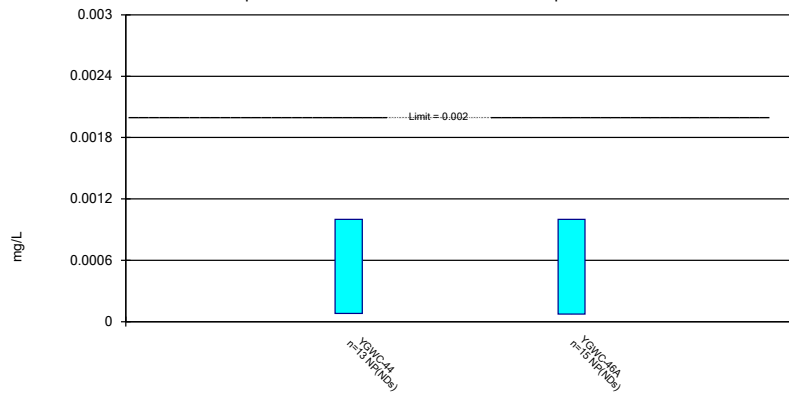
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Molybdenum Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

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



Constituent: Thallium Analysis Run 11/2/2021 5:24 PM View: Appendix IV  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-45	YGWC-46A
8/31/2016	<0.003	
9/1/2016		<0.003
11/14/2016	<0.003	
11/16/2016		<0.003
2/27/2017	<0.003	<0.003
5/8/2017		<0.003
5/9/2017	<0.003	
7/13/2017	<0.003	<0.003
10/10/2017	<0.003	
10/11/2017		<0.003
4/3/2018	<0.003	
4/4/2018		<0.003
9/19/2018	<0.003	<0.003
8/20/2019	<0.003	
8/21/2019		<0.003
7/6/2020		<0.003
8/28/2020	0.0017 (J)	0.00029 (J)
9/23/2020	<0.003	<0.003
10/7/2020		<0.003
11/12/2020		<0.003
3/1/2021	<0.003	
3/2/2021		<0.003
8/19/2021	<0.003	
8/27/2021		<0.003
Mean	0.0029	0.002831
Std. Dev.	0.0003606	0.0006775
Upper Lim.	0.003	0.003
Lower Lim.	0.0017	0.00029

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
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
3/17/2020	<0.005	<0.005	<0.005
7/6/2020			0.00079 (J)
8/27/2020	<0.005		
8/28/2020		<0.005	0.0015 (J)
9/22/2020	<0.005		
9/23/2020		<0.005	0.00091 (J)
10/7/2020			0.001 (J)
11/12/2020			0.0014 (J)
3/1/2021	<0.005	<0.005	
3/2/2021			0.0016 (J)
8/19/2021	<0.005	<0.005	
8/27/2021			0.0022 (J)
Mean	0.003575	0.003847	0.002228
Std. Dev.	0.002088	0.001979	0.001804
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.0007	0.00072	0.00087

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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	
3/17/2020	0.099	0.061	0.022	
7/6/2020			0.048	
8/27/2020	0.086			0.021
8/28/2020		0.053	0.05	
9/22/2020	0.096			0.021
9/23/2020		0.052	0.045	
10/7/2020			0.042	0.019
11/12/2020			0.042	0.019
3/1/2021	0.087	0.055		0.019
3/2/2021			0.044	
8/19/2021	0.089	0.055		
8/20/2021				0.019
8/27/2021			0.043	
Mean	0.106	0.06483	0.03594	0.01967
Std. Dev.	0.01366	0.009899	0.008986	0.001033
Upper Lim.	0.1153	0.07154	0.04138	0.021
Lower Lim.	0.09674	0.05813	0.03051	0.019

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A
9/1/2016	<0.0005
11/16/2016	<0.0005
2/27/2017	<0.0005
5/8/2017	0.0001 (J)
7/13/2017	<0.0005
10/11/2017	<0.0005
4/4/2018	<0.0005
9/19/2018	<0.0005
8/21/2019	0.00012 (J)
10/9/2019	<0.0005
3/17/2020	0.00012 (J)
7/6/2020	<0.0005
8/28/2020	<0.0005
11/12/2020	<0.0005
8/27/2021	<0.0005
Mean	0.0004227
Std. Dev.	0.0001602
Upper Lim.	0.0005
Lower Lim.	0.00012



# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-45	YGWC-52
8/31/2016	<0.005	
11/14/2016	0.0061 (J)	
2/27/2017	<0.005	
5/9/2017	<0.005	
7/13/2017	0.0006 (J)	
10/10/2017	<0.005	
4/3/2018	<0.005	
9/19/2018	<0.005	
8/20/2019	<0.005	
8/27/2020		<0.005
8/28/2020	<0.005	
9/22/2020		0.00073 (J)
9/23/2020	0.00058 (J)	
10/7/2020		0.00086 (J)
11/12/2020		<0.005
3/1/2021	<0.005	0.00094 (J)
8/19/2021	<0.005	
8/20/2021		<0.005
Mean	0.004406	0.002922
Std. Dev.	0.001721	0.002278
Upper Lim.	0.0061	0.005
Lower Lim.	0.0006	0.00073

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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	<0.005		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	
3/17/2020	0.004 (J)	0.00081 (J)	0.022	
7/6/2020			0.0041 (J)	
8/27/2020	0.003 (J)			0.0022 (J)
8/28/2020		0.00055 (J)	0.0038 (J)	
9/22/2020	0.0065			0.0019 (J)
9/23/2020		0.00053 (J)	0.0015 (J)	
10/7/2020			0.0014 (J)	0.0019 (J)
11/12/2020			0.001 (J)	0.0015 (J)
3/1/2021	0.0033 (J)	0.00062 (J)		0.0013 (J)
3/2/2021			0.00096 (J)	
8/19/2021	0.0014 (J)	0.00048 (J)		
8/20/2021				0.0013 (J)
8/27/2021			0.00056 (J)	
Mean	0.0033	0.0007507	0.01777	0.001683
Std. Dev.	0.002706	0.000158	0.01615	0.000371
Upper Lim.	0.004	0.0008626	0.02754	0.002193
Lower Lim.	0.0017	0.0006388	0.007995	0.001174

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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)	
3/17/2020	1.37	1.44	1.74	
7/6/2020			2.27	
8/27/2020	0.0859 (U)			0.852 (U)
8/28/2020		0.983 (U)	2.34	
9/22/2020	0.327 (U)			0.268 (U)
9/23/2020		0.746 (U)	0.575 (U)	
10/7/2020			1.81	0.819 (U)
3/1/2021	0.0694 (U)	1.28		0.846 (U)
3/2/2021			1.64	
8/19/2021	0.261 (U)	1.38		
8/20/2021				0.496 (U)
8/27/2021			1.83	
Mean	0.7386	1.245	1.349	0.6562
Std. Dev.	0.6373	0.459	0.5911	0.2633
Upper Lim.	1.063	1.556	1.706	0.852
Lower Lim.	0.2869	0.9342	0.9912	0.268

# Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
8/31/2016	<0.1	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	<0.1	0.11 (J)	0.35
10/10/2017	<0.1	0.39	
10/11/2017			<0.1
4/3/2018		<0.1	
4/4/2018	<0.1		<0.1
9/19/2018	<0.1	<0.1	<0.1
3/27/2019	<0.1	0.18 (J)	0.12 (J)
8/20/2019	<0.1	<0.1	
8/21/2019			<0.1
10/8/2019	<0.1		
10/9/2019		<0.1	0.12 (J)
3/17/2020	<0.1	0.076 (J)	<0.1
7/6/2020			0.12
8/27/2020	<0.1		
8/28/2020		0.07 (J)	0.12
9/22/2020	<0.1		
9/23/2020		0.082 (J)	0.12
10/7/2020			0.13
11/12/2020			0.084 (J)
3/1/2021	<0.1	0.073 (J)	
3/2/2021			0.12
8/19/2021	<0.1	0.075 (J)	
8/27/2021			0.13
Mean	0.09563	0.1685	0.1099
Std. Dev.	0.0175	0.1664	0.067
Upper Lim.	0.12	0.22	0.13
Lower Lim.	0.07	0.075	0.08

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-45	YGWC-46A	YGWC-52
8/31/2016	<0.001		
9/1/2016		<0.001	
11/14/2016	<0.001		
11/16/2016		<0.001	
2/27/2017	<0.001	<0.001	
5/8/2017		<0.001	
5/9/2017	0.0001 (J)		
7/13/2017	<0.001	<0.001	
10/10/2017	<0.001		
10/11/2017		<0.001	
4/3/2018	<0.001		
4/4/2018		<0.001	
9/19/2018	<0.001	<0.001	
8/20/2019	<0.001		
8/21/2019		<0.001	
7/6/2020		<0.001	
8/27/2020			9.2E-05 (J)
8/28/2020	<0.001	<0.001	
9/22/2020			6E-05 (J)
9/23/2020	<0.001	<0.001	
10/7/2020		<0.001	<0.001
11/12/2020		4.4E-05 (J)	6.4E-05 (J)
3/1/2021	<0.001		8.7E-05 (J)
3/2/2021		<0.001	
8/19/2021	<0.001		
8/20/2021			<0.001
8/27/2021		<0.001	
Mean	0.0009308	0.0009403	0.0003838
Std. Dev.	0.0002496	0.000239	0.0004774
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.0001	4.4E-05	6E-05

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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)	
3/17/2020	0.013 (J)	0.014 (J)	0.0071 (J)	
7/6/2020			0.011 (J)	
8/27/2020	0.013 (J)			0.0048 (J)
8/28/2020		0.012 (J)	0.012 (J)	
9/22/2020	0.013 (J)			0.0046 (J)
9/23/2020		0.012 (J)	0.013 (J)	
10/7/2020			0.011 (J)	0.0041 (J)
11/12/2020			0.014 (J)	0.0044 (J)
3/1/2021	0.013 (J)	0.012 (J)		0.0043 (J)
3/2/2021			0.013 (J)	
8/19/2021	0.013 (J)	0.012 (J)		
8/20/2021				0.0043 (J)
8/27/2021			0.014 (J)	
Mean	0.01291	0.01328	0.01034	0.004417
Std. Dev.	0.0007842	0.001594	0.00235	0.0002483
Upper Lim.	0.01344	0.0147	0.01176	0.004758
Lower Lim.	0.01238	0.012	0.008917	0.004076

# Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
8/31/2016	<0.0002	<0.0002	
9/1/2016			<0.0002
11/14/2016		<0.0002	
11/15/2016	<0.0002		
11/16/2016			<0.0002
2/27/2017		<0.0002	<0.0002
2/28/2017	<0.0002		
5/8/2017	<0.0002		<0.0002
5/9/2017		<0.0002	
7/13/2017	<0.0002	<0.0002	<0.0002
10/10/2017	<0.0002	<0.0002	
10/11/2017			<0.0002
4/3/2018		<0.0002	
4/4/2018	<0.0002		<0.0002
9/19/2018	6E-05 (J)	7.1E-05 (J)	7E-05 (J)
8/20/2019	<0.0002	<0.0002	
8/21/2019			<0.0002
7/6/2020			<0.0002
8/27/2020	<0.0002		
8/28/2020		<0.0002	<0.0002
11/12/2020			<0.0002
8/19/2021	<0.0002	<0.0002	
8/27/2021			<0.0002
Mean	0.0001873	0.0001883	0.00019
Std. Dev.	4.221E-05	3.889E-05	3.606E-05
Upper Lim.	0.0002	0.0002	0.0002
Lower Lim.	0.0002	0.0002	7E-05

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
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)
3/17/2020	<0.01	0.0016 (J)	0.0015 (J)
7/6/2020			0.0026 (J)
8/27/2020	<0.01		
8/28/2020		0.0013 (J)	0.003 (J)
9/22/2020	<0.01		
9/23/2020		0.0011 (J)	0.0025 (J)
10/7/2020			0.0024 (J)
11/12/2020			0.0019 (J)
3/1/2021	<0.01	0.0012 (J)	
3/2/2021			0.0023 (J)
8/19/2021	<0.01	0.0012 (J)	
8/27/2021			0.0022 (J)
Mean	0.009367	0.00316	0.0034
Std. Dev.	0.002453	0.003555	0.003118
Upper Lim.	0.01	0.01	0.0039
Lower Lim.	0.0005	0.0012	0.0015



# Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 11/2/2021 5:25 PM View: Appendix IV

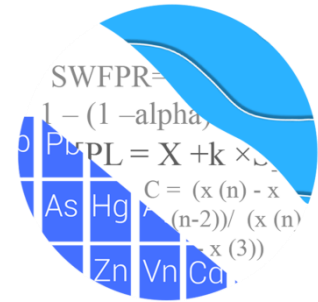
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-44	YGWC-46A
8/31/2016	<0.001	
9/1/2016		<0.001
11/15/2016	<0.001	
11/16/2016		<0.001
2/27/2017		<0.001
2/28/2017	<0.001	
5/8/2017	<0.001	<0.001
7/13/2017	<0.001	<0.001
10/10/2017	<0.001	
10/11/2017		<0.001
4/4/2018	<0.001	<0.001
9/19/2018	<0.001	<0.001
8/20/2019	<0.001	
8/21/2019		<0.001
10/8/2019	<0.001	
10/9/2019		<0.001
3/17/2020	8E-05 (J)	<0.001
7/6/2020		7.3E-05 (J)
8/27/2020	<0.001	
8/28/2020		<0.001
11/12/2020		<0.001
8/19/2021	<0.001	
8/27/2021		<0.001
Mean	0.0009292	0.0009382
Std. Dev.	0.0002552	0.0002394
Upper Lim.	0.001	0.001
Lower Lim.	8E-05	7.3E-05

# **February 2022 Event**

## GROUNDWATER STATS CONSULTING



July 29, 2022

Southern Company Services  
Attn: Ms. Lauren Coker  
241 Ralph McGill Blvd NE, Bin 10160  
Atlanta, Georgia 30308-3374

Re: Plant Yates Ash Pond 1 (AP-1)  
February 2022 Sample Event

Dear Ms. Coker,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the February 2022 semi-annual Groundwater Detection and Assessment Monitoring statistical analysis for Georgia Power Company's Plant Yates AP-1. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10, and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling for the Appendix III parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. Semi-annual sampling of the majority of Appendix IV constituents has been performed for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:**
  - **AP-1:** YGWA-47
  - **AP-2:** YGWA-1D, YGWA-1I, YGWA-2I, YGWA-3D, YGWA-3I, YGWA-14S and, YGWA-30I
  - **Gypsum Landfill:** GWA-2
  - **AMA-R6:** YGWA-17S, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-21I, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D, and YGWA-5I
- **Downgradient wells:** YGWC-44, YGWC-45, YGWC-46A, and YGWC-52

Well YGWC-52 was installed in June 2020, and baseline sampling began in August 2020. Well YGWC-46 was abandoned in June 2020, and baseline sampling began at well YGWC-46A in July 2020 to supplement existing data in well YGWC-46. Well YGWC-46 was screened during the 2019 evaluation and the findings of that report are summarized below. Reported observations from the February 2022 sample event for Appendix III constituents at YGWC-46A are compared to established interwell prediction limits in this analysis.

Confidence intervals have been used to evaluate the combined data from both wells for the Appendix IV constituents. All concentrations from both wells are below established MCLs. A minimum of 8 samples have been collected from new well YGWC-46A; therefore, the Mann-Whitney test of medians was used to evaluate whether the medians of both wells are statistically similar for the Appendix IV constituents. In cases where statistically significant differences are identified at the 99% confidence level, the historical record is truncated so that only data from new well YGWC-46A, which may be more representative of present-day groundwater quality, are evaluated with confidence interval comparisons to respective Groundwater Protection Standards. This process is described below.

All data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Senior Statistician to Groundwater Stats Consulting.

The CCR program consists of the constituents listed below. The terms “parameters” and “constituents” are used interchangeably.

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of Appendix IV downgradient well/constituent pairs with 100% non-detects follows this letter.

Combined upgradient well data from all units at Plant Yates are utilized to construct statistical limits for Appendix III and IV parameters. The absence of samples from upgradient wells will affect the sample size of the combined background data set that is used for interwell limits among all units at Plant Yates; however, the calculated limits should not be affected greatly.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data and this generally gives the most conservative limit in each case. In time series plots, a single reporting limit substitution is used across all wells for a given parameter since the wells are plotted as a group. For interwell prediction and tolerance limits, a single reporting limit substitution is used across upgradient wells for a given parameter. Regarding the case of cobalt, due to varying detection limits in individual wells, the most recent reporting limit of 0.005 mg/L was substituted across all wells for all calculations and reports.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

### **Summary of Statistical Methods – Appendix III and IV Parameters**

Based on the April 2019 evaluation and state and federal regulatory requirements described below, the following methods were selected for Appendix III and IV constituents:

- Appendix III: Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- Appendix IV: Confidence intervals on downgradient well data compared against Groundwater Protections Standards (GWPS) for Appendix IV constituents

The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. Parametric prediction limits (or tolerance limits or confidence intervals as applicable) are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric prediction limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric prediction limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling non-detects (USEPA, 2009):

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

## **Summary of Background Screening – Appendix III and IV Constituents - Conducted in April 2019**

### Outlier Analysis

Time series plots were used to identify suspected outliers for the original well network which consisted of upgradient well YGWA-47 and downgradient wells YGWC-44, YGWC-45, and YGWC-46, or extreme values that would result in limits that are not representative of the current background data population. All other upgradient well data from neighboring units were previously screened for outliers with their respective reports. Suspected outliers at all wells for Appendix III and IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, a couple outliers were identified. While this did not occur in the present data set, when the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

The reported non-detect value of 0.01 mg/L for cobalt at well YGWC-45 and the detected value of 6.3 s.u. for pH at well YGWA-47 were flagged as outliers because they were both unusually high during a single event compared to all other values at neighboring wells. The high non-detect value for cobalt does not provide any useful information. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages will display the flagged value in a lighter font as well.

### Seasonality

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

## Trend Test Evaluation

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at upgradient well YGWA-47 and downgradient wells YGWC-44, YGWC-45, and YGWC-46 to identify whether statistically significant increasing or decreasing trends were present. The trend analyses showed a statistically significant increasing trend for lithium in well YGWC-46. Concentrations of lithium at this well decreased in 2019 and increased again in 2020.

The reports were submitted with the background screening analysis, and all other upgradient wells at neighboring units were evaluated for trends with their respective reports. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. While no records required adjustment, if that is necessary in the future a summary report will be provided to show the date ranges used in construction of the statistical limits.

## Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) is typically used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach (interwell or intrawell). However, only one upgradient well was present at the time of the screening and the ANOVA requires a minimum of two wells. Therefore, the ANOVA was not utilized in the background screening.

Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter. While data were further tested for intrawell eligibility during the screening, interwell methods will be used for all Appendix III constituents in accordance with Georgia EPD requirements.



## Statistical Analysis of Appendix III Parameters – February 2022

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed for potential outliers during this analysis. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. No new values were flagged for Appendix III parameters, and a summary of flagged outliers follows this report (Figure C).

### Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical pooled upgradient well data through February 2022 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The February 2022 sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs).

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When a resample confirms the initial exceedance, a statistically significant increase is identified, and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result. Therefore, no exceedance is noted, and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. A summary table of the interwell prediction limits follows this letter. Prediction limit exceedances were noted for the following Appendix III well/constituent pairs:

- Boron: YGWC-44, YGWC-45, and YGWC-46A
- Calcium: YGWC-45, YGWC-46A, and YGWC-52
- Chloride: YGWC-44 and YGWC-46A
- Sulfate: YGWC-45 and YGWC-46A
- TDS: YGWC-44, YGWC-45, YGWC-46A, and YGWC-52

### Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction

limit in downgradient wells to identify whether similar patterns exist upgradient of the site. Upgradient trends are an indication of natural variability in groundwater unrelated to practices at the site. Both a summary and complete graphical results of the trend tests follow this report. No statistically significant increasing trends were identified for any downgradient wells. The following statistically significant trends were identified:

Increasing:

- Calcium: YGWA-1D, YGWA-21I, YGWA-17S, and GWA-2 (all upgradient)
- Chloride: YGWA-17S and YGWA-20S (both upgradient)
- Sulfate: YGWA-1D, YGWA-3D, YGWA-3I, YGWA-5I, and GWA-2 (all upgradient)
- TDS: GWA-2 (upgradient)

Decreasing:

- Boron: YGWA-40 (upgradient)
- Calcium: YGWA-1I, YGWA-5D, YGWA-18S, and YGWA-47 (all upgradient)
- Chloride: YGWA-3D, YGWA-3I, YGWA-5D, and YGWA-47 (all upgradient)
- Sulfate: YGWA-5D (upgradient), YGWA-18I (upgradient), YGWA-39 (upgradient), YGWA-40 (upgradient), YGWA-47 (upgradient), YGWC-45, and YGWC-46A
- TDS: YGWA-5D, YGWA-40, and YGWA-47 (all upgradient)

A complete list of trend test results and all statistically significant increasing and decreasing trends may be found following this letter in the Trend Test Summary Table.

### **Statistical Analysis of Appendix IV Parameters – February 2022**

For analysis of Appendix IV parameters, confidence intervals for each downgradient well/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Downgradient well/constituent pairs that have 100% non-detects or trace values below the reporting limits do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis.

A high value of 0.072 mg/L for cobalt at upgradient well GWA-2 from the February 2022 sample event was flagged in order to maintain statistical limits that are conservative (i.e., lower) from a regulatory perspective. The more recent reported measurements since August 2020 were previously flagged as these measurements were two orders of magnitude higher than remaining measurements at this well. If further studies indicate these measurements represent natural variation in groundwater quality, the values will be

included in construction of interwell prediction limits. A summary of flagged outliers follows this report (Figure C).

### Mann-Whitney Test of Medians

During this analysis, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of observations sampled before July 2020 at abandoned well YGWC-46 to the medians of 8 most recent observations sampled at well YGWC-46A through February 2022 (Figure F). When no variation is present between historical data and compliance samples, the Mann-Whitney test is not performed, which is the case for beryllium, chromium, and selenium. Cadmium, combined radium 226 + 228, mercury, and thallium do not yet have 8 samples beyond July 2020 due to historical sampling procedures; therefore, they were not tested at this time.

When the medians of the two groups were statistically significantly different at the 99% confidence level, the historical data sampled from abandoned well YGWC-46 was truncated to only use data from well YGWC-46A. Statistically significant differences were found for barium, cobalt, and lithium. A list of the constituents using truncated records follows this report.

### Interwell Upper Tolerance Limits

First, interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through February 2022 for Appendix IV constituents (Figure G). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. When the alpha level (or false positive rate) for a nonparametric limit is shown as NaN in the results table, it indicates that the background sample size is large enough such that the resulting alpha level is too small to display in the results table.

### Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a). On July 30, 2018, US EPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Effective on February 22, 2022, Georgia EPD incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). In accordance with the updated Rules, the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, Federal and State CCR Rules specify levels for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

Following Georgia EPD Rule requirements and the Federal CCR requirements, GWPS were established for statistical comparison of Appendix IV constituents for this sample event (Figure H).

### Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals using data through February 2022 were constructed for each of the Appendix IV constituents in each downgradient well with 4 or more samples (Figure I). Beryllium and selenium were 100% non-detects at all downgradient wells.

The Sanitas software was used to calculate the tolerance limits and the confidence intervals, either parametric or nonparametric, as appropriate. Confidence intervals were compared to the GWPS prepared as described above. Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. Summaries of the confidence interval results, along with graphical comparison against GWPS follow this letter. No exceedances were identified.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Yates AP-1. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Andrew T. Collins  
Project Manager



Kristina L. Rayner  
Senior Statistician

# 100% Non-Detects: Appendix IV Downgradient

Analysis Run 4/27/2022 12:26 PM View: Appendix IV - Confidence Intervals  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

Antimony (mg/L)  
YGWC-44, YGWC-52

Arsenic (mg/L)  
YGWC-52

Beryllium (mg/L)  
YGWC-44, YGWC-45, YGWC-46A, YGWC-52

Cadmium (mg/L)  
YGWC-44, YGWC-45, YGWC-52

Chromium (mg/L)  
YGWC-44, YGWC-46A

Fluoride, total (mg/L)  
YGWC-52

Lead (mg/L)  
YGWC-44

Mercury (mg/L)  
YGWC-52

Molybdenum (mg/L)  
YGWC-52

Selenium (mg/L)  
YGWC-44, YGWC-45, YGWC-46A, YGWC-52

Thallium (mg/L)  
YGWC-45, YGWC-52

# Date Ranges

Date: 4/27/2022 12:11 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

Barium (mg/L)

YGWC-46A overall:7/6/2020-2/9/2022

Cobalt (mg/L)

YGWC-46A overall:7/6/2020-2/9/2022

Lithium (mg/L)

YGWC-46A overall:7/6/2020-2/9/2022

# Interwell Prediction Limits - Significant Results

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 3/17/2022, 2:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	N	Bg	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	YGWC-44	0.16	n/a	2/9/2022	0.58	Yes	331	n/a	n/a	48.04	n/a	n/a	0.00004922	NP Inter (normality)	1 of 2	
Boron, total (mg/L)	YGWC-45	0.16	n/a	2/9/2022	0.34	Yes	331	n/a	n/a	48.04	n/a	n/a	0.00004922	NP Inter (normality)	1 of 2	
Boron, total (mg/L)	YGWC-46A	0.16	n/a	2/9/2022	2.1	Yes	331	n/a	n/a	48.04	n/a	n/a	0.00004922	NP Inter (normality)	1 of 2	
Calcium, total (mg/L)	YGWC-45	37	n/a	2/9/2022	49.3	Yes	331	n/a	n/a	0.9063	n/a	n/a	0.00004922	NP Inter (normality)	1 of 2	
Calcium, total (mg/L)	YGWC-46A	37	n/a	2/9/2022	109	Yes	331	n/a	n/a	0.9063	n/a	n/a	0.00004922	NP Inter (normality)	1 of 2	
Calcium, total (mg/L)	YGWC-52	37	n/a	2/9/2022	42.2	Yes	331	n/a	n/a	0.9063	n/a	n/a	0.00004922	NP Inter (normality)	1 of 2	
Chloride, Total (mg/L)	YGWC-44	10.9	n/a	2/9/2022	13.5	Yes	331	n/a	n/a	0	n/a	n/a	0.00004922	NP Inter (normality)	1 of 2	
Chloride, Total (mg/L)	YGWC-46A	10.9	n/a	2/9/2022	28.2	Yes	331	n/a	n/a	0	n/a	n/a	0.00004922	NP Inter (normality)	1 of 2	
Sulfate as SO4 (mg/L)	YGWC-45	160	n/a	2/9/2022	164	Yes	331	n/a	n/a	6.042	n/a	n/a	0.00004922	NP Inter (normality)	1 of 2	
Sulfate as SO4 (mg/L)	YGWC-46A	160	n/a	2/9/2022	415	Yes	331	n/a	n/a	6.042	n/a	n/a	0.00004922	NP Inter (normality)	1 of 2	
Total Dissolved Solids [TDS] (mg/L)	YGWC-44	211.1	n/a	2/9/2022	311	Yes	331	10.06	2.585	0.6042	None	sqrt(x)	0.00188	Param Inter	1 of 2	
Total Dissolved Solids [TDS] (mg/L)	YGWC-45	211.1	n/a	2/9/2022	400	Yes	331	10.06	2.585	0.6042	None	sqrt(x)	0.00188	Param Inter	1 of 2	
Total Dissolved Solids [TDS] (mg/L)	YGWC-46A	211.1	n/a	2/9/2022	846	Yes	331	10.06	2.585	0.6042	None	sqrt(x)	0.00188	Param Inter	1 of 2	
Total Dissolved Solids [TDS] (mg/L)	YGWC-52	211.1	n/a	2/9/2022	278	Yes	331	10.06	2.585	0.6042	None	sqrt(x)	0.00188	Param Inter	1 of 2	

# Interwell Prediction Limits - All Results

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 3/17/2022, 2:50 PM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg	N	Bg	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
<b>Boron, total (mg/L)</b>	<b>YGWC-44</b>	<b>0.16</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>0.58</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>48.04</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Boron, total (mg/L)</b>	<b>YGWC-45</b>	<b>0.16</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>0.34</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>48.04</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Boron, total (mg/L)</b>	<b>YGWC-46A</b>	<b>0.16</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>2.1</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>48.04</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Boron, total (mg/L)	YGWC-52	0.16	n/a	2/9/2022	0.0089J	No	331	n/a	n/a	n/a	48.04	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-44	37	n/a	2/9/2022	30.8	No	331	n/a	n/a	n/a	0.9063	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Calcium, total (mg/L)</b>	<b>YGWC-45</b>	<b>37</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>49.3</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9063</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium, total (mg/L)</b>	<b>YGWC-46A</b>	<b>37</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>109</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9063</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium, total (mg/L)</b>	<b>YGWC-52</b>	<b>37</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>42.2</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9063</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Chloride, Total (mg/L)</b>	<b>YGWC-44</b>	<b>10.9</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>13.5</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride, Total (mg/L)	YGWC-45	10.9	n/a	2/9/2022	4.9	No	331	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Chloride, Total (mg/L)</b>	<b>YGWC-46A</b>	<b>10.9</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>28.2</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride, Total (mg/L)	YGWC-52	10.9	n/a	2/9/2022	3.2	No	331	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	YGWC-44	0.68	n/a	2/9/2022	0.1ND	No	400	n/a	n/a	n/a	67.5	n/a	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-45	0.68	n/a	2/9/2022	0.063J	No	400	n/a	n/a	n/a	67.5	n/a	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-46A	0.68	n/a	2/9/2022	0.12	No	400	n/a	n/a	n/a	67.5	n/a	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-52	0.68	n/a	2/9/2022	0.1ND	No	400	n/a	n/a	n/a	67.5	n/a	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	YGWC-44	8.39	4.4	2/9/2022	5.73	No	410	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-45	8.39	4.4	2/9/2022	6.15	No	410	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-46A	8.39	4.4	2/9/2022	6.98	No	410	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-52	8.39	4.4	2/9/2022	5.99	No	410	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-44	160	n/a	2/9/2022	121	No	331	n/a	n/a	n/a	6.042	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-45</b>	<b>160</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>164</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>6.042</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-46A</b>	<b>160</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>415</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>6.042</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate as SO4 (mg/L)	YGWC-52	160	n/a	2/9/2022	119	No	331	n/a	n/a	n/a	6.042	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-44</b>	<b>211.1</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>311</b>	<b>Yes</b>	<b>331</b>	<b>10.06</b>	<b>2.585</b>	<b>0.6042</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter</b>	<b>1 of 2</b>	
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-45</b>	<b>211.1</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>400</b>	<b>Yes</b>	<b>331</b>	<b>10.06</b>	<b>2.585</b>	<b>0.6042</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter</b>	<b>1 of 2</b>	
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-46A</b>	<b>211.1</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>846</b>	<b>Yes</b>	<b>331</b>	<b>10.06</b>	<b>2.585</b>	<b>0.6042</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter</b>	<b>1 of 2</b>	
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-52</b>	<b>211.1</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>278</b>	<b>Yes</b>	<b>331</b>	<b>10.06</b>	<b>2.585</b>	<b>0.6042</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter</b>	<b>1 of 2</b>	



# Appendix III Trend Test Summary - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 3/17/2022, 2:54 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	YGWA-40 (bg)	-0.01631	-64	-53	Yes	15	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-47 (bg)	-1.677	-83	-53	Yes	15	6.667	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-17S (bg)	0.1305	91	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-18S (bg)	-0.07569	-96	-68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-211 (bg)	1.174	97	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-5D (bg)	-1.819	-87	-68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	GWA-2 (bg)	3.816	78	58	Yes	16	6.25	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-1D (bg)	0.7001	77	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-1I (bg)	-0.0958	-81	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-47 (bg)	-0.4996	-72	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-17S (bg)	0.5046	109	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-20S (bg)	0.1624	93	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-5D (bg)	-0.8339	-113	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-3D (bg)	-0.05275	-85	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-3I (bg)	-0.03927	-78	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-47 (bg)	-19.14	-92	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWC-45	-7.091	-64	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-18I (bg)	-0.1558	-69	-68	Yes	18	22.22	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-39 (bg)	-2.833	-59	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-40 (bg)	-9.797	-77	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5D (bg)	-3.238	-119	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5I (bg)	0.0955	100	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	GWA-2 (bg)	18.82	81	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-1D (bg)	0.9733	103	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-3D (bg)	0.4345	86	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-3I (bg)	1.183	74	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWC-46A	-61.76	-98	-74	Yes	19	5.263	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-47 (bg)	-13.78	-75	-53	Yes	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-40 (bg)	-13.89	-55	-53	Yes	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-5D (bg)	-15.08	-97	-68	Yes	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	GWA-2 (bg)	24.56	61	58	Yes	16	0	n/a	n/a	0.01	NP

# Appendix III Trend Test Summary - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 3/17/2022, 2:54 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	YGWA-47 (bg)	-0.0007235	-42	-53	No	15	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWC-44	-0.02072	-41	-53	No	15	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWC-45	0	0	53	No	15	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-17S (bg)	0.00005921	8	68	No	18	11.11	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18I (bg)	0	-26	-68	No	18	77.78	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18S (bg)	0.0001172	14	68	No	18	22.22	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-20S (bg)	0	-11	-68	No	18	88.89	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-21I (bg)	0	-46	-68	No	18	61.11	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-39 (bg)	0.007949	41	53	No	15	6.667	n/a	n/a	0.01	NP
<b>Boron, total (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-0.01631</b>	<b>-64</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron, total (mg/L)	YGWA-4I (bg)	0	-5	-68	No	18	66.67	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5D (bg)	0.0003037	26	68	No	18	11.11	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5I (bg)	0	-32	-68	No	18	61.11	n/a	n/a	0.01	NP
Boron, total (mg/L)	GWA-2 (bg)	0	17	58	No	16	62.5	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-14S (bg)	-0.0004307	-27	-68	No	18	11.11	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1D (bg)	0.0003452	22	68	No	18	33.33	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1I (bg)	0	-13	-68	No	18	72.22	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-2I (bg)	0	-10	-68	No	18	77.78	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-30I (bg)	0	-22	-68	No	18	83.33	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3D (bg)	0	-8	-68	No	18	55.56	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3I (bg)	0	-19	-68	No	18	88.89	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWC-46A	0.05753	31	74	No	19	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-1.677</b>	<b>-83</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>6.667</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWC-45	-0.1554	-13	-53	No	15	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-17S (bg)</b>	<b>0.1305</b>	<b>91</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-18I (bg)	0.02072	10	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-18S (bg)</b>	<b>-0.07569</b>	<b>-96</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-20S (bg)	0.04138	51	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-21I (bg)</b>	<b>1.174</b>	<b>97</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-39 (bg)	0.9186	40	53	No	15	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-40 (bg)	-0.7684	-45	-53	No	15	6.667	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-4I (bg)	0.009311	4	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-1.819</b>	<b>-87</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-5I (bg)	0.06854	66	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>GWA-2 (bg)</b>	<b>3.816</b>	<b>78</b>	<b>58</b>	<b>Yes</b>	<b>16</b>	<b>6.25</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-14S (bg)	-0.00868	-30	-68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-1D (bg)</b>	<b>0.7001</b>	<b>77</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium, total (mg/L)</b>	<b>YGWA-1I (bg)</b>	<b>-0.0958</b>	<b>-81</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-2I (bg)	0.08578	11	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-30I (bg)	0.006518	17	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3D (bg)	0.5552	59	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3I (bg)	0.6025	52	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWC-46A	2.932	61	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWC-52	-6.616	-11	-18	No	7	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-0.4996</b>	<b>-72</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWC-44	0.1092	29	53	No	15	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-17S (bg)</b>	<b>0.5046</b>	<b>109</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWA-18I (bg)	0.0841	61	68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-18S (bg)	0.1771	67	68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-20S (bg)</b>	<b>0.1624</b>	<b>93</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWA-21I (bg)	-0.1442	-57	-68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-39 (bg)	0.6239	40	53	No	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-40 (bg)	0.2865	51	53	No	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-4I (bg)	0.08324	35	68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-0.8339</b>	<b>-113</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

# Appendix III Trend Test Summary - All Results

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 3/17/2022, 2:54 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride, Total (mg/L)	YGWA-5I (bg)	0	1	68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	GWA-2 (bg)	0.2307	58	58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-14S (bg)	0.1623	47	68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-1D (bg)	-0.01968	-51	-68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-1I (bg)	-0.02497	-49	-68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-2I (bg)	-0.03702	-46	-68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-30I (bg)	0	-15	-68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-3D (bg)</b>	<b>-0.05275</b>	<b>-85</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride, Total (mg/L)</b>	<b>YGWA-3I (bg)</b>	<b>-0.03927</b>	<b>-78</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWC-46A	-1.169	-46	-74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-19.14</b>	<b>-92</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-45</b>	<b>-7.091</b>	<b>-64</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-17S (bg)	0.07043	47	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-18I (bg)</b>	<b>-0.1558</b>	<b>-69</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>22.22</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-18S (bg)	-0.1518	-54	-68	No	18	11.11	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-20S (bg)	0	36	68	No	18	66.67	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-21I (bg)	-0.2086	-31	-68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-39 (bg)</b>	<b>-2.833</b>	<b>-59</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-9.797</b>	<b>-77</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-4I (bg)	0.0866	30	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-3.238</b>	<b>-119</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-5I (bg)</b>	<b>0.0955</b>	<b>100</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>GWA-2 (bg)</b>	<b>18.82</b>	<b>81</b>	<b>58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-14S (bg)	0.04468	14	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-1D (bg)</b>	<b>0.9733</b>	<b>103</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-1I (bg)	-0.1386	-20	-68	No	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-2I (bg)	0.7686	44	68	No	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-30I (bg)	-0.03944	-14	-68	No	18	11.11	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-3D (bg)</b>	<b>0.4345</b>	<b>86</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-3I (bg)</b>	<b>1.183</b>	<b>74</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-46A</b>	<b>-61.76</b>	<b>-98</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>5.263</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-13.78</b>	<b>-75</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWC-44	-9.353	-40	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-45	-2.656	-16	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-17S (bg)	4.594	38	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18I (bg)	-0.8196	-15	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18S (bg)	0.4481	12	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-20S (bg)	3.147	36	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-21I (bg)	12.83	63	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-39 (bg)	28.42	53	53	No	15	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-13.89</b>	<b>-55</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWA-4I (bg)	0.5267	6	68	No	18	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-15.08</b>	<b>-97</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWA-5I (bg)	0	-4	-68	No	18	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>GWA-2 (bg)</b>	<b>24.56</b>	<b>61</b>	<b>58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWA-14S (bg)	0.8555	20	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-1D (bg)	0.2702	7	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-1I (bg)	-2.568	-31	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-2I (bg)	-2.032	-29	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-30I (bg)	2.779	37	68	No	18	11.11	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3D (bg)	1.473	15	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3I (bg)	1.513	13	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-46A	-68.04	-53	-74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-52	-48.8	-13	-18	No	7	0	n/a	n/a	0.01	NP

# Appendix IV Welch's t-test/Mann-Whitney - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 4/27/2022, 12:06 PM

<u>Constituent</u>	<u>Well</u>	<u>Calc.</u>	<u>0.01</u>	<u>Method</u>
<b>Barium (mg/L)</b>	<b>YGWC-46A</b>	<b>3.6</b>	<b>Yes</b>	<b>Mann-W</b>
<b>Cobalt (mg/L)</b>	<b>YGWC-46A</b>	<b>-3.674</b>	<b>Yes</b>	<b>Mann-W</b>
<b>Lithium (mg/L)</b>	<b>YGWC-46A</b>	<b>3.317</b>	<b>Yes</b>	<b>Mann-W</b>

# Appendix IV Welch's t-test/Mann-Whitney - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 4/27/2022, 12:06 PM

<u>Constituent</u>	<u>Well</u>	<u>Calc.</u>	<u>0.01</u>	<u>Method</u>
Antimony (mg/L)	YGWC-46A	-1.179	No	Mann-W
Arsenic (mg/L)	YGWC-46A	-0.3356	No	Mann-W
<b>Barium (mg/L)</b>	<b>YGWC-46A</b>	<b>3.6</b>	<b>Yes</b>	<b>Mann-W</b>
<b>Cobalt (mg/L)</b>	<b>YGWC-46A</b>	<b>-3.674</b>	<b>Yes</b>	<b>Mann-W</b>
Fluoride, total (mg/L)	YGWC-46A	-0.5962	No	Mann-W
Lead (mg/L)	YGWC-46A	-1.179	No	Mann-W
<b>Lithium (mg/L)</b>	<b>YGWC-46A</b>	<b>3.317</b>	<b>Yes</b>	<b>Mann-W</b>
Molybdenum (mg/L)	YGWC-46A	0.7451	No	Mann-W

# Upper Tolerance Limits Summary Table

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 4/27/2022, 12:19 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>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	0.0047	n/a	n/a	n/a	n/a	353	n/a	n/a	87.25	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	401	n/a	n/a	75.06	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.071	n/a	n/a	n/a	n/a	401	n/a	n/a	2.743	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	385	n/a	n/a	80.26	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.00063	n/a	n/a	n/a	n/a	385	n/a	n/a	95.58	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0093	n/a	n/a	n/a	n/a	353	n/a	n/a	79.6	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.035	n/a	n/a	n/a	n/a	396	n/a	n/a	69.19	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.92	n/a	n/a	n/a	n/a	380	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride, total (mg/L)	n/a	0.68	n/a	n/a	n/a	n/a	400	n/a	n/a	67.5	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	n/a	355	n/a	n/a	84.51	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	n/a	380	n/a	n/a	26.32	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	n/a	309	n/a	n/a	93.2	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.014	n/a	n/a	n/a	n/a	344	n/a	n/a	60.17	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	383	n/a	n/a	91.91	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	319	n/a	n/a	96.87	n/a	n/a	NaN	NP Inter(NDs)

<b>YATES ASH POND 1 GWPS</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>GWPS</b>
Antimony, Total (mg/L)	0.006		0.0047	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.071	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.00063	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.92	6.92
Fluoride, Total (mg/L)	4		0.68	4
Lead, Total (mg/L)		0.015	0.0013	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residual*

*\*GWPS = Groundwater Protection Standard*

# Confidence Intervals - All Results (No Significant)

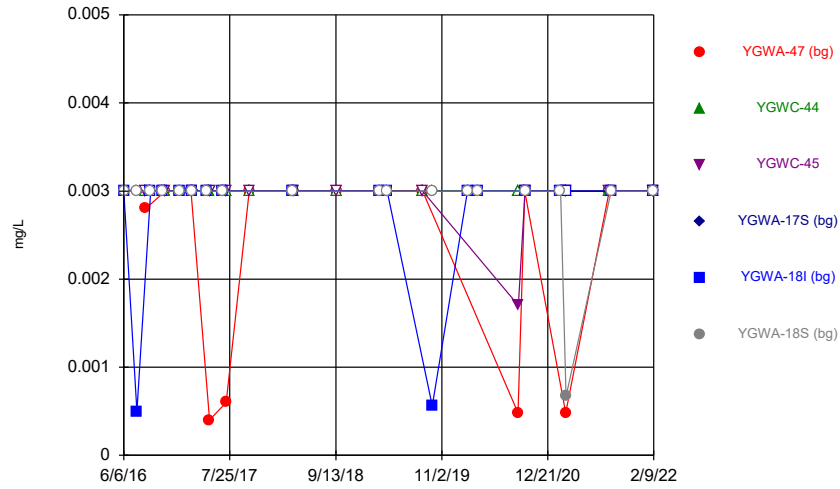
Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 4/27/2022, 12:27 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-45	0.003	0.0017	0.006	No	14	0.002907	0.0003474	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-46A	0.003	0.00029	0.006	No	17	0.002841	0.0006573	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-44	0.005	0.0007	0.01	No	16	0.003664	0.002048	68.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00072	0.01	No	16	0.003919	0.001933	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-46A	0.005	0.00087	0.01	No	19	0.002374	0.001865	31.58	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-44	0.1139	0.09519	2	No	16	0.1046	0.0144	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.07061	0.05758	2	No	16	0.06409	0.01001	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46A	0.05	0.042	2	No	8	0.0445	0.003024	0	None	No	0.004	NP (normality)
Barium (mg/L)	YGWC-52	0.021	0.018	2	No	7	0.01943	0.001134	0	None	No	0.008	NP (normality)
Cadmium (mg/L)	YGWC-46A	0.0005	0.00012	0.005	No	16	0.0004275	0.0001559	81.25	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-45	0.0061	0.0006	0.1	No	14	0.004449	0.001661	78.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-52	0.005	0.00073	0.1	No	7	0.002676	0.002179	42.86	None	No	0.008	NP (normality)
Cobalt (mg/L)	YGWC-44	0.004	0.0017	0.035	No	16	0.003262	0.002618	6.25	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0008461	0.0006232	0.035	No	15	0.0007347	0.0001644	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46A	0.00305	0.0005501	0.035	No	8	0.00174	0.001406	0	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	YGWC-52	0.002068	0.001246	0.035	No	7	0.001657	0.0003457	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.006	0.2896	6.92	No	16	0.7131	0.624	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.526	0.9474	6.92	No	16	1.237	0.4447	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46A	1.71	1.029	6.92	No	19	1.369	0.5814	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-52	0.9886	0.3443	6.92	No	6	0.7012	0.26	0	None	x^2	0.01	Param.
Fluoride, total (mg/L)	YGWC-44	0.12	0.07	4	No	17	0.09588	0.01698	82.35	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	YGWC-45	0.2	0.075	4	No	17	0.1623	0.1631	23.53	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	YGWC-46A	0.12	0.084	4	No	20	0.1104	0.06526	25	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-45	0.001	0.0001	0.015	No	14	0.0009357	0.0002405	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-46A	0.001	0.000044	0.015	No	17	0.0009438	0.0002319	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-52	0.001	0.00006	0.015	No	7	0.0004719	0.0004942	42.86	None	No	0.008	NP (normality)
Lithium (mg/L)	YGWC-44	0.0135	0.01245	0.04	No	16	0.01298	0.0008054	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.0147	0.012	0.04	No	16	0.0132	0.001573	0	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-46A	0.014	0.011	0.04	No	8	0.01275	0.001282	0	None	No	0.004	NP (normality)
Lithium (mg/L)	YGWC-52	0.004672	0.004099	0.04	No	7	0.004386	0.000241	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0002	0.00006	0.002	No	12	0.0001883	0.00004041	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0002	0.000071	0.002	No	12	0.0001892	0.00003724	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-46A	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.0005	0.1	No	16	0.009406	0.002375	93.75	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.0024	0.0012	0.1	No	16	0.003037	0.003469	18.75	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-46A	0.0039	0.0015	0.1	No	19	0.003332	0.003045	15.79	None	No	0.01	NP (normality)
Thallium (mg/L)	YGWC-44	0.001	0.00008	0.002	No	14	0.0009343	0.0002459	92.86	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-46A	0.001	0.000073	0.002	No	16	0.0009421	0.0002318	93.75	None	No	0.01	NP (NDs)



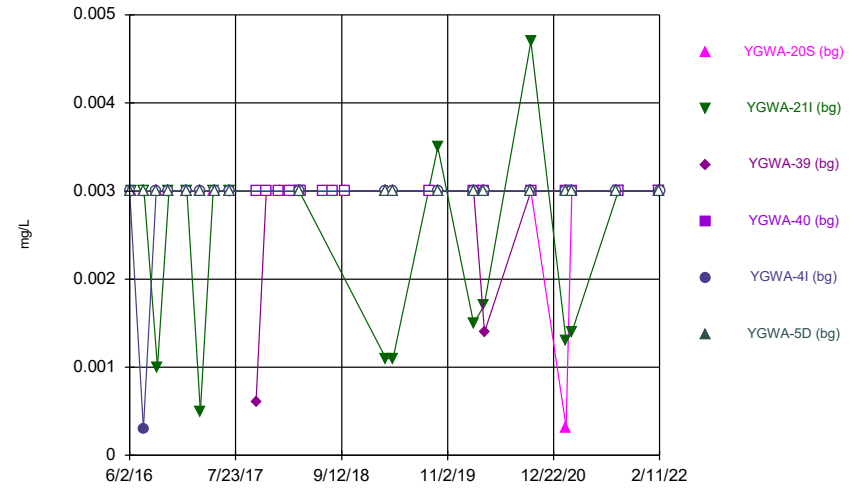
FIGURE A.

Time Series



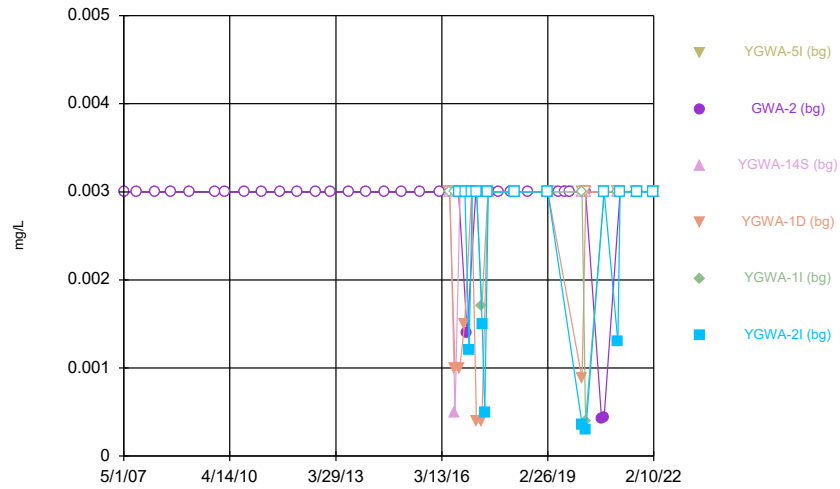
Constituent: Antimony Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



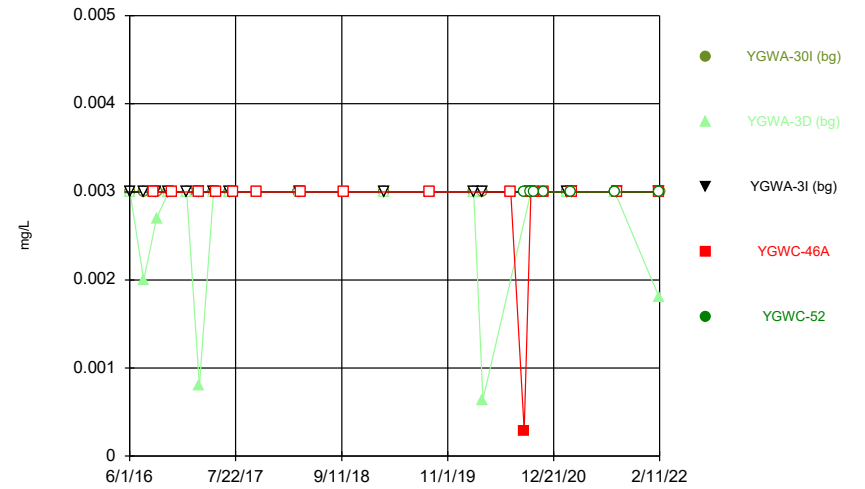
Constituent: Antimony Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



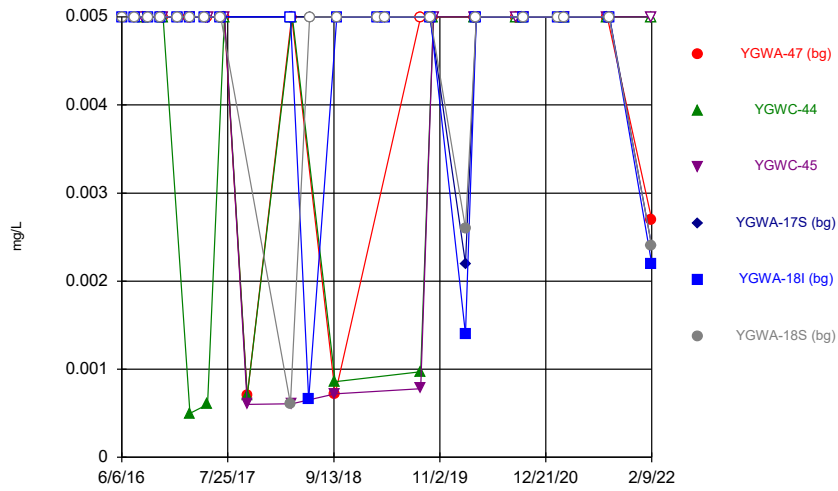
Constituent: Antimony Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



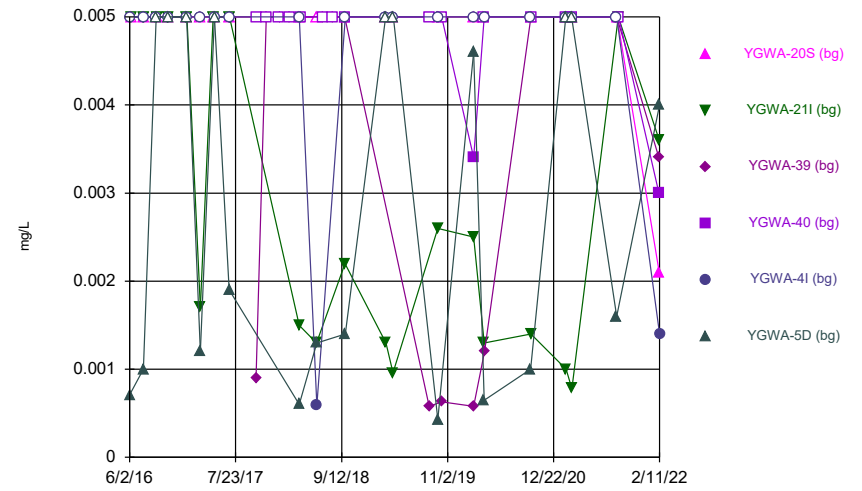
Constituent: Antimony Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



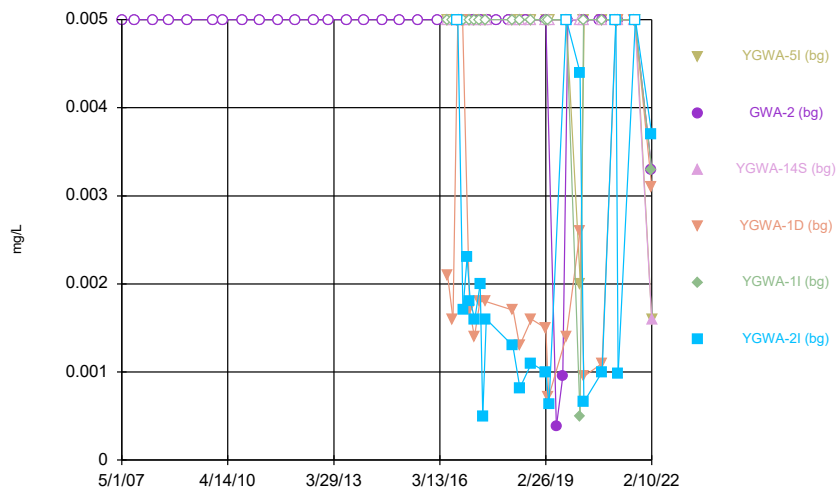
Constituent: Arsenic Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



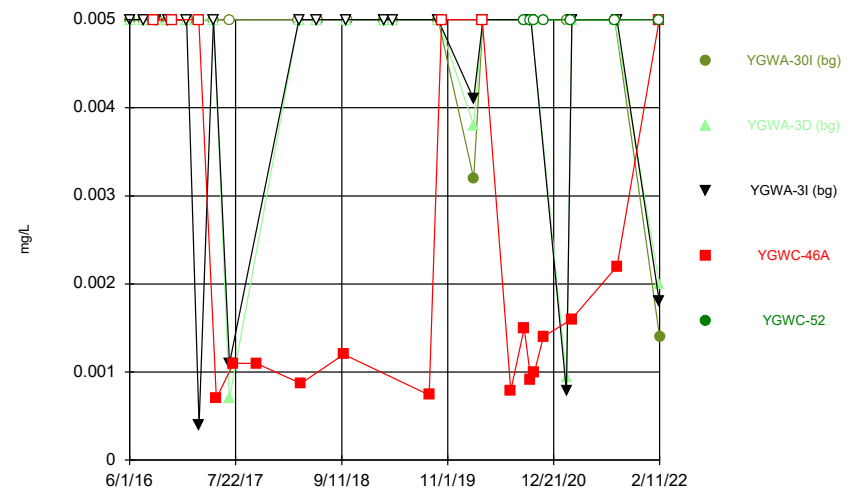
Constituent: Arsenic Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



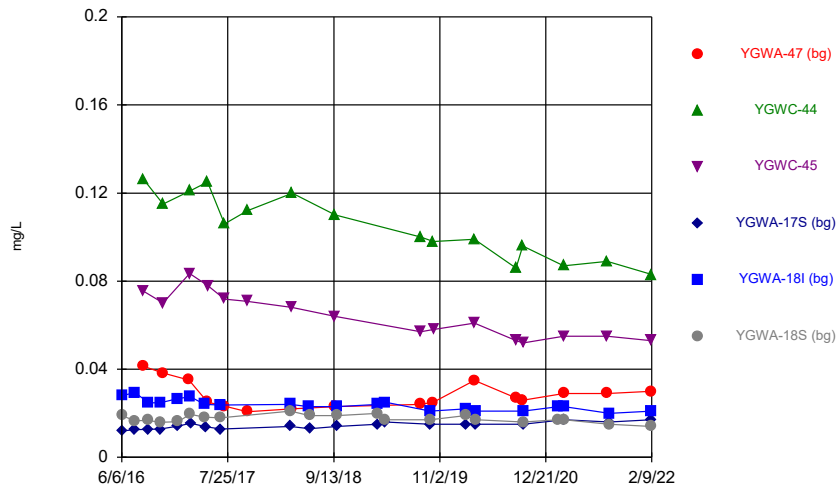
Constituent: Arsenic Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



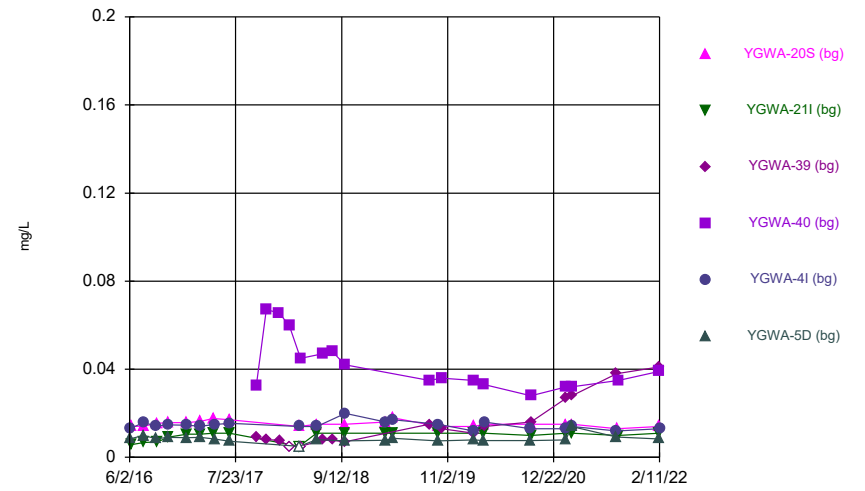
Constituent: Arsenic Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



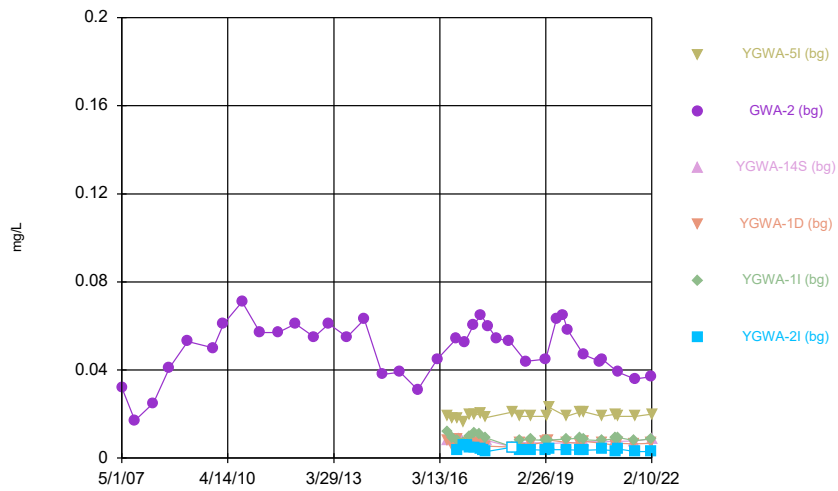
Constituent: Barium Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



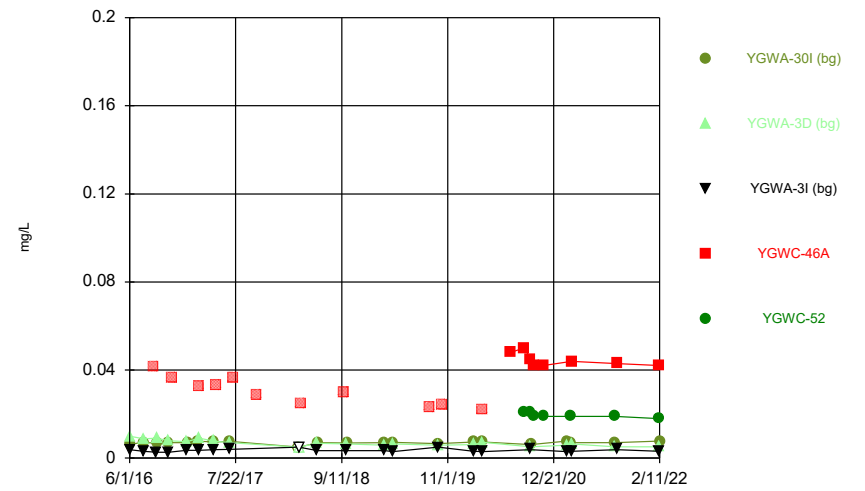
Constituent: Barium Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



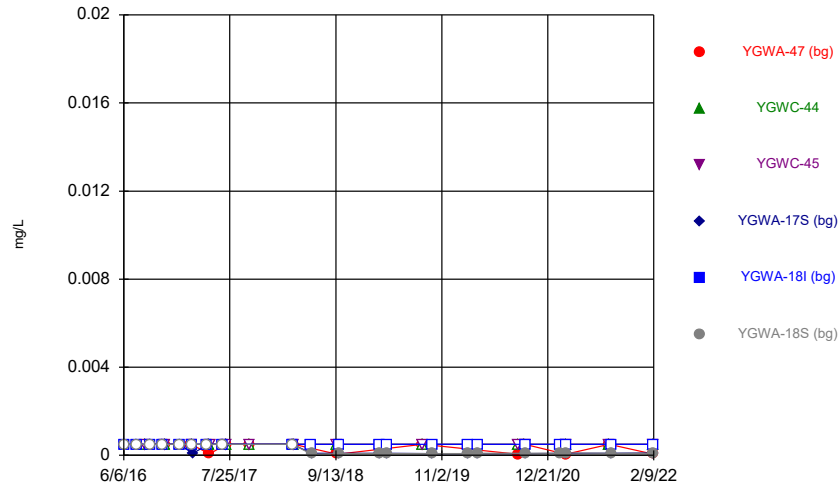
Constituent: Barium Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



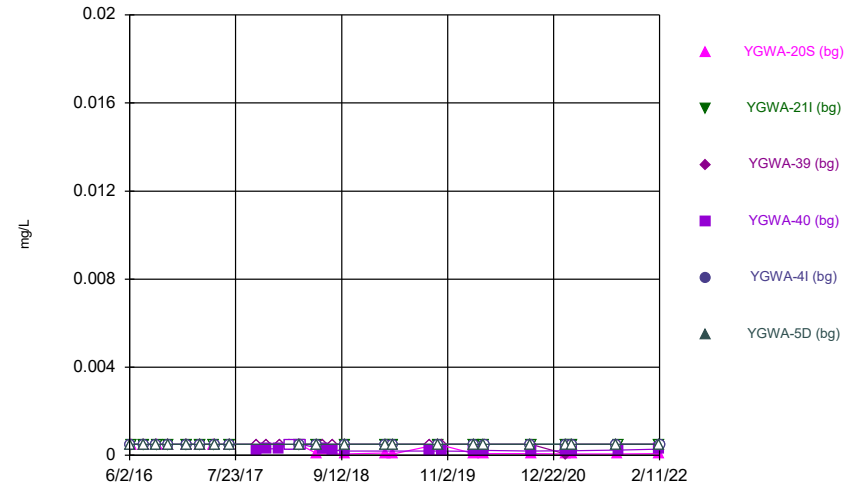
Constituent: Barium Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



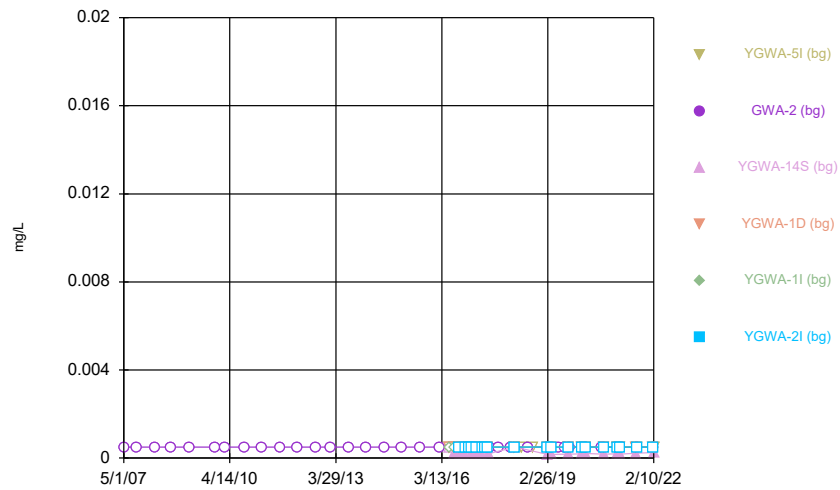
Constituent: Beryllium Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



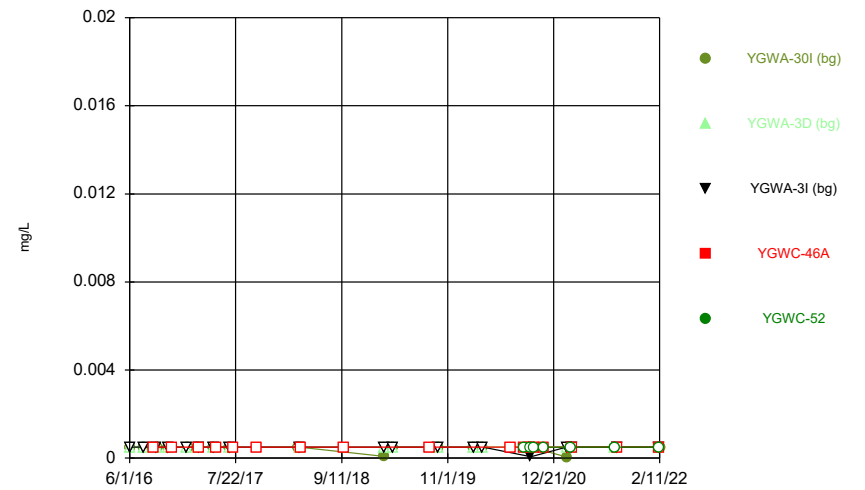
Constituent: Beryllium Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



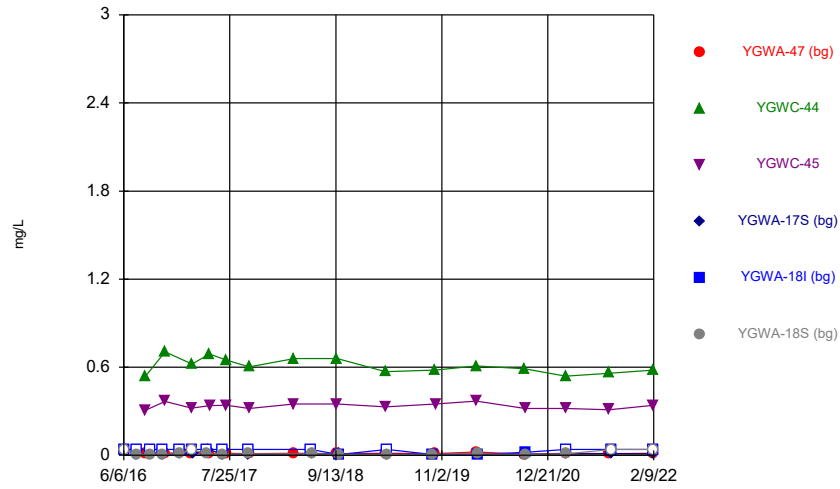
Constituent: Beryllium Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



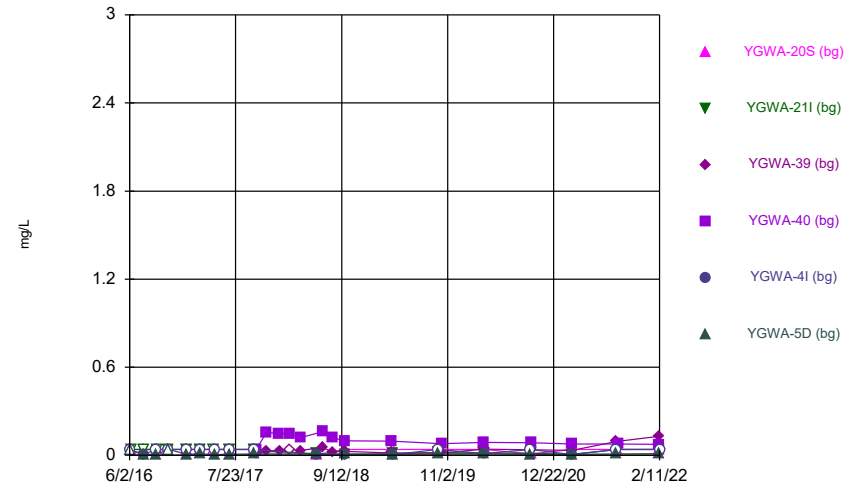
Constituent: Beryllium Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



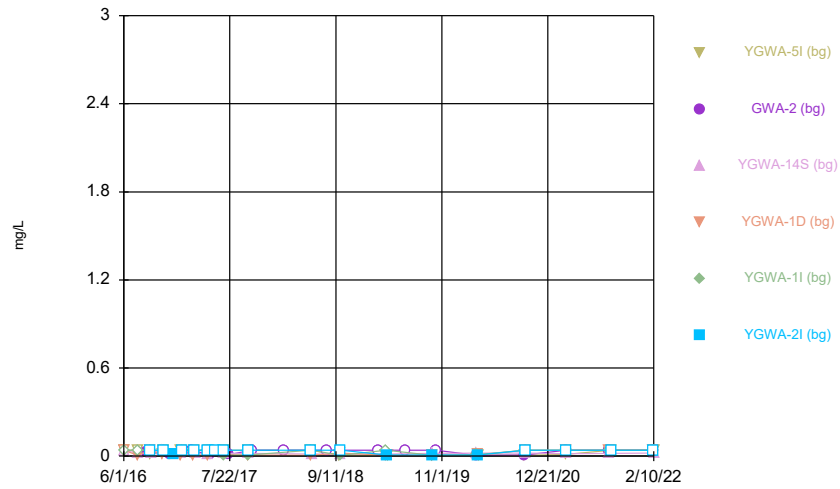
Constituent: Boron, total Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



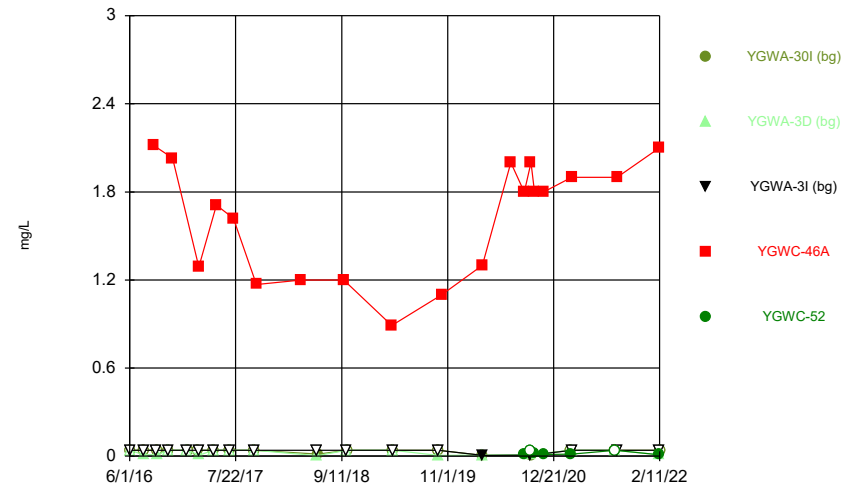
Constituent: Boron, total Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



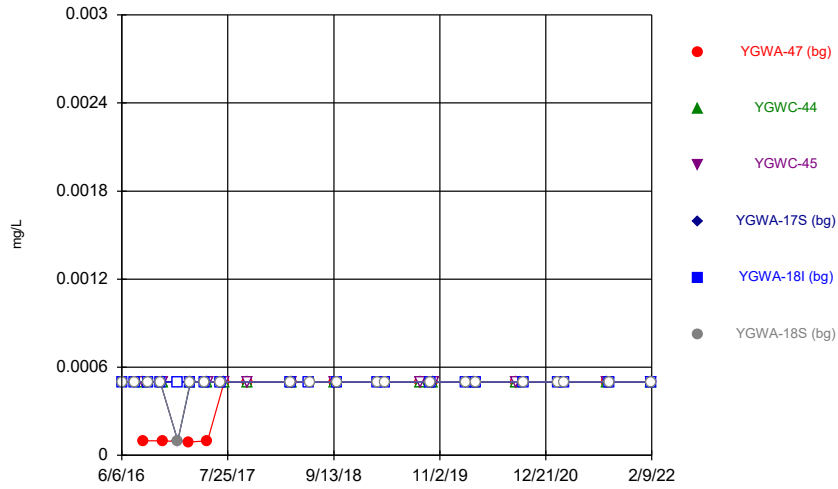
Constituent: Boron, total Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



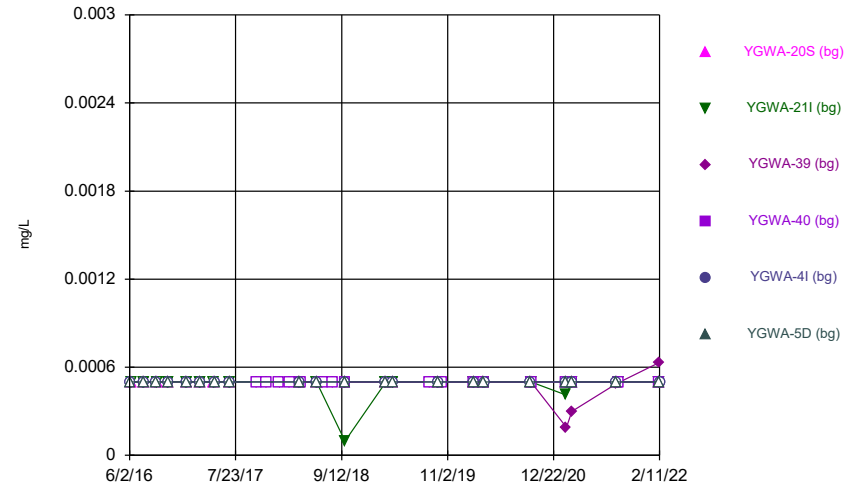
Constituent: Boron, total Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



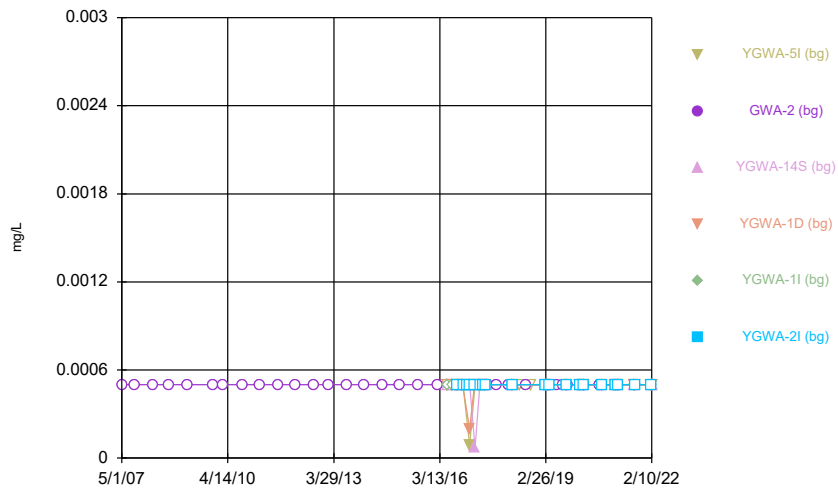
Constituent: Cadmium Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



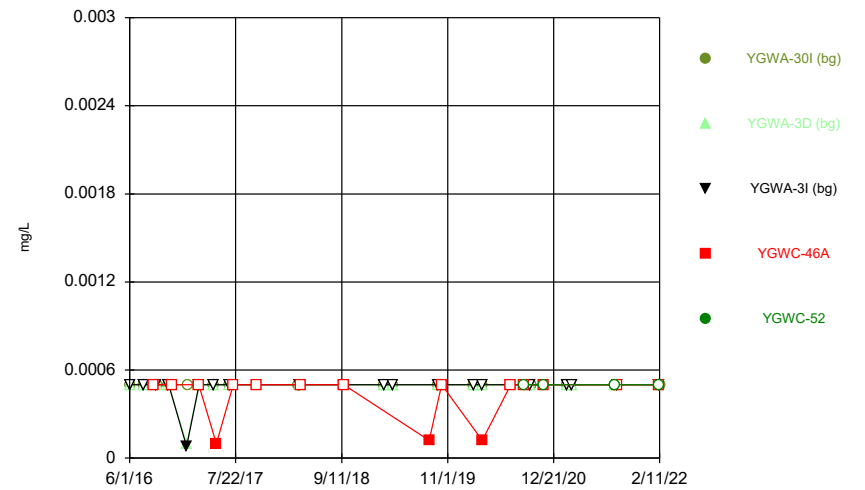
Constituent: Cadmium Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



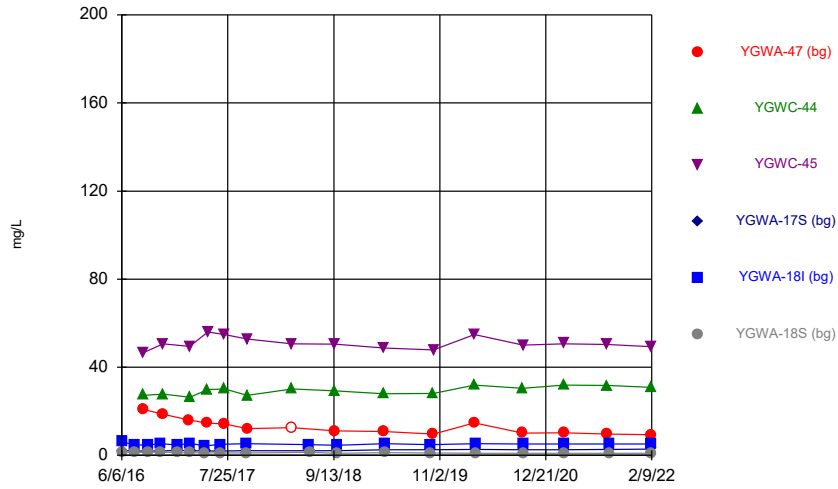
Constituent: Cadmium Analysis Run 4/27/2022 12:11 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



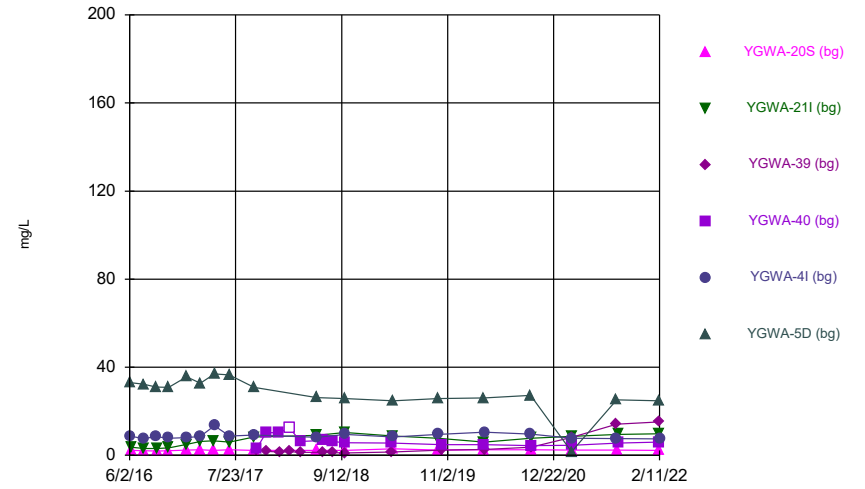
Constituent: Cadmium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



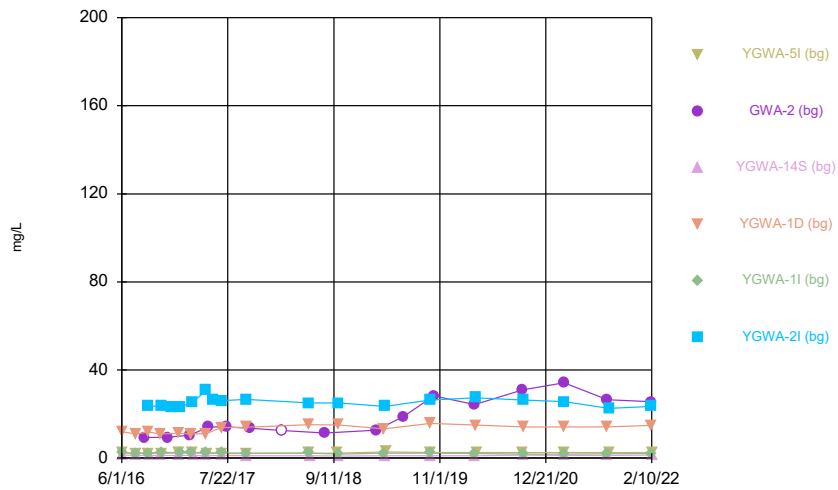
Constituent: Calcium, total Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



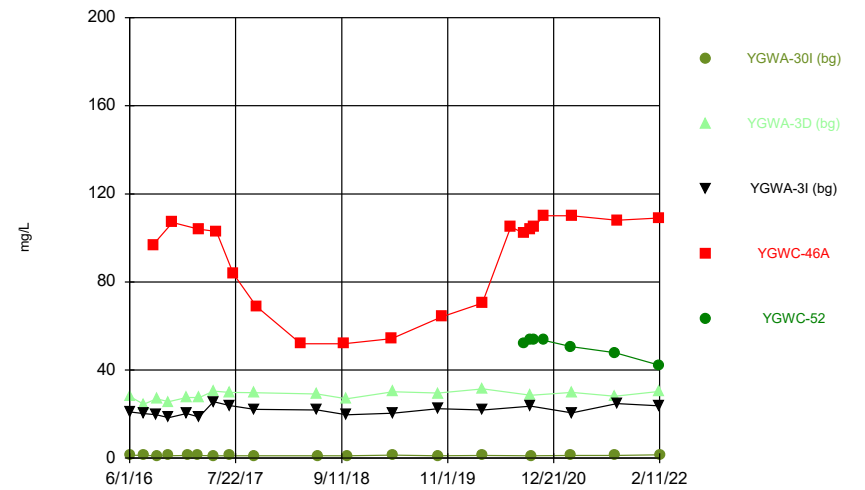
Constituent: Calcium, total Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



Constituent: Calcium, total Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

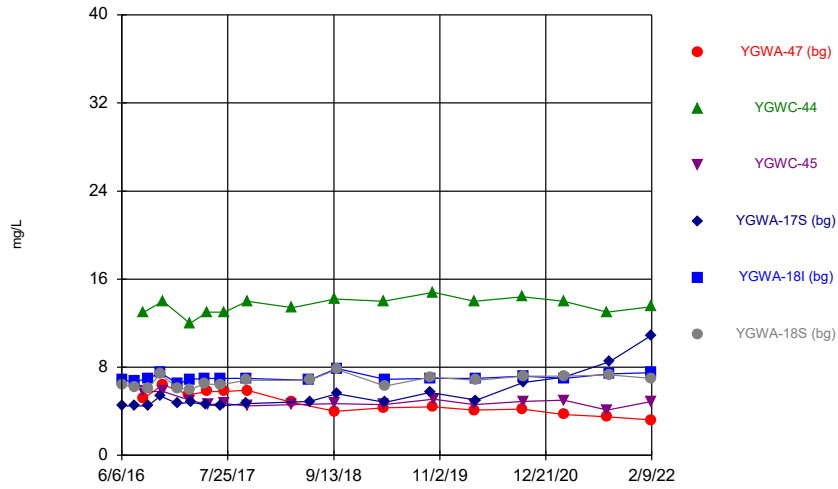
Time Series



Constituent: Calcium, total Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

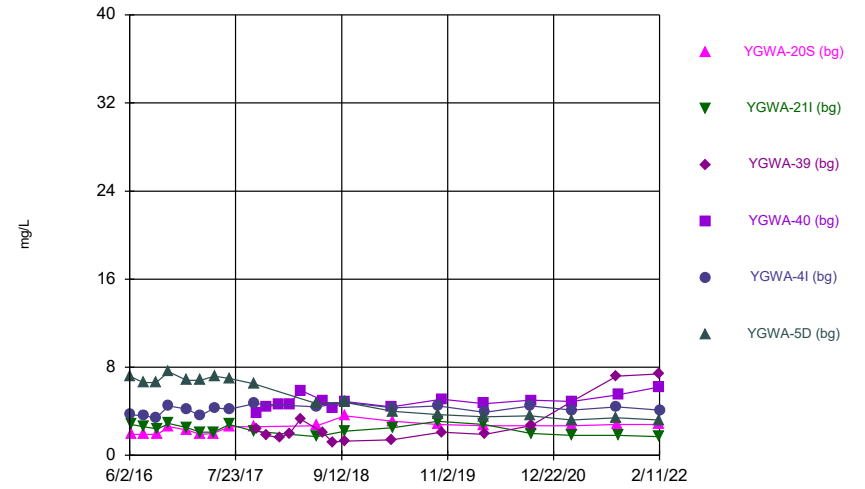


Time Series



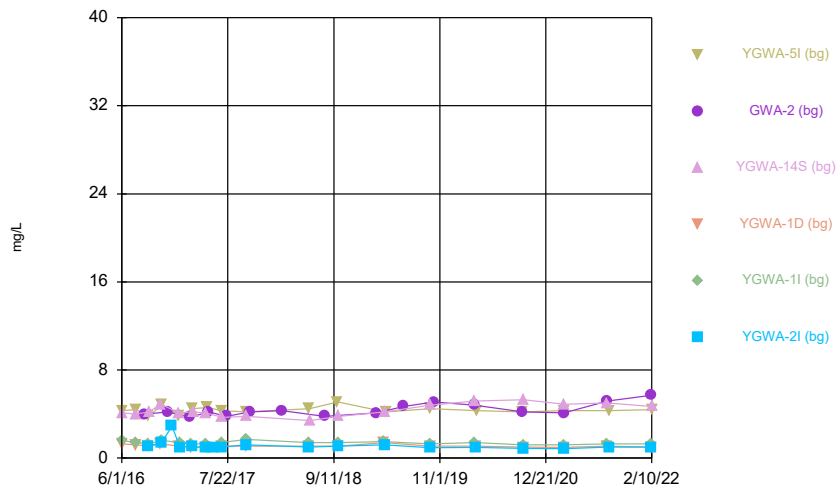
Constituent: Chloride, Total Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



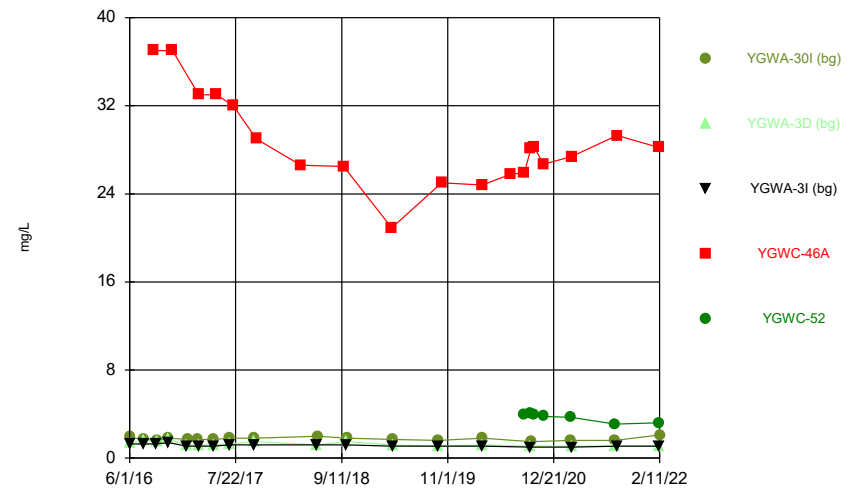
Constituent: Chloride, Total Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



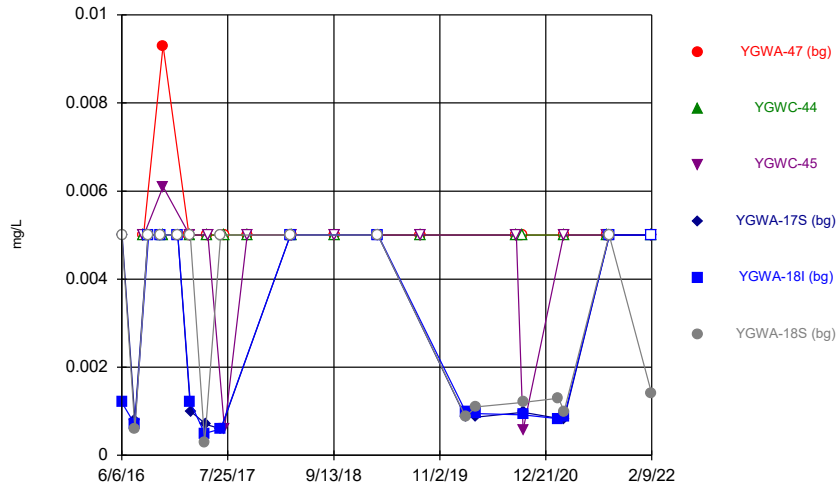
Constituent: Chloride, Total Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



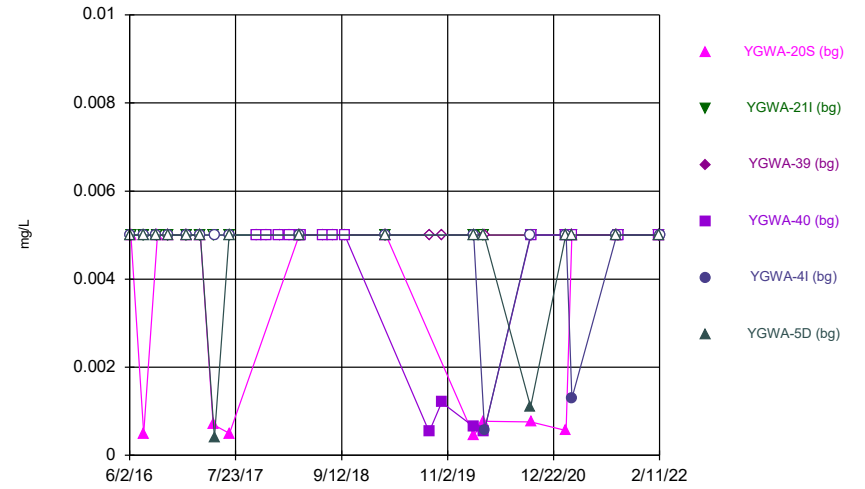
Constituent: Chloride, Total Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



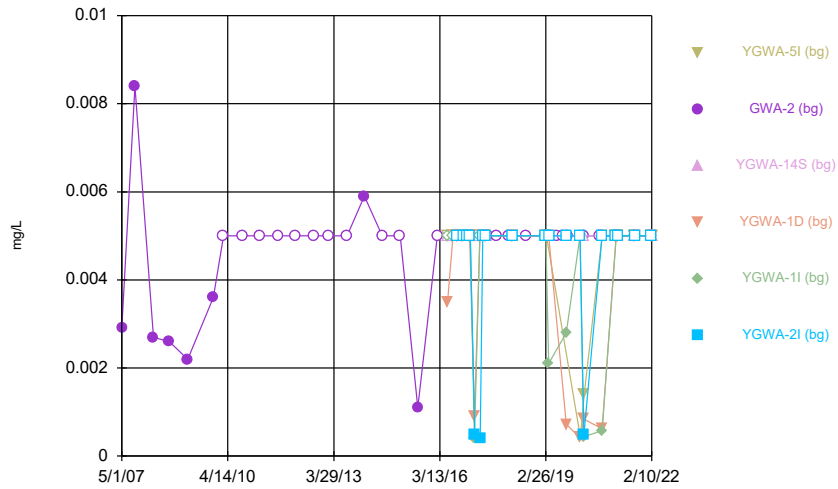
Constituent: Chromium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



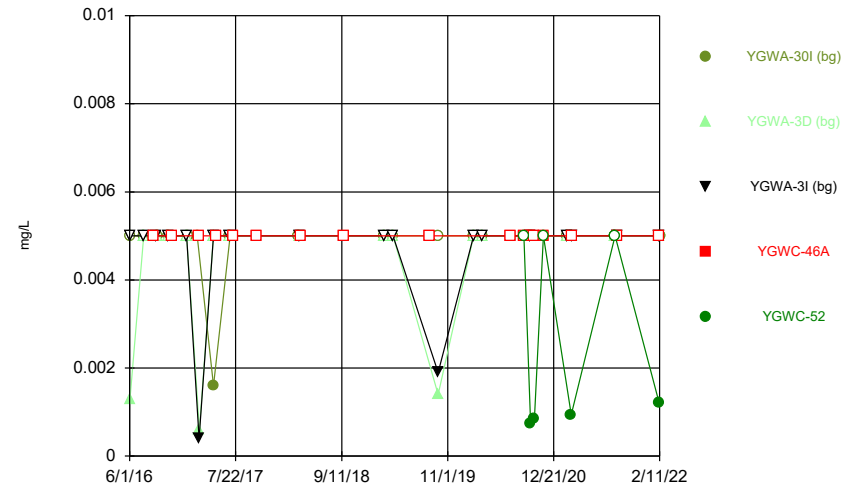
Constituent: Chromium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



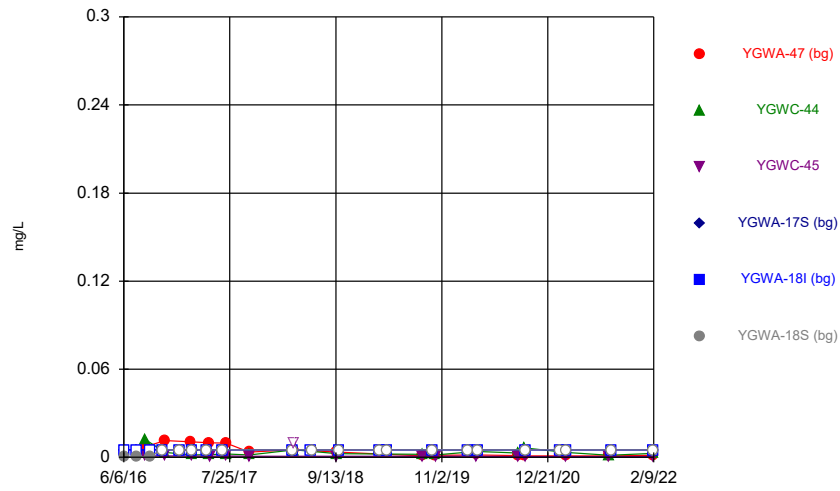
Constituent: Chromium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



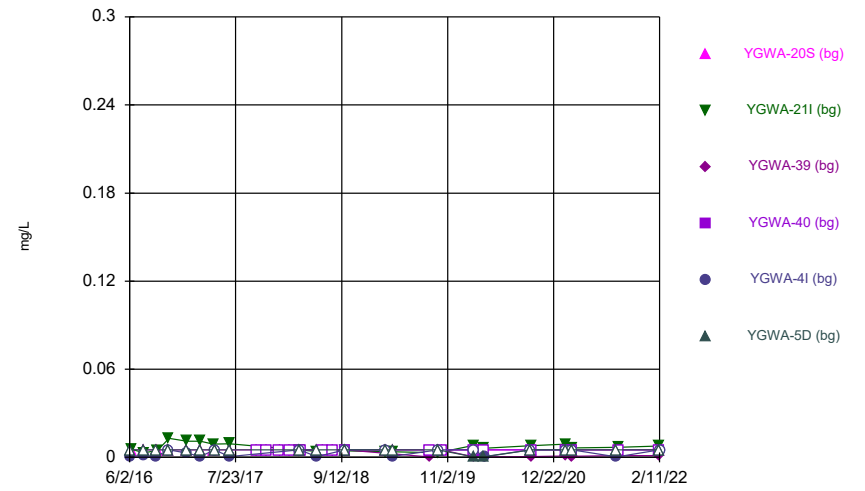
Constituent: Chromium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



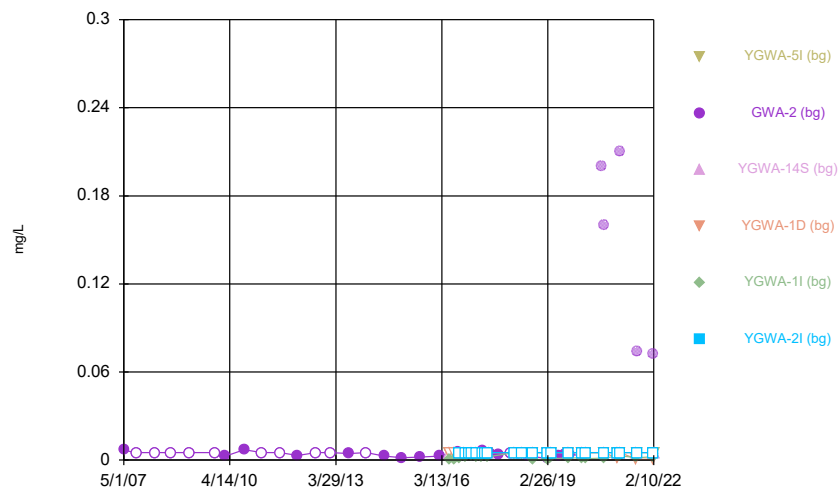
Constituent: Cobalt Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



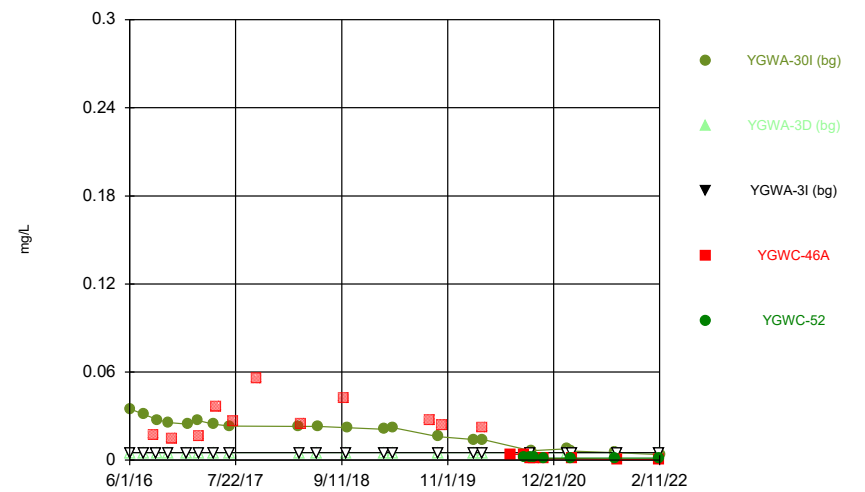
Constituent: Cobalt Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



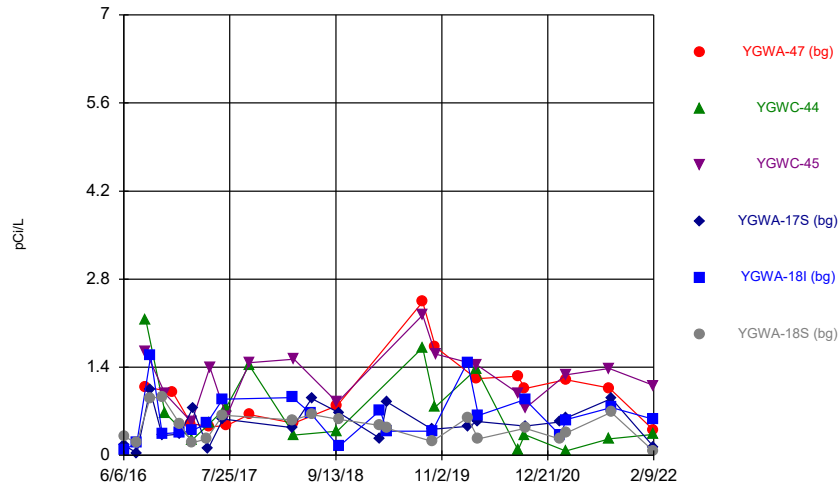
Constituent: Cobalt Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



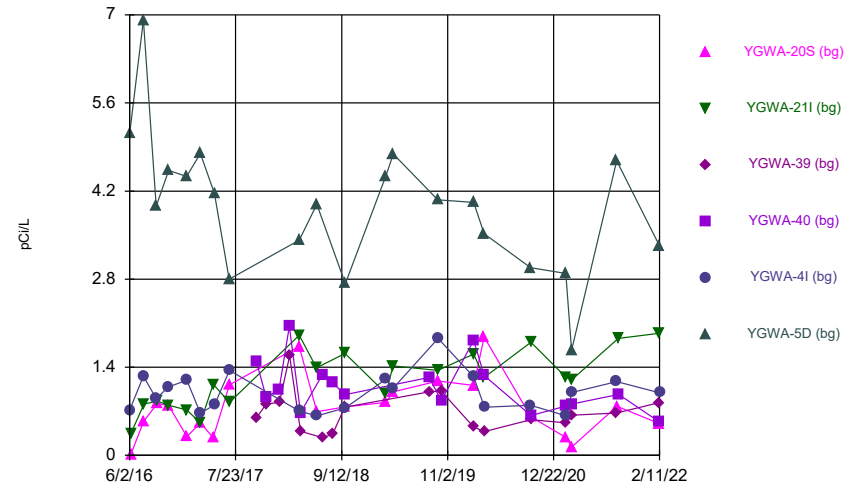
Constituent: Cobalt Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



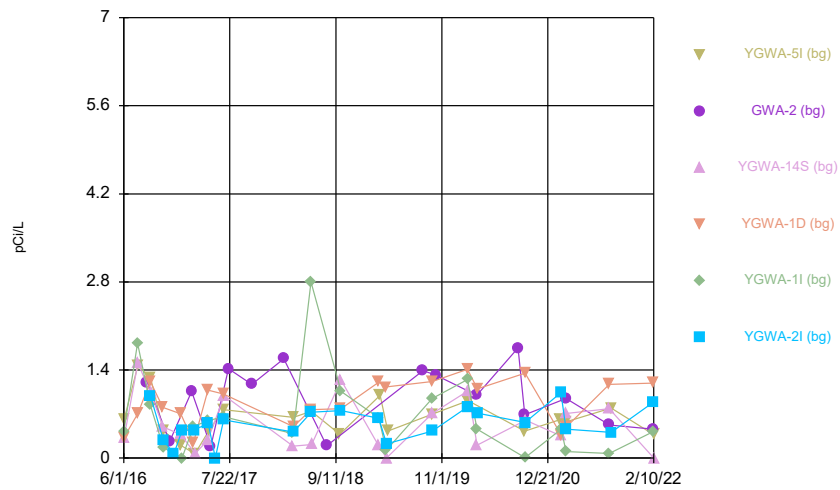
Constituent: Combined Radium 226 + 228 Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



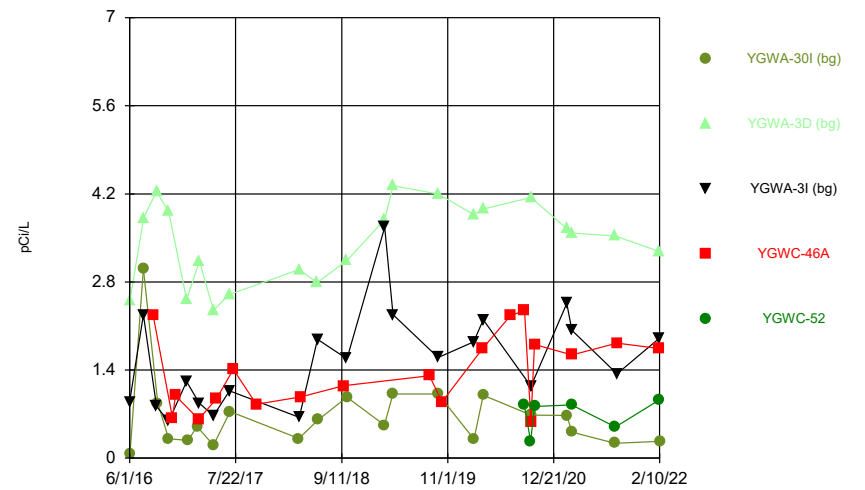
Constituent: Combined Radium 226 + 228 Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



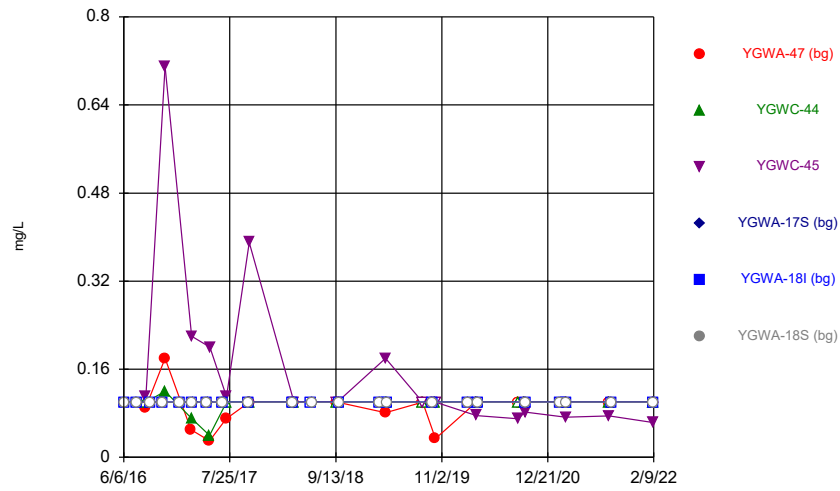
Constituent: Combined Radium 226 + 228 Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



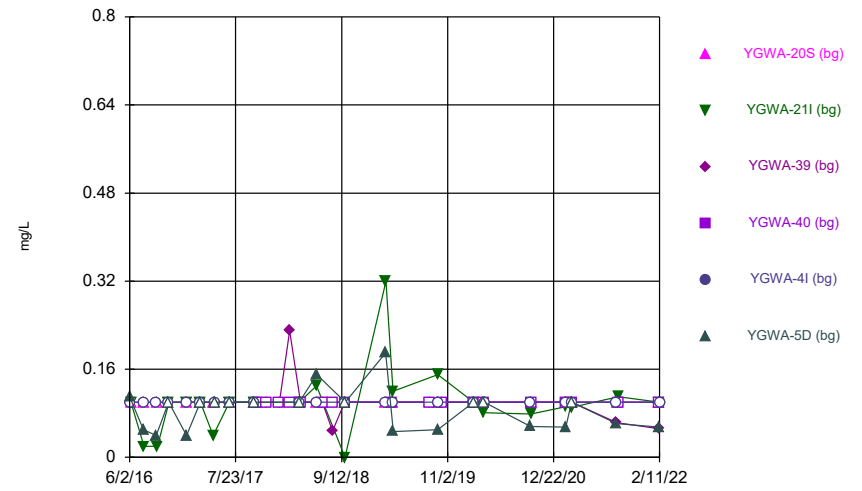
Constituent: Combined Radium 226 + 228 Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



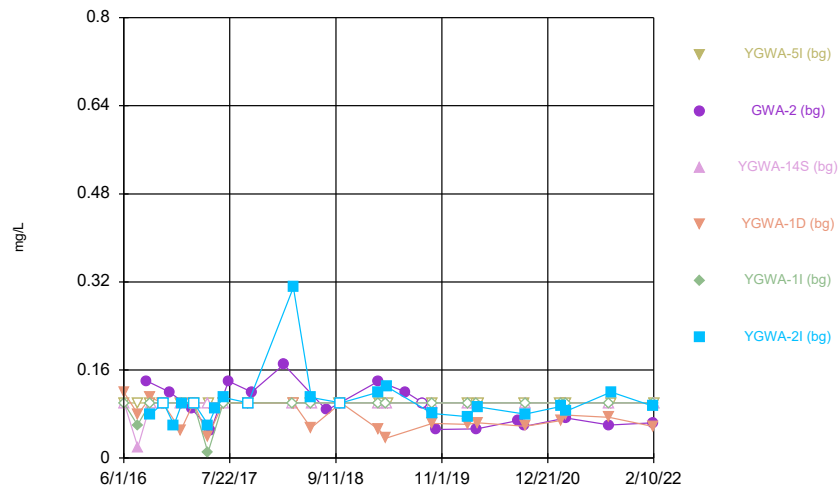
Constituent: Fluoride, total Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



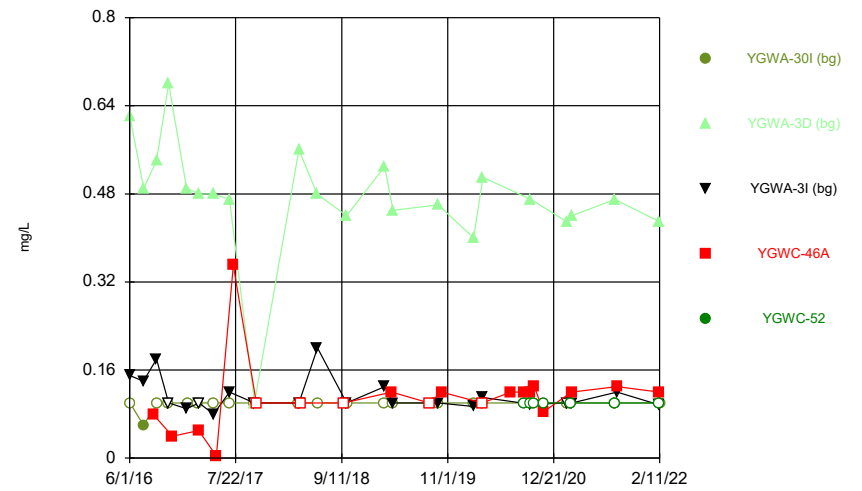
Constituent: Fluoride, total Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



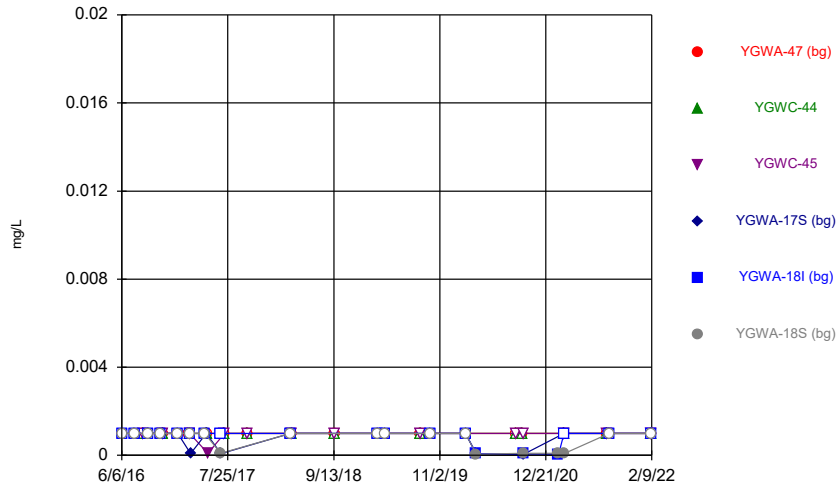
Constituent: Fluoride, total Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



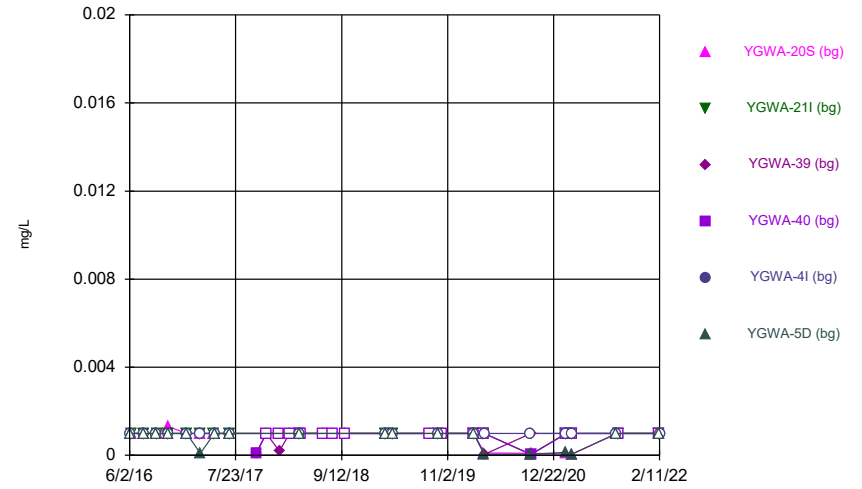
Constituent: Fluoride, total Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



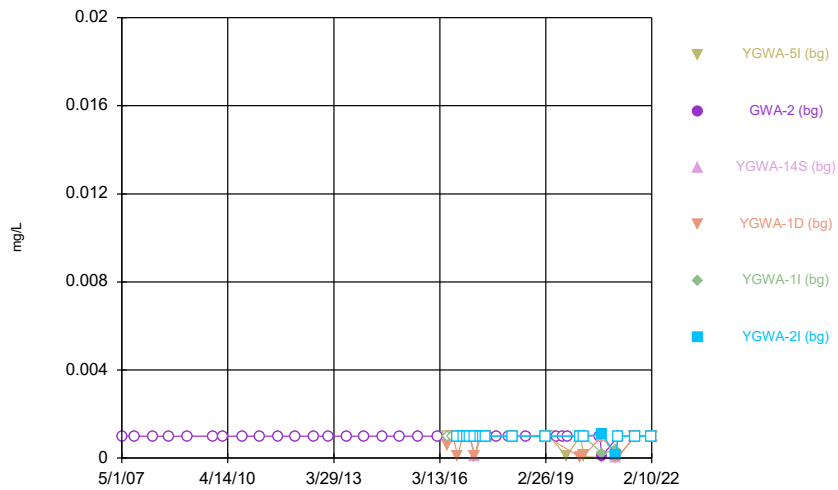
Constituent: Lead Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



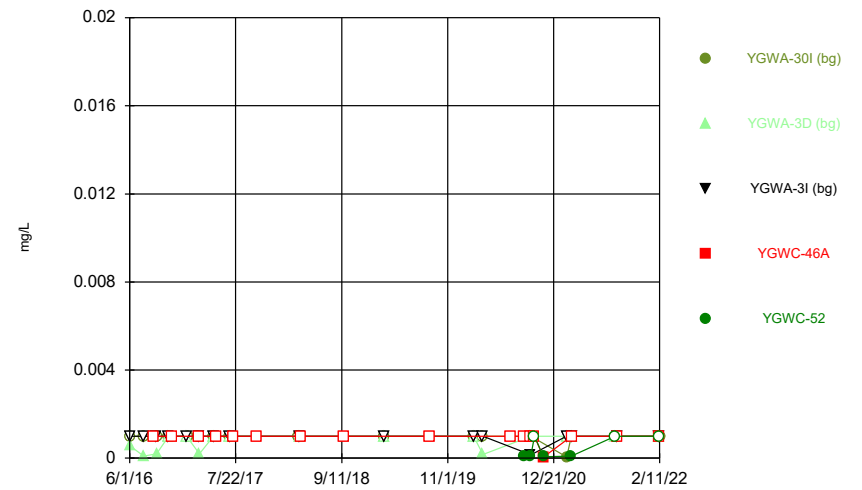
Constituent: Lead Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



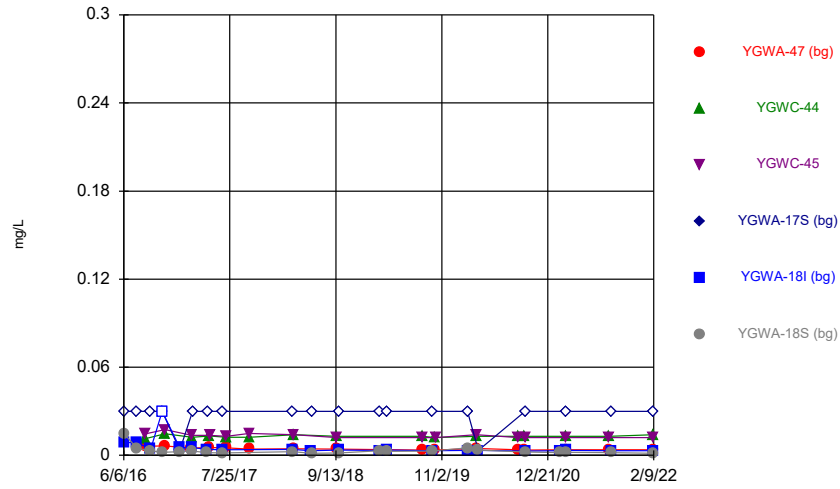
Constituent: Lead Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



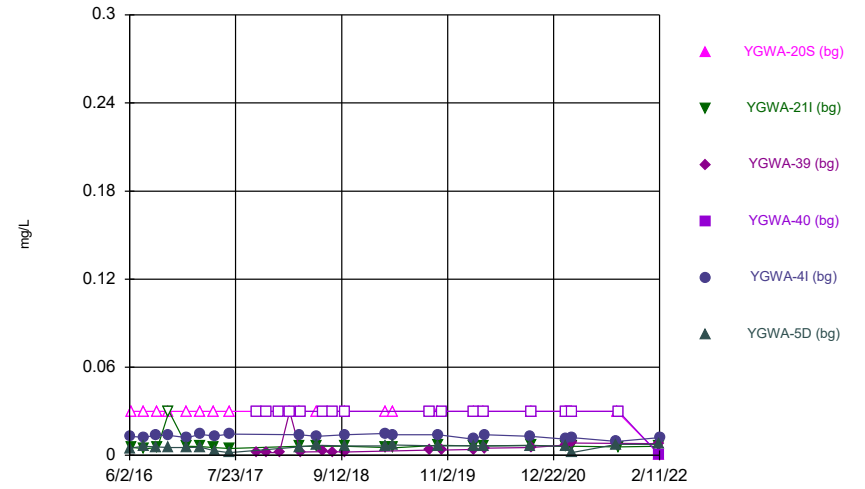
Constituent: Lead Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



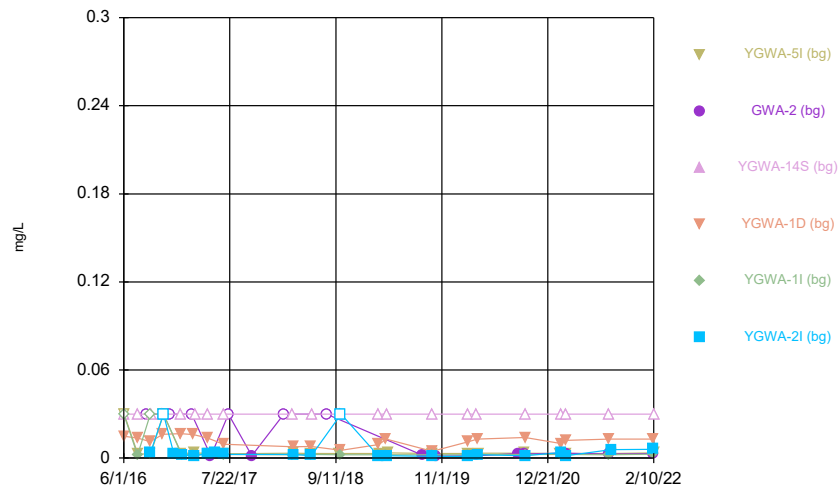
Constituent: Lithium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



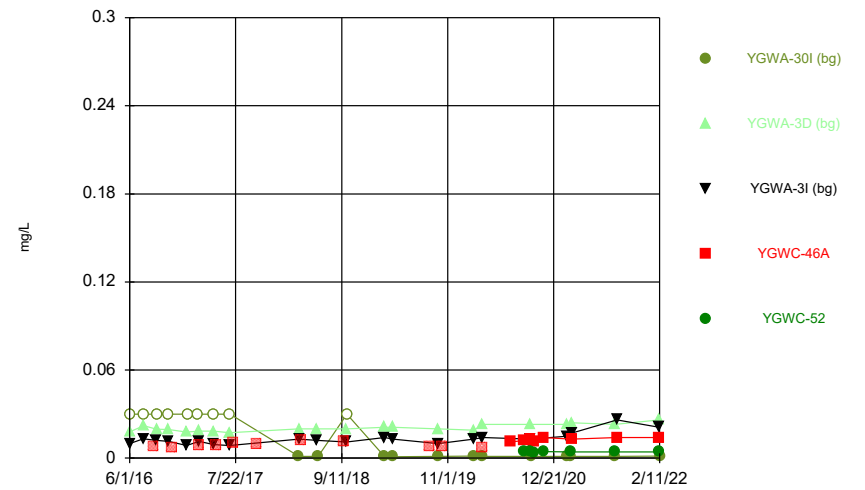
Constituent: Lithium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



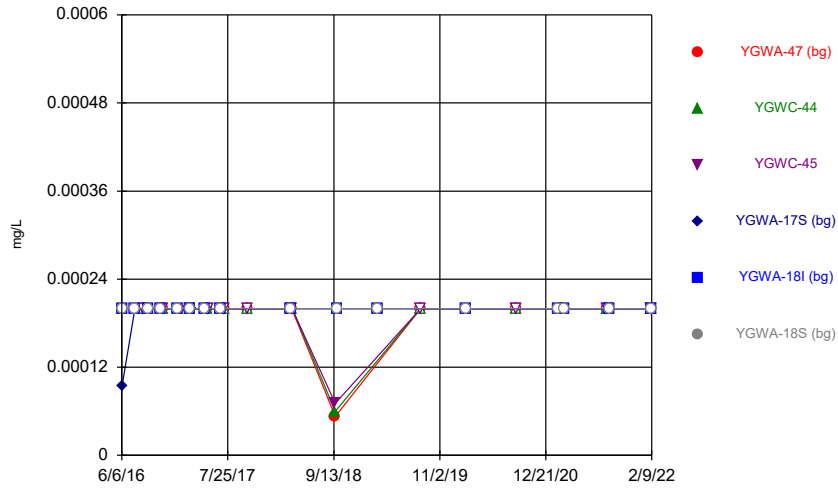
Constituent: Lithium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



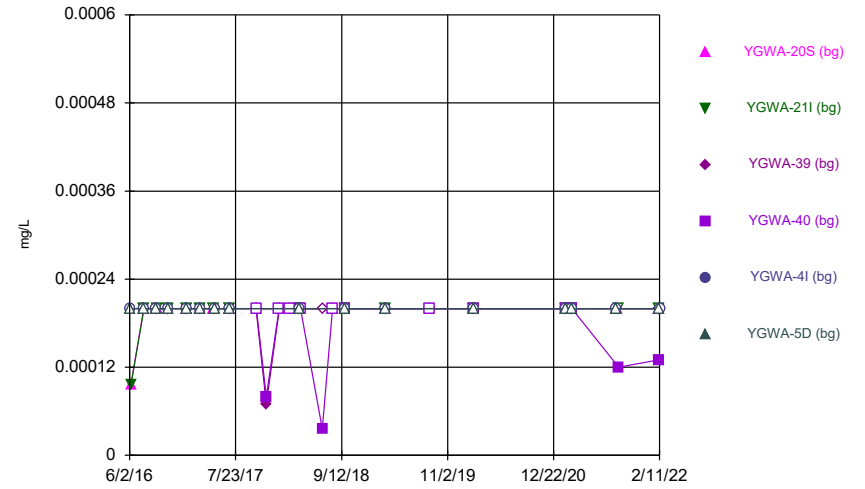
Constituent: Lithium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



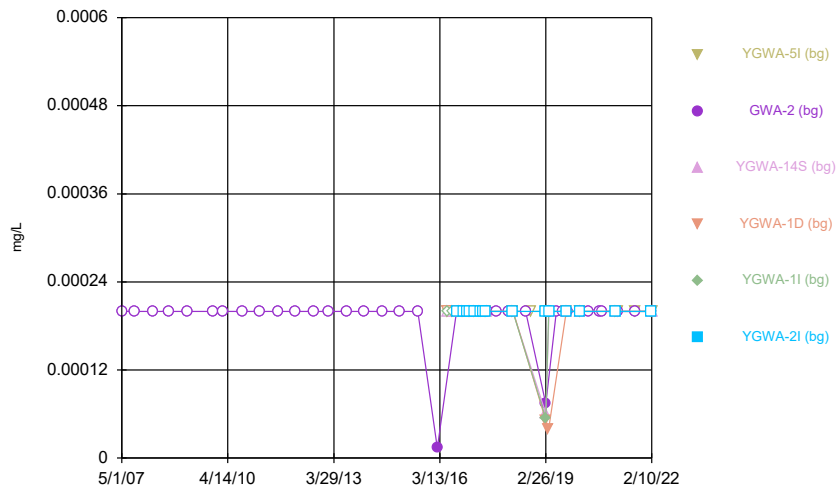
Constituent: Mercury Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



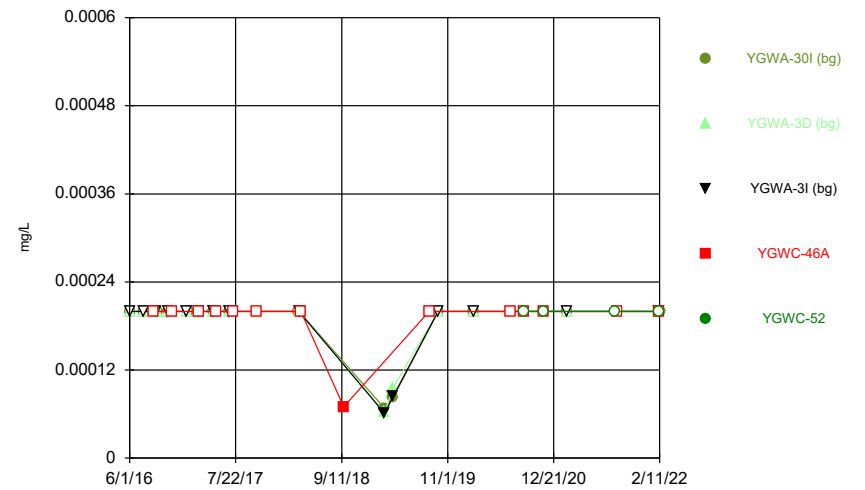
Constituent: Mercury Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



Constituent: Mercury Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

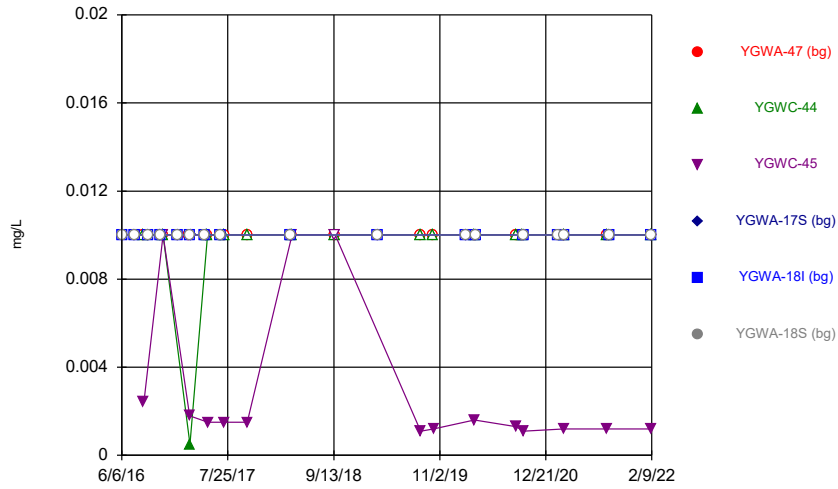
Time Series



Constituent: Mercury Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

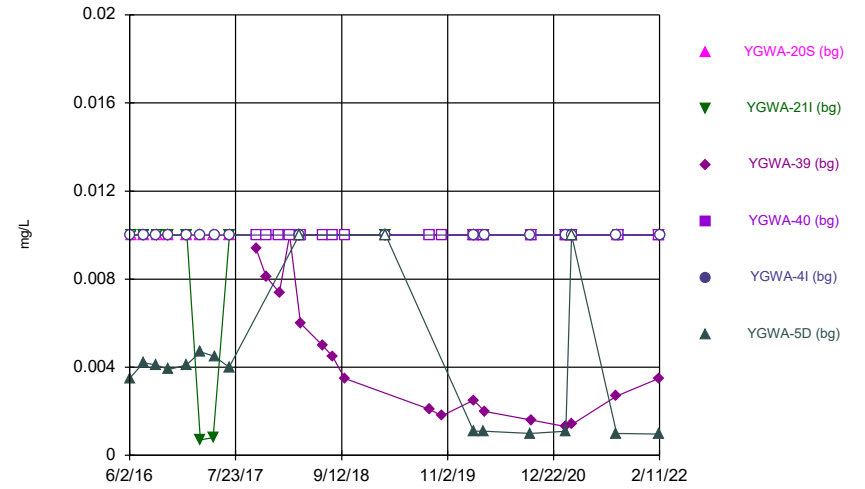


Time Series



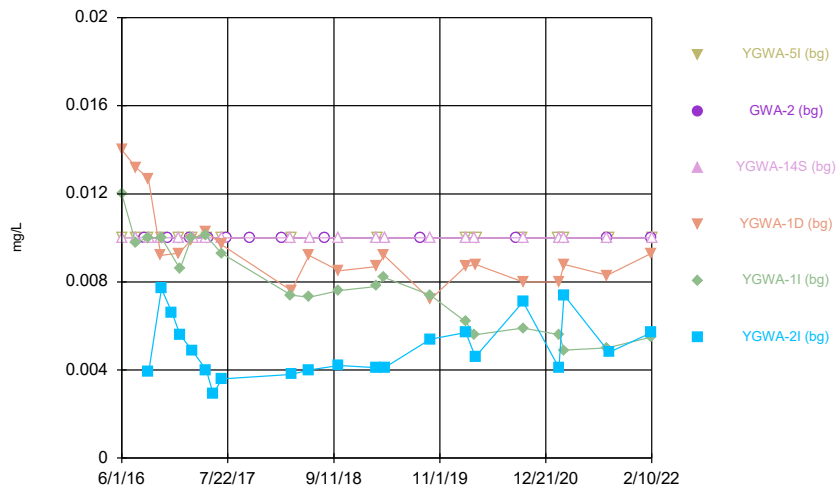
Constituent: Molybdenum Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



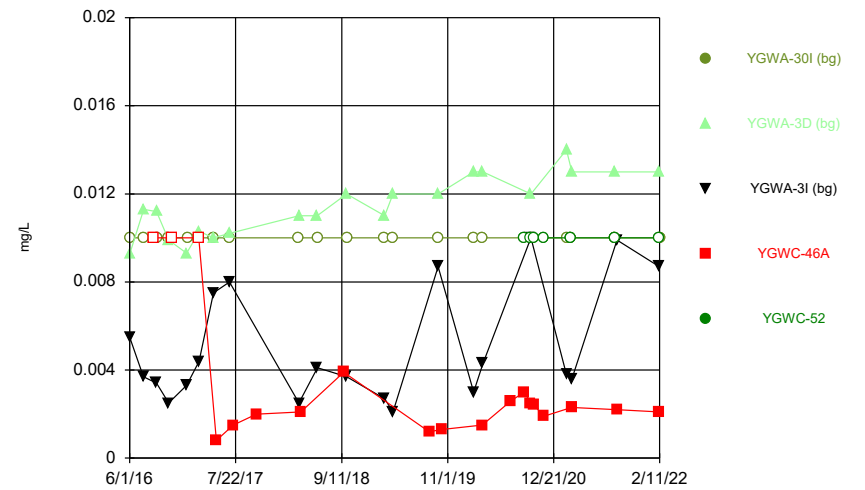
Constituent: Molybdenum Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



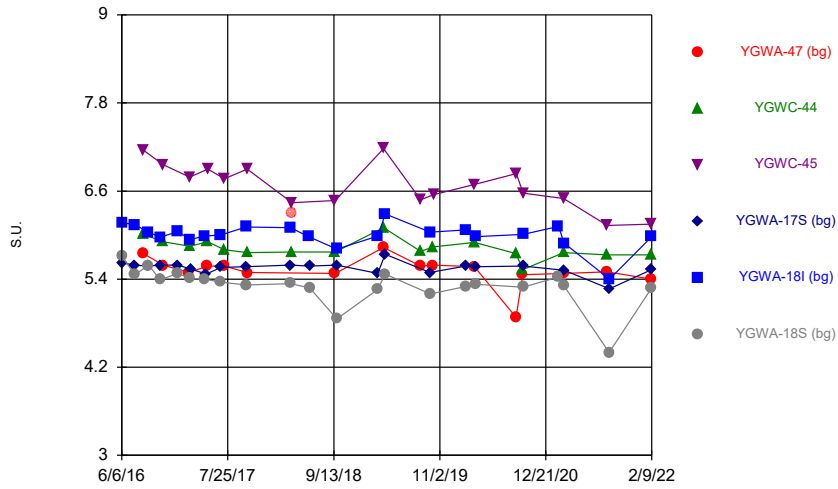
Constituent: Molybdenum Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



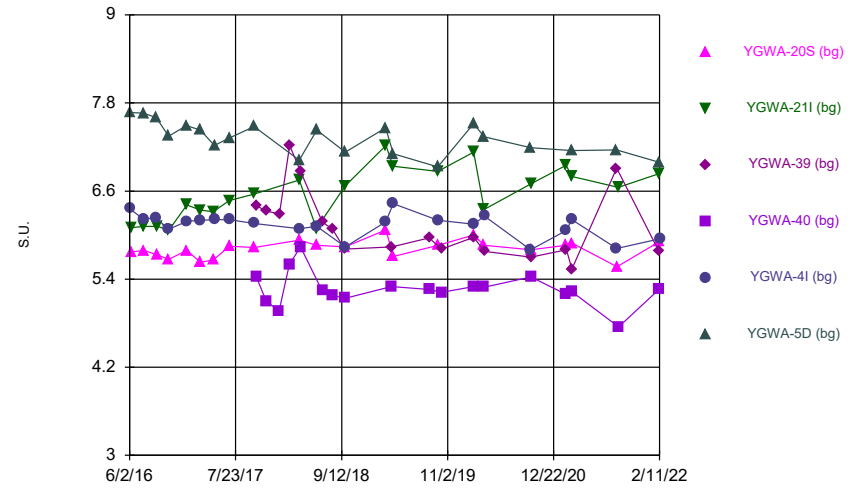
Constituent: Molybdenum Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



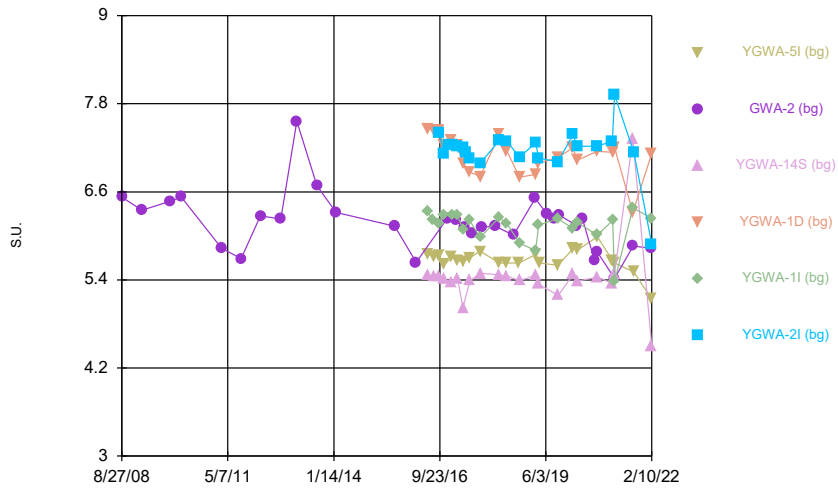
Constituent: pH, Field Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



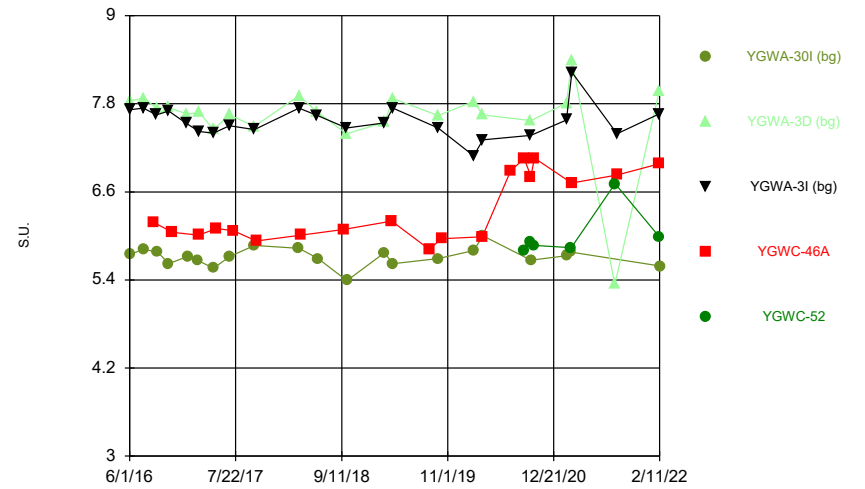
Constituent: pH, Field Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



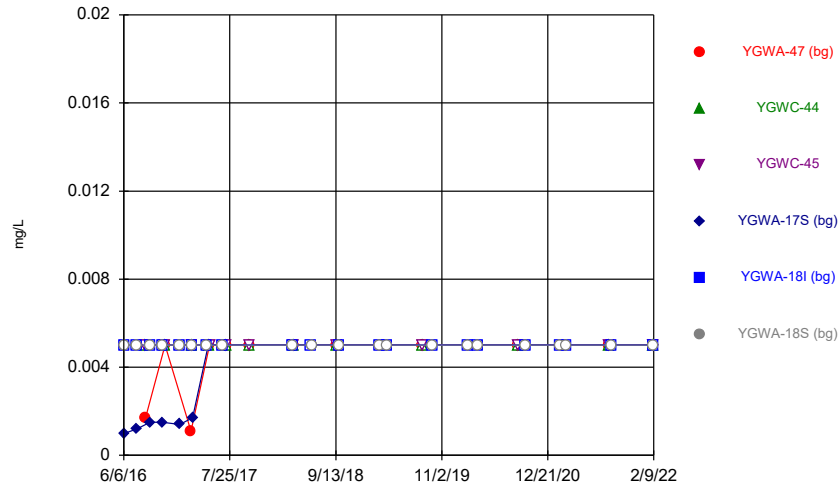
Constituent: pH, Field Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Time Series



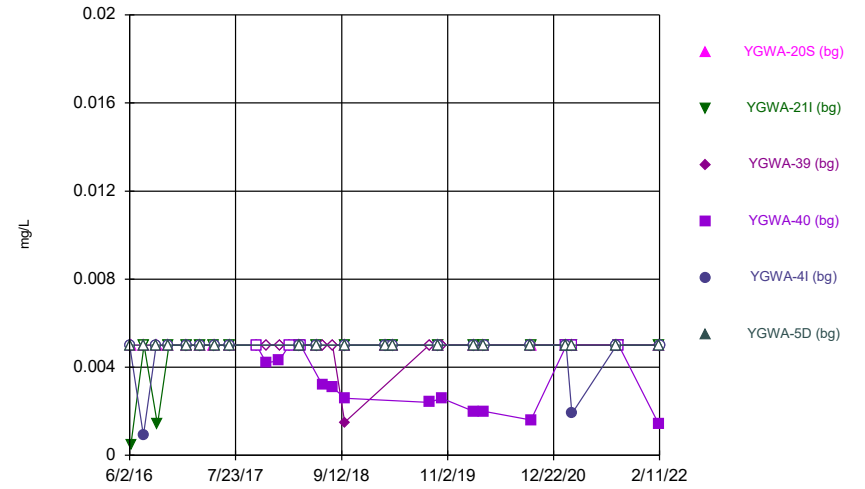
Constituent: pH, Field Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



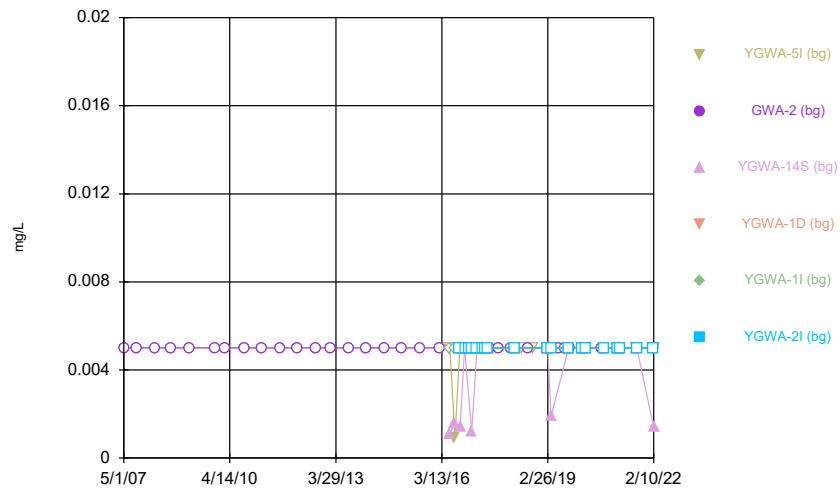
Constituent: Selenium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



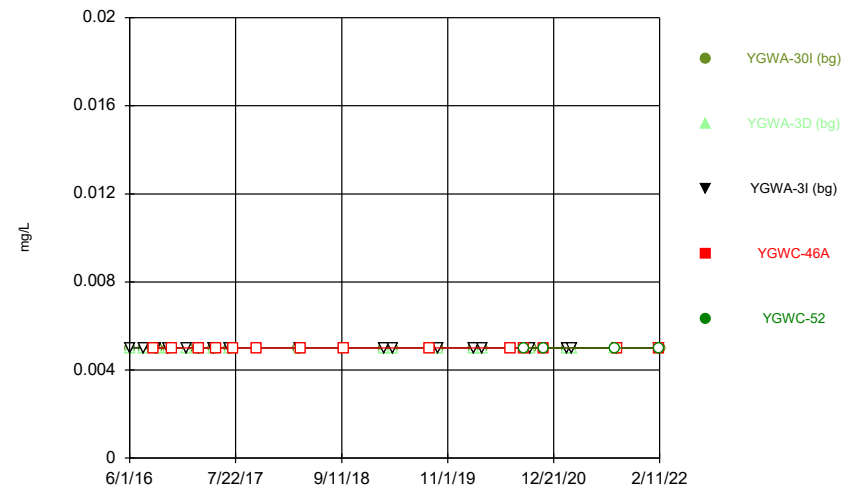
Constituent: Selenium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



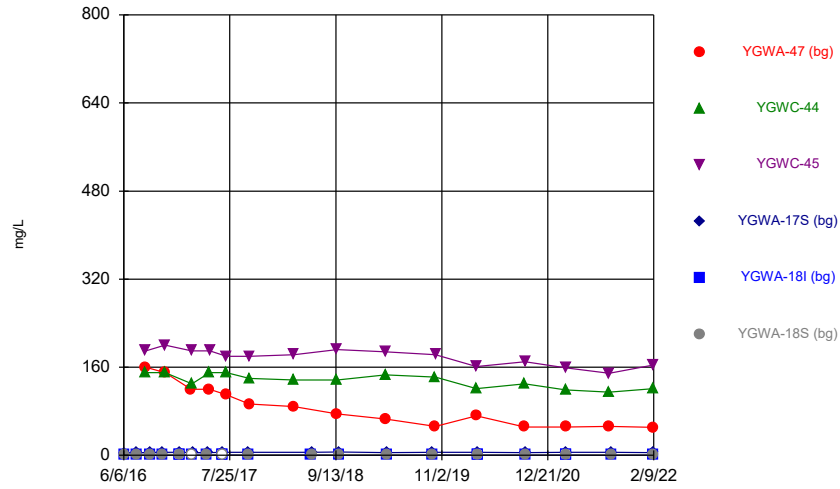
Constituent: Selenium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



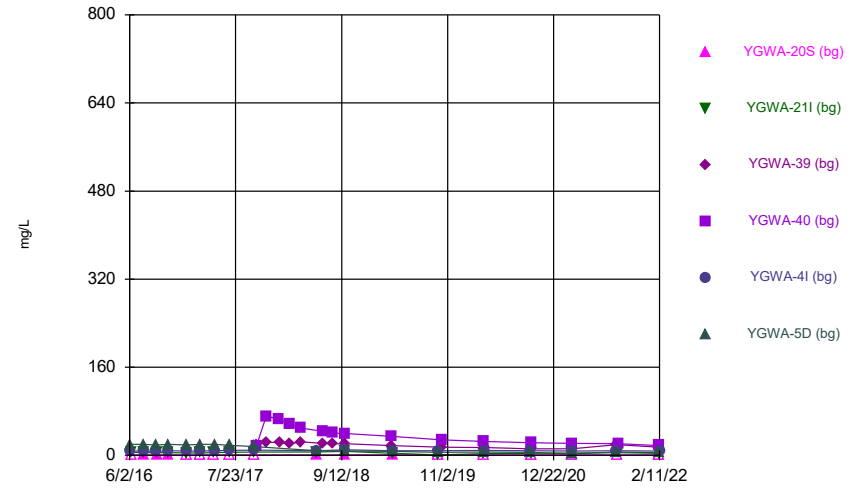
Constituent: Selenium Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



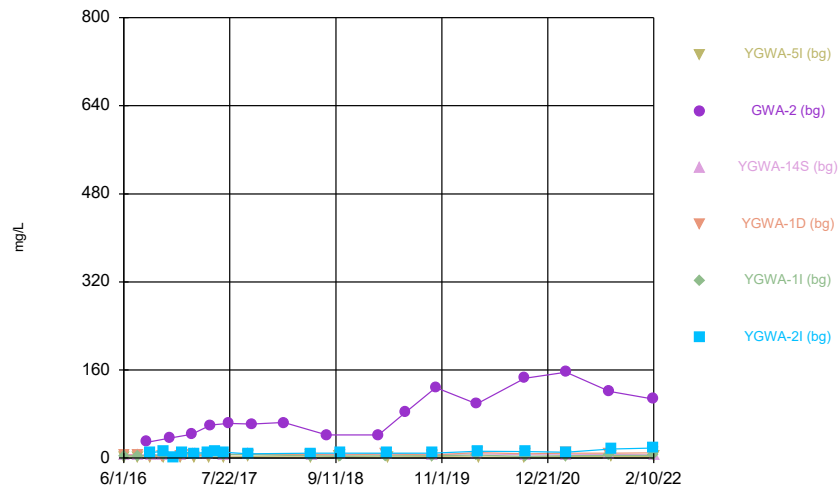
Constituent: Sulfate as SO4 Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



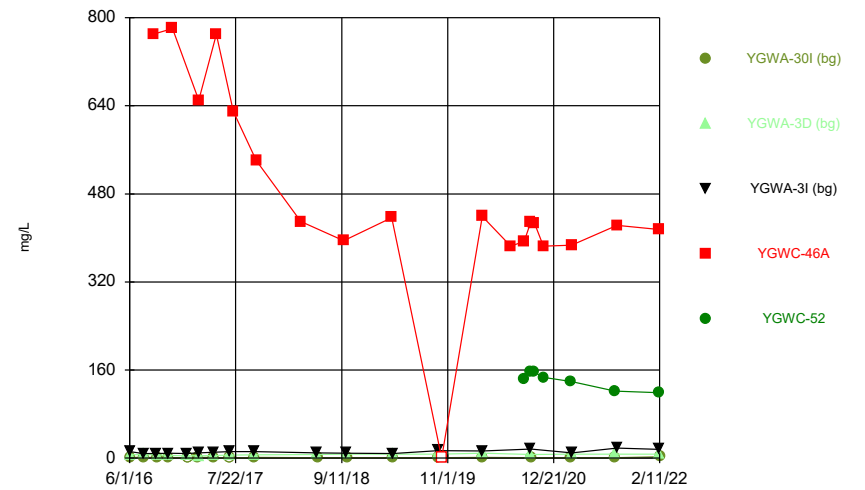
Constituent: Sulfate as SO4 Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



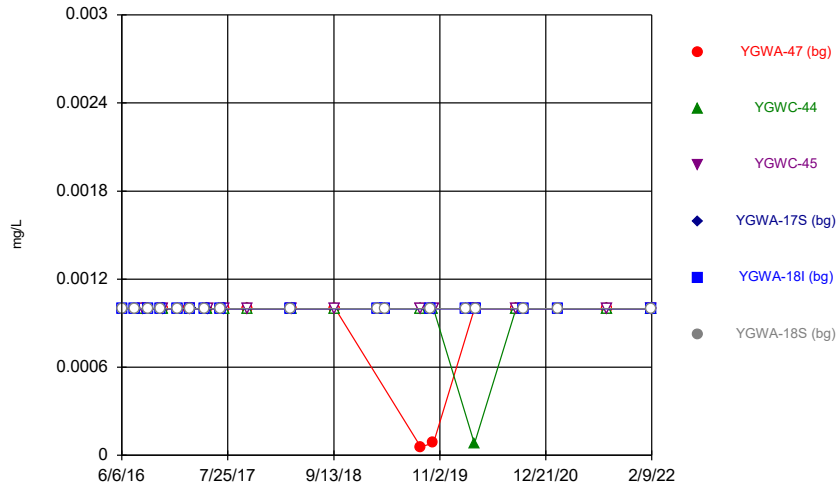
Constituent: Sulfate as SO4 Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



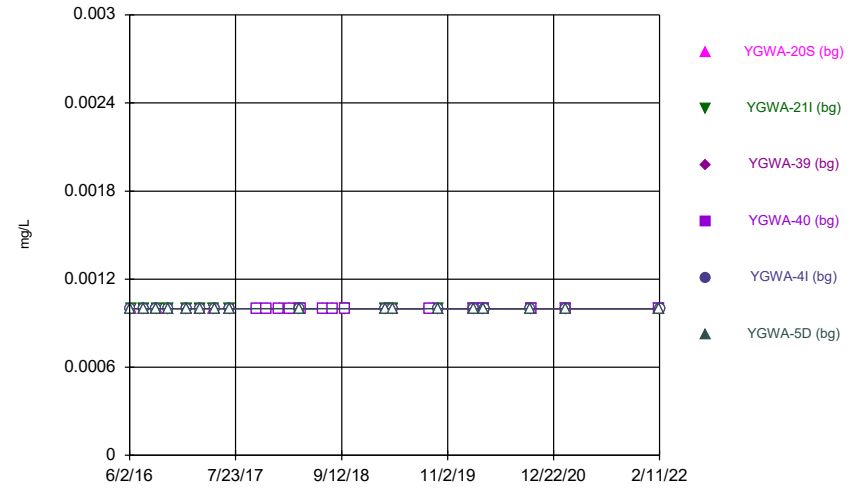
Constituent: Sulfate as SO4 Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



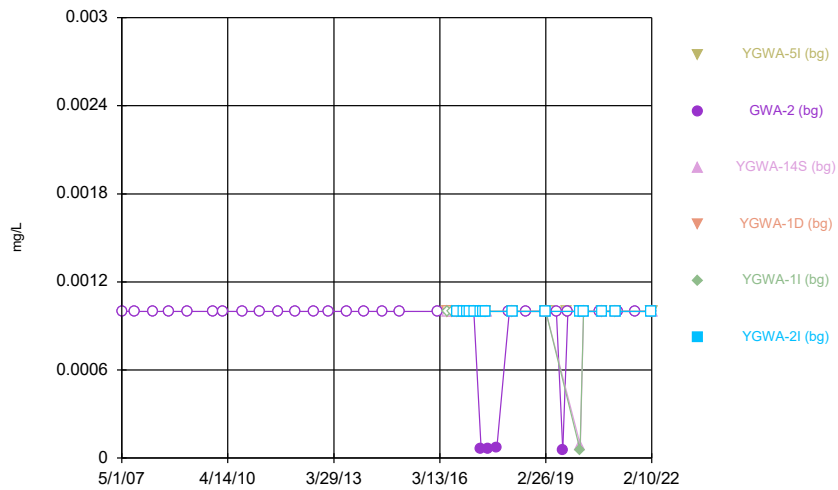
Constituent: Thallium Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



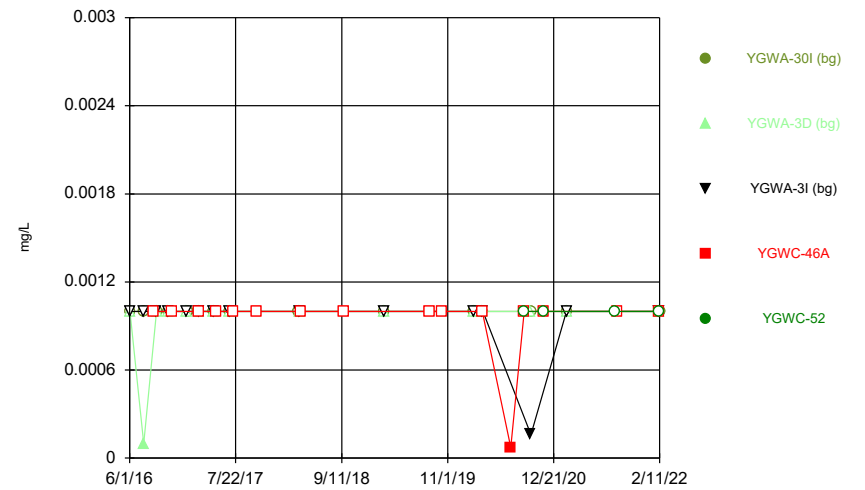
Constituent: Thallium Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



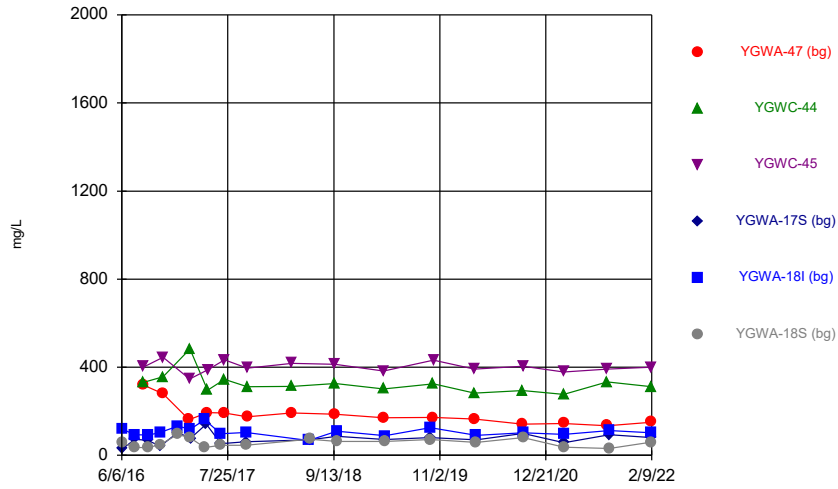
Constituent: Thallium Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



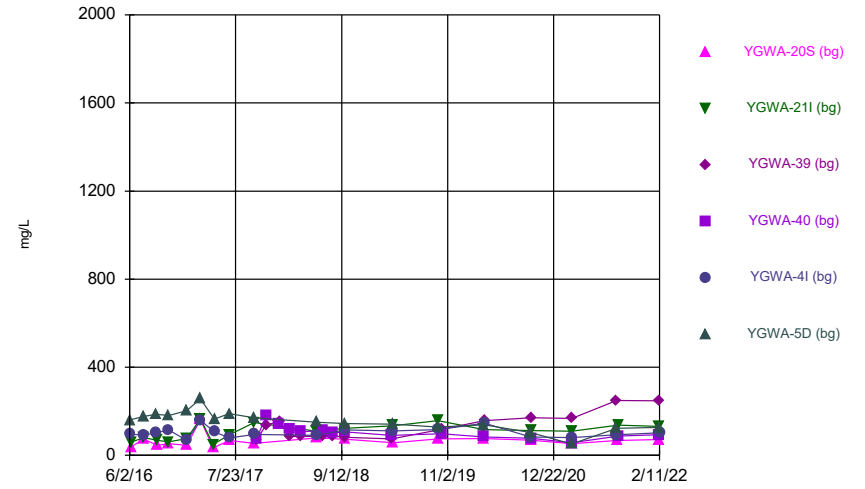
Constituent: Thallium Analysis Run 4/27/2022 12:12 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



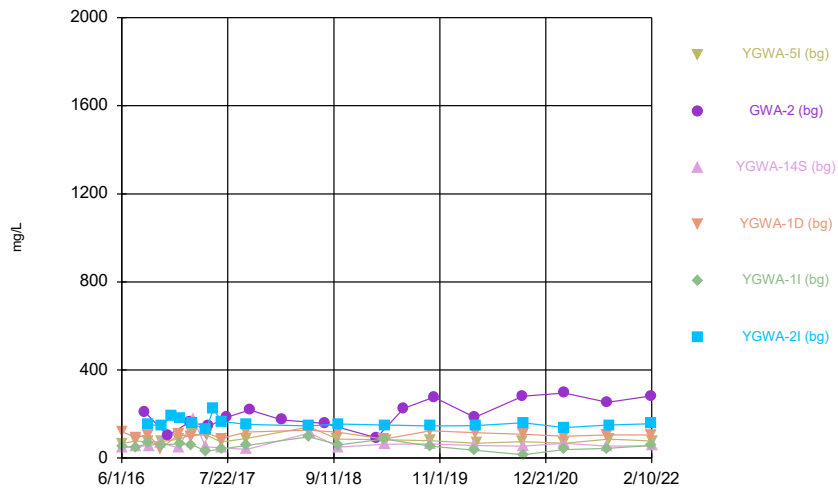
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



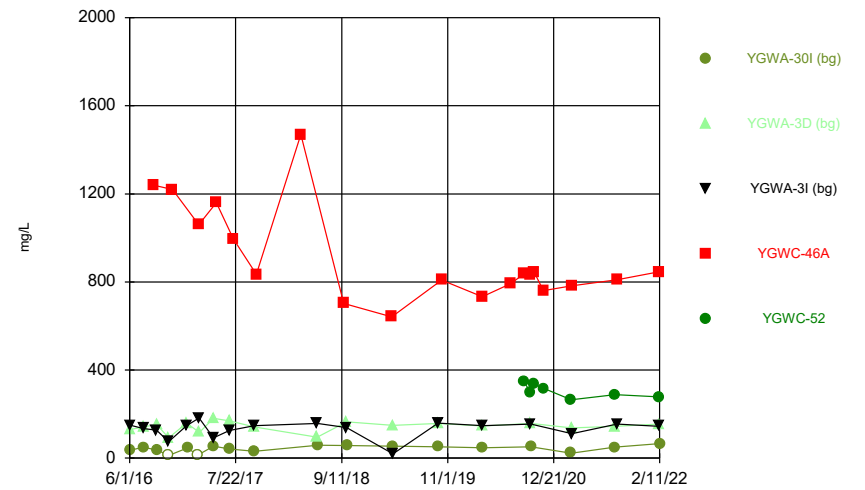
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/27/2022 12:12 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

# Time Series

Constituent: Antimony (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.003	<0.003
6/7/2016				<0.003		
7/27/2016				<0.003	0.0005 (J)	<0.003
8/30/2016	0.0028 (J)					
8/31/2016		<0.003	<0.003			
9/16/2016				<0.003		<0.003
9/19/2016					<0.003	
11/3/2016				<0.003	<0.003	<0.003
11/14/2016	<0.003		<0.003			
11/15/2016		<0.003				
1/11/2017				<0.003	<0.003	<0.003
2/24/2017	<0.003					
2/27/2017			<0.003			
2/28/2017		<0.003				
3/1/2017					<0.003	<0.003
3/2/2017				<0.003		
4/26/2017					<0.003	<0.003
5/2/2017				<0.003		
5/8/2017	0.0004 (J)	<0.003				
5/9/2017			<0.003			
6/28/2017					<0.003	<0.003
6/29/2017				<0.003		
7/11/2017	0.0006 (J)					
7/13/2017		<0.003	<0.003			
10/10/2017	<0.003	<0.003	<0.003			
3/28/2018				<0.003	<0.003	<0.003
4/2/2018	<0.003					
4/3/2018			<0.003			
4/4/2018		<0.003				
9/19/2018	<0.003	<0.003	<0.003			
3/5/2019				<0.003		<0.003
3/6/2019					<0.003	
4/2/2019				<0.003		
4/3/2019					<0.003	<0.003
8/20/2019	<0.003	<0.003	<0.003			
9/25/2019				<0.003		
9/26/2019					0.00056 (J)	<0.003
2/11/2020				<0.003	<0.003	<0.003
3/24/2020				<0.003	<0.003	<0.003
8/27/2020	0.00048 (J)	<0.003				
8/28/2020			0.0017 (J)			
9/22/2020	<0.003	<0.003				
9/23/2020			<0.003	<0.003	<0.003	<0.003
2/9/2021					<0.003	<0.003
3/1/2021	0.00048 (J)	<0.003	<0.003			
3/3/2021				<0.003	<0.003	0.00067 (J)
8/19/2021	<0.003	<0.003	<0.003			
8/26/2021						<0.003
8/27/2021				<0.003	<0.003	
2/8/2022	<0.003					
2/9/2022		<0.003	<0.003	<0.003	<0.003	<0.003

# Time Series

Constituent: Antimony (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.003	<0.003
6/7/2016	<0.003	<0.003				
7/26/2016					0.0003 (J)	<0.003
7/27/2016	<0.003					
7/28/2016		<0.003				
9/14/2016					<0.003	<0.003
9/19/2016	<0.003	0.001 (J)				
11/2/2016	<0.003				<0.003	<0.003
11/3/2016		<0.003				
1/12/2017						<0.003
1/13/2017	<0.003	<0.003			<0.003	
3/6/2017	<0.003	0.0005 (J)			<0.003	
3/7/2017						<0.003
4/26/2017	<0.003	<0.003				
5/1/2017					<0.003	<0.003
6/27/2017						<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			
3/29/2018	<0.003	<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	<0.003
3/5/2019	<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				<0.003
9/25/2019	<0.003				<0.003	
2/12/2020	<0.003	0.0015 (J)	<0.003	<0.003	<0.003	<0.003
3/24/2020	<0.003	0.0017 (J)		<0.003		<0.003
3/25/2020			0.0014 (J)		<0.003	
9/22/2020					<0.003	<0.003
9/24/2020	<0.003	0.0047	<0.003	<0.003		
2/8/2021						<0.003
2/9/2021	0.00032 (J)	0.0013 (J)			<0.003	
2/10/2021			<0.003	<0.003		
3/2/2021						<0.003
3/3/2021	<0.003				<0.003	
3/4/2021		0.0014 (J)	<0.003	<0.003		
8/26/2021			<0.003		<0.003	<0.003
8/27/2021	<0.003	<0.003				
9/1/2021		<0.003				
9/3/2021				<0.003		
2/8/2022			<0.003	<0.003		



# Time Series

Constituent: Antimony (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
2/9/2022	<0.003	<0.003				
2/10/2022						<0.003
2/11/2022					<0.003	

# Time Series

Constituent: Antimony (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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			
7/25/2016					<0.003	
7/26/2016	<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			
11/4/2016	<0.003				<0.003	<0.003
11/28/2016		0.0014 (J)				
12/15/2016						0.0012 (J)
1/10/2017			<0.003			
1/11/2017				<0.003		
1/12/2017	<0.003					
1/16/2017					<0.003	<0.003
2/22/2017		<0.003				
3/2/2017				0.0004 (J)	<0.003	
3/3/2017						<0.003
3/7/2017	<0.003					
3/8/2017			<0.003			
4/26/2017			<0.003			
4/27/2017				0.0004 (J)	0.0017 (J)	
4/28/2017						0.0015 (J)
5/2/2017	<0.003					
5/8/2017		<0.003				
5/26/2017						0.0005 (J)
6/27/2017	<0.003			<0.003	<0.003	
6/28/2017						<0.003
6/30/2017			<0.003			
7/17/2017		<0.003				
10/16/2017		<0.003				

# Time Series

Constituent: Antimony (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.003				
3/27/2018			<0.003		<0.003	
3/28/2018						<0.003
3/29/2018	<0.003			<0.003		
8/6/2018		<0.003				
2/25/2019		<0.003				
2/26/2019			<0.003			
2/27/2019				<0.003	<0.003	<0.003
3/4/2019	<0.003					
4/3/2019	<0.003					
6/12/2019		<0.003				
8/19/2019		<0.003				
9/24/2019	<0.003					
10/8/2019		<0.003				
2/10/2020				0.00088 (J)	<0.003	
2/11/2020						0.00036 (J)
2/12/2020	<0.003		<0.003			
3/17/2020		<0.003				
3/18/2020			<0.003		0.0004 (J)	
3/19/2020				<0.003		0.0003 (J)
3/24/2020	<0.003					
8/26/2020		0.00042 (J)				
9/22/2020	<0.003	0.00044 (J)				
9/23/2020				<0.003	<0.003	<0.003
9/25/2020			<0.003			
2/8/2021	<0.003					
2/10/2021			<0.003			0.0013 (J)
2/12/2021				<0.003	<0.003	
3/2/2021	<0.003	<0.003	<0.003			
3/3/2021				<0.003	<0.003	<0.003
8/19/2021			<0.003	<0.003	<0.003	
8/20/2021		<0.003				
8/26/2021	<0.003					
8/27/2021						<0.003
2/8/2022		<0.003				
2/9/2022				<0.003	<0.003	<0.003
2/10/2022	<0.003		<0.003			

# Time Series

Constituent: Antimony (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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)			
9/1/2016				<0.003	
9/14/2016			<0.003		
9/15/2016		0.0027 (J)			
9/19/2016	<0.003				
11/1/2016	<0.003	<0.003	<0.003		
11/16/2016				<0.003	
1/11/2017		<0.003	<0.003		
1/16/2017	<0.003				
2/21/2017	<0.003				
2/27/2017				<0.003	
3/1/2017			<0.003		
3/2/2017		0.0008 (J)			
4/26/2017	<0.003	<0.003	<0.003		
5/8/2017				<0.003	
6/28/2017		<0.003	<0.003		
6/30/2017	<0.003				
7/13/2017				<0.003	
10/11/2017				<0.003	
3/27/2018	<0.003				
3/28/2018		<0.003	<0.003		
4/4/2018				<0.003	
9/19/2018				<0.003	
2/26/2019	<0.003				
2/27/2019		<0.003	<0.003		
8/21/2019				<0.003	
2/11/2020			<0.003		
2/12/2020	<0.003	<0.003			
3/19/2020	<0.003	0.00064 (J)	<0.003		
7/6/2020				<0.003	
8/27/2020					<0.003
8/28/2020				0.00029 (J)	
9/22/2020					<0.003
9/23/2020		<0.003	<0.003	<0.003	
9/24/2020	<0.003				
10/7/2020				<0.003	<0.003
11/12/2020				<0.003	<0.003
2/10/2021		<0.003	<0.003		
2/11/2021	<0.003				
3/1/2021	<0.003				<0.003
3/2/2021				<0.003	
3/3/2021		<0.003	<0.003		
8/19/2021	<0.003	<0.003			
8/20/2021					<0.003
8/27/2021			<0.003	<0.003	
2/9/2022		0.0018 (J)	<0.003	<0.003	<0.003
2/11/2022	<0.003				

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.005	<0.005
6/7/2016				<0.005		
7/27/2016				<0.005	<0.005	<0.005
8/30/2016	<0.005					
8/31/2016		<0.005	<0.005			
9/16/2016				<0.005		<0.005
9/19/2016					<0.005	
11/3/2016				<0.005	<0.005	<0.005
11/14/2016	<0.005		<0.005			
11/15/2016		<0.005				
1/11/2017				<0.005	<0.005	<0.005
2/24/2017	<0.005					
2/27/2017			<0.005			
2/28/2017		0.0005 (J)				
3/1/2017					<0.005	<0.005
3/2/2017				<0.005		
4/26/2017					<0.005	<0.005
5/2/2017				<0.005		
5/8/2017	<0.005	0.0006 (J)				
5/9/2017			<0.005			
6/28/2017					<0.005	<0.005
6/29/2017				<0.005		
7/11/2017	<0.005					
7/13/2017		<0.005	<0.005			
10/10/2017	0.0007 (J)	0.0007 (J)	0.0006 (J)			
3/28/2018				<0.005	<0.005	0.00061 (J)
4/2/2018	<0.005					
4/3/2018			0.00061 (J)			
4/4/2018		<0.005				
6/7/2018					0.00066 (J)	
6/11/2018				<0.005		<0.005
9/19/2018	0.00072 (J)	0.00086 (J)	0.00072 (J)			
9/25/2018				<0.005	<0.005	<0.005
3/5/2019				<0.005		<0.005
3/6/2019					<0.005	
4/2/2019				<0.005		
4/3/2019					<0.005	<0.005
8/20/2019	<0.005	0.00097 (J)	0.00078 (J)			
9/25/2019				<0.005		
9/26/2019					<0.005	<0.005
10/8/2019	<0.005	<0.005				
10/9/2019			<0.005			
2/11/2020				0.0022 (J)	0.0014 (J)	0.0026 (J)
3/17/2020	<0.005	<0.005	<0.005			
3/24/2020				<0.005	<0.005	<0.005
8/27/2020	<0.005	<0.005				
8/28/2020			<0.005			
9/22/2020	<0.005	<0.005				
9/23/2020			<0.005	<0.005	<0.005	<0.005
2/9/2021					<0.005	<0.005
3/1/2021	<0.005	<0.005	<0.005			
3/3/2021				<0.005	<0.005	<0.005

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	<0.005	<0.005	<0.005			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	
2/8/2022	0.0027 (J)					
2/9/2022		<0.005	<0.005	0.0024 (J)	0.0022 (J)	0.0024 (J)

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.005	0.00071 (J)
6/7/2016	<0.005	<0.005				
7/26/2016					<0.005	0.001 (J)
7/27/2016	<0.005					
7/28/2016		<0.005				
9/14/2016					<0.005	<0.005
9/19/2016	<0.005	<0.005				
11/2/2016	<0.005				<0.005	<0.005
11/3/2016		<0.005				
1/12/2017						<0.005
1/13/2017	<0.005	<0.005			<0.005	
3/6/2017	<0.005	0.0017 (J)			<0.005	
3/7/2017						0.0012 (J)
4/26/2017	<0.005	<0.005				
5/1/2017					<0.005	<0.005
6/27/2017						0.0019 (J)
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			
3/29/2018	<0.005	0.0015 (J)			<0.005	0.0006 (J)
4/3/2018			<0.005	<0.005		
6/5/2018		0.0013 (J)				
6/6/2018	<0.005					0.0013 (J)
6/7/2018					0.00059 (J)	
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	0.0022 (J)				
9/26/2018					<0.005	0.0014 (J)
3/4/2019					<0.005	<0.005
3/5/2019	<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)				0.00043 (J)
9/25/2019	<0.005				<0.005	
10/9/2019			0.00063 (J)	<0.005		
2/12/2020	<0.005	0.0025 (J)	0.00058 (J)	0.0034 (J)	<0.005	0.0046 (J)
3/24/2020	<0.005	0.0013 (J)		<0.005		0.00065 (J)
3/25/2020			0.0012 (J)		<0.005	
9/22/2020					<0.005	0.001 (J)
9/24/2020	<0.005	0.0014 (J)	<0.005	<0.005		
2/8/2021						<0.005
2/9/2021	<0.005	0.001 (J)			<0.005	
2/10/2021			<0.005	<0.005		
3/2/2021						<0.005
3/3/2021	<0.005				<0.005	

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.00078 (J)	<0.005	<0.005		
8/26/2021			<0.005		<0.005	0.0016 (J)
8/27/2021	<0.005					
9/1/2021		<0.005				
9/3/2021				<0.005		
2/8/2022			0.0034 (J)	0.003 (J)		
2/9/2022	0.0021 (J)	0.0036 (J)				
2/10/2022						0.004 (J)
2/11/2022					0.0014 (J)	



# Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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	<0.005		<0.005			
7/25/2016					<0.005	
7/26/2016	<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			
11/4/2016	<0.005				<0.005	0.0017 (J)
11/28/2016		<0.005				
12/15/2016						0.0023 (J)
1/10/2017			<0.005			
1/11/2017				0.0017 (J)		
1/12/2017	<0.005					
1/16/2017					<0.005	0.0018 (J)
2/22/2017		<0.005				
3/2/2017				0.0014 (J)	<0.005	
3/3/2017						0.0016 (J)
3/7/2017	<0.005					
3/8/2017			<0.005			
4/26/2017			<0.005			
4/27/2017				0.0018 (J)	<0.005	
4/28/2017						0.002 (J)
5/2/2017	<0.005					
5/8/2017		<0.005				
5/26/2017						0.0005 (J)
6/27/2017	<0.005			0.0018 (J)	<0.005	
6/28/2017						0.0016 (J)
6/30/2017			<0.005			
7/17/2017		<0.005				
10/16/2017		<0.005				

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						0.0013 (J)
3/29/2018	<0.005			0.0017 (J)		
6/5/2018				0.0013 (J)		
6/6/2018					<0.005	
6/7/2018	<0.005					0.00082 (J)
6/8/2018			<0.005			
8/6/2018		<0.005				
9/26/2018	<0.005					
10/1/2018			<0.005	0.0016 (J)	<0.005	0.0011 (J)
2/25/2019		<0.005				
2/26/2019			<0.005			
2/27/2019				0.0015 (J)	<0.005	0.001 (J)
3/4/2019	<0.005					
3/28/2019				0.00072 (J)	<0.005	
3/29/2019			<0.005			0.00063 (J)
4/3/2019	<0.005					
6/12/2019		0.00038 (J)				
8/19/2019		0.00095 (J)				
9/24/2019	<0.005			0.0014 (J)	<0.005	<0.005
9/25/2019			<0.005			
10/8/2019		<0.005				
2/10/2020				0.0026 (J)	0.0005 (J)	
2/11/2020						0.0044 (J)
2/12/2020	0.002 (J)		<0.005			
3/17/2020		<0.005				
3/18/2020			<0.005		<0.005	
3/19/2020				0.00095 (J)		0.00066 (J)
3/24/2020	<0.005					
8/26/2020		<0.005				
9/22/2020	<0.005	<0.005				
9/23/2020				0.0011 (J)	<0.005	0.001 (J)
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				<0.005	<0.005	
3/2/2021	<0.005	<0.005	<0.005			
3/3/2021				<0.005	<0.005	0.00098 (J)
8/19/2021			<0.005	<0.005	<0.005	
8/20/2021		<0.005				
8/26/2021	<0.005					
8/27/2021						<0.005
2/8/2022		0.0033 (J)				
2/9/2022				0.0031 (J)	0.0033 (J)	0.0037 (J)
2/10/2022	0.0016 (J)		0.0016 (J)			

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.005		
6/2/2016	<0.005	<0.005			
7/25/2016	<0.005		<0.005		
7/26/2016		<0.005			
9/1/2016				<0.005	
9/14/2016			<0.005		
9/15/2016		<0.005			
9/19/2016	<0.005				
11/1/2016	<0.005	<0.005	<0.005		
11/16/2016				<0.005	
1/11/2017		<0.005	<0.005		
1/16/2017	<0.005				
2/21/2017	<0.005				
2/27/2017				<0.005	
3/1/2017			0.0004 (J)		
3/2/2017		<0.005			
4/26/2017	<0.005	<0.005	<0.005		
5/8/2017				0.0007 (J)	
6/28/2017		0.0007 (J)	0.0011 (J)		
6/30/2017	<0.005				
7/13/2017				0.0011 (J)	
10/11/2017				0.0011 (J)	
3/27/2018	<0.005				
3/28/2018		<0.005	<0.005		
4/4/2018				0.00087 (J)	
6/7/2018		<0.005			
6/8/2018			<0.005		
6/11/2018	<0.005				
9/19/2018				0.0012 (J)	
10/1/2018		<0.005	<0.005		
10/2/2018	<0.005				
2/26/2019	<0.005				
2/27/2019		<0.005	<0.005		
4/1/2019	<0.005	<0.005	<0.005		
8/21/2019				0.00074 (J)	
9/25/2019	<0.005	<0.005	<0.005		
10/9/2019				<0.005	
2/11/2020			0.0041 (J)		
2/12/2020	0.0032 (J)	0.0038 (J)			
3/17/2020				<0.005	
3/19/2020	<0.005	<0.005	<0.005		
7/6/2020				0.00079 (J)	
8/27/2020					<0.005
8/28/2020				0.0015 (J)	
9/22/2020					<0.005
9/23/2020		<0.005	<0.005	0.00091 (J)	
9/24/2020	<0.005				
10/7/2020				0.001 (J)	<0.005
11/12/2020				0.0014 (J)	<0.005
2/10/2021		0.00094 (J)	0.00078 (J)		
2/11/2021	<0.005				
3/1/2021	<0.005				<0.005

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.0016 (J)	
3/3/2021		<0.005	<0.005		
8/19/2021	<0.005	<0.005			
8/20/2021					<0.005
8/27/2021			<0.005	0.0022 (J)	
2/9/2022		0.002 (J)	0.0018 (J)	<0.005	<0.005
2/11/2022	0.0014 (J)				

# Time Series

Constituent: Barium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					0.028	0.019
6/7/2016				0.012		
7/27/2016				0.0126	0.0294	0.0167
8/30/2016	0.0413					
8/31/2016		0.126	0.0754			
9/16/2016				0.0127		0.0168
9/19/2016					0.0247	
11/3/2016				0.0128	0.0248	0.0159
11/14/2016	0.0383		0.0701			
11/15/2016		0.115				
1/11/2017				0.0142	0.0266	0.0162
2/24/2017	0.0351					
2/27/2017			0.0834			
2/28/2017		0.121				
3/1/2017					0.0275	0.0195
3/2/2017				0.0155		
4/26/2017					0.024	0.0182
5/2/2017				0.0138		
5/8/2017	0.0251	0.125				
5/9/2017			0.0779			
6/28/2017					0.0237	0.018
6/29/2017				0.0128		
7/11/2017	0.0233					
7/13/2017		0.106	0.0719			
10/10/2017	0.0207	0.112	0.0708			
3/28/2018				0.014	0.024	0.021
4/2/2018	0.022					
4/3/2018			0.068			
4/4/2018		0.12				
6/7/2018					0.023	
6/11/2018				0.013		0.019
9/19/2018	0.023	0.11	0.064			
9/25/2018				0.014	0.023	0.019
3/5/2019				0.015		0.02
3/6/2019					0.024	
4/2/2019				0.016		
4/3/2019					0.025	0.017
8/20/2019	0.024	0.1	0.057			
9/25/2019				0.015		
9/26/2019					0.021	0.017
10/8/2019	0.025	0.098				
10/9/2019			0.058			
2/11/2020				0.015	0.022	0.019
3/17/2020	0.035	0.099	0.061			
3/24/2020				0.015	0.021	0.017
8/27/2020	0.027	0.086				
8/28/2020			0.053			
9/22/2020	0.026	0.096				
9/23/2020			0.052	0.015	0.021	0.016
2/9/2021					0.023	0.017
3/1/2021	0.029	0.087	0.055			
3/3/2021				0.017	0.023	0.017

# Time Series

Constituent: Barium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	0.029	0.089	0.055			
8/26/2021						0.015
8/27/2021				0.016	0.02	
2/8/2022	0.03					
2/9/2022		0.083	0.053	0.017	0.021	0.014

# Time Series

Constituent: Barium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					0.013	0.0084
6/7/2016	0.014	0.0058				
7/26/2016					0.0158	0.01
7/27/2016	0.0141					
7/28/2016		0.0068 (J)				
9/14/2016					0.0143	0.0085 (J)
9/19/2016	0.0155	0.0071 (J)				
11/2/2016	0.0157				0.0148	0.0091 (J)
11/3/2016		0.0092 (J)				
1/12/2017						0.0089 (J)
1/13/2017	0.0158	0.0105			0.0146	
3/6/2017	0.0163	0.0105			0.0141	
3/7/2017						0.009 (J)
4/26/2017	0.0177	0.011				
5/1/2017					0.0149	0.0083 (J)
6/27/2017						0.0074 (J)
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			
3/29/2018	0.014	<0.01			0.014	<0.01
4/3/2018			<0.01	0.045		
6/5/2018		0.011				
6/6/2018	0.015					0.008 (J)
6/7/2018					0.014	
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	0.015	0.011				
9/26/2018					0.02	0.0075 (J)
3/4/2019					0.016	0.0077 (J)
3/5/2019	0.016	0.011				
4/2/2019		0.011				
4/3/2019	0.018				0.017	0.0087 (J)
8/21/2019			0.015	0.035		
9/24/2019		0.011				0.0075 (J)
9/25/2019	0.014				0.015	
10/9/2019			0.013	0.036		
2/12/2020	0.014	0.011	0.011	0.035	0.012	0.0079 (J)
3/24/2020	0.015	0.011		0.033		0.0076 (J)
3/25/2020			0.014		0.016	
9/22/2020					0.013	0.0076 (J)
9/24/2020	0.015	0.01	0.016	0.028		
2/8/2021						0.0079 (J)
2/9/2021	0.015	0.011			0.013	
2/10/2021			0.027	0.032		
3/2/2021						0.014
3/3/2021	0.015				0.014	

# Time Series

Constituent: Barium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.011	0.028	0.032		
8/26/2021			0.038		0.012	0.0092
8/27/2021	0.013					
9/1/2021		0.0099				
9/3/2021				0.035		
2/8/2022			0.041	0.039		
2/9/2022	0.014	0.011				
2/10/2022						0.0084
2/11/2022					0.013	



# Time Series

Constituent: Barium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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	0.019		0.0081			
7/25/2016					0.0091 (J)	
7/26/2016	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	0.0181					0.0037 (J)
9/15/2016			0.0087 (J)			
11/1/2016				0.0062 (J)		
11/2/2016			0.0082 (J)			
11/4/2016	0.0165				0.0067 (J)	0.0059 (J)
11/28/2016		0.0529				
12/15/2016						0.0056 (J)
1/10/2017			0.0086 (J)			
1/11/2017				0.0069 (J)		
1/12/2017	0.0199					
1/16/2017					0.0096 (J)	0.0049 (J)
2/22/2017		0.0607				
3/2/2017				0.0071 (J)	0.0112	
3/3/2017						0.0046 (J)
3/7/2017	0.0196					
3/8/2017			0.0088 (J)			
4/26/2017			0.0085 (J)			
4/27/2017				0.0064 (J)	0.0106	
4/28/2017						0.0039 (J)
5/2/2017	0.0202					
5/8/2017		0.065				
5/26/2017						0.0034 (J)
6/27/2017	0.0184			0.0054 (J)	0.0092 (J)	
6/28/2017						0.003 (J)
6/30/2017			0.0081 (J)			
7/17/2017		0.06				
10/16/2017		0.0542				

# Time Series

Constituent: Barium (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		0.0533				
3/27/2018			<0.01		<0.01	
3/28/2018						<0.01
3/29/2018	0.021			<0.01		
6/5/2018				0.0069 (J)		
6/6/2018					0.0082 (J)	
6/7/2018	0.019					0.0037 (J)
6/8/2018			0.007 (J)			
8/6/2018		0.044				
9/26/2018	0.019					
10/1/2018			0.007 (J)	0.0062 (J)	0.0084 (J)	0.0038 (J)
2/25/2019		0.045				
2/26/2019			0.0067 (J)			
2/27/2019				0.0074 (J)	0.008 (J)	0.0035 (J)
3/4/2019	0.019					
3/28/2019				0.0082 (J)	0.0082 (J)	
3/29/2019			0.0066 (J)			0.0039 (J)
4/3/2019	0.023					
6/12/2019		0.063				
8/19/2019		0.065				
9/24/2019	0.019			0.0072 (J)	0.0086 (J)	0.0038 (J)
9/25/2019			0.0071 (J)			
10/8/2019		0.058				
2/10/2020				0.0066 (J)	0.0091 (J)	
2/11/2020						0.0036 (J)
2/12/2020	0.021		0.007 (J)			
3/17/2020		0.047				
3/18/2020			0.0076 (J)		0.0084 (J)	
3/19/2020				0.0076 (J)		0.0036 (J)
3/24/2020	0.021					
8/26/2020		0.044				
9/22/2020	0.019	0.045				
9/23/2020				0.0068 (J)	0.0079 (J)	0.0039 (J)
9/25/2020			0.0073 (J)			
2/8/2021	0.02					
2/10/2021			0.0078 (J)			0.0032 (J)
2/12/2021				0.0057 (J)	0.009 (J)	
3/2/2021	0.019	0.039	0.0076			
3/3/2021				0.0068	0.0094	0.0041 (J)
8/19/2021			0.0077	0.0065	0.0079	
8/20/2021		0.036				
8/26/2021	0.019					
8/27/2021						0.003 (J)
2/8/2022		0.037				
2/9/2022				0.0067	0.0088	0.0029 (J)
2/10/2022	0.02		0.0088			

# Time Series

Constituent: Barium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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)			
9/1/2016				0.0414	
9/14/2016			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)		
11/16/2016				0.0365	
1/11/2017		0.0075 (J)	0.0036 (J)		
1/16/2017	0.0071 (J)				
2/21/2017	0.0077 (J)				
2/27/2017				0.0326	
3/1/2017			0.0036 (J)		
3/2/2017		0.009 (J)			
4/26/2017	0.0074 (J)	0.0078 (J)	0.0038 (J)		
5/8/2017				0.0332	
6/28/2017		0.0071 (J)	0.004 (J)		
6/30/2017	0.0076 (J)				
7/13/2017				0.0365	
10/11/2017				0.0288	
3/27/2018	<0.01				
3/28/2018		<0.01	<0.01		
4/4/2018				0.025	
6/7/2018		0.0068 (J)			
6/8/2018			0.0034 (J)		
6/11/2018	0.007 (J)				
9/19/2018				0.03	
10/1/2018		0.0065 (J)	0.0034 (J)		
10/2/2018	0.0069 (J)				
2/26/2019	0.007 (J)				
2/27/2019		0.0059 (J)	0.0034 (J)		
4/1/2019	0.0072 (J)	0.0064 (J)	0.003 (J)		
8/21/2019				0.023	
9/25/2019	0.0066 (J)	0.0059 (J)	0.005 (J)		
10/9/2019				0.024	
2/11/2020			0.0031 (J)		
2/12/2020	0.0073 (J)	0.0062 (J)			
3/17/2020				0.022	
3/19/2020	0.0074 (J)	0.0072 (J)	0.0029 (J)		
7/6/2020				0.048	
8/27/2020					0.021
8/28/2020				0.05	
9/22/2020					0.021
9/23/2020		0.0051 (J)	0.0039 (J)	0.045	
9/24/2020	0.0062 (J)				
10/7/2020				0.042	0.019
11/12/2020				0.042	0.019
2/10/2021		0.0059 (J)	0.0029 (J)		
2/11/2021	0.0077 (J)				
3/1/2021	0.007				0.019

# Time Series

Constituent: Barium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.044	
3/3/2021		0.0064	0.0031 (J)		
8/19/2021	0.0071	0.0052			
8/20/2021					0.019
8/27/2021			0.0039 (J)	0.043	
2/9/2022		0.0051	0.0031 (J)	0.042	0.018
2/11/2022	0.0077				

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.0005	<0.0005
6/7/2016				<0.0005		
7/27/2016				<0.0005	<0.0005	<0.0005
8/30/2016	<0.0005					
8/31/2016		<0.0005	<0.0005			
9/16/2016				<0.0005		<0.0005
9/19/2016					<0.0005	
11/3/2016				<0.0005	<0.0005	<0.0005
11/14/2016	<0.0005		<0.0005			
11/15/2016		<0.0005				
1/11/2017				<0.0005	<0.0005	<0.0005
2/24/2017	<0.0005					
2/27/2017			<0.0005			
2/28/2017		<0.0005				
3/1/2017					<0.0005	<0.0005
3/2/2017				8E-05 (J)		
4/26/2017					<0.0005	<0.0005
5/2/2017				<0.0005		
5/8/2017	7E-05 (J)	<0.0005				
5/9/2017			<0.0005			
6/28/2017					<0.0005	<0.0005
6/29/2017				<0.0005		
7/11/2017	<0.0005					
7/13/2017		<0.0005	<0.0005			
10/10/2017	<0.0005	<0.0005	<0.0005			
3/28/2018				<0.0005	<0.0005	<0.0005
4/2/2018	<0.0005					
4/3/2018			<0.0005			
4/4/2018		<0.0005				
6/7/2018					<0.0005	
6/11/2018				9E-05 (J)		5.7E-05 (J)
9/19/2018	5.7E-05 (J)	<0.0005	<0.0005			
9/25/2018				8.9E-05 (J)	<0.0005	8.2E-05 (J)
3/5/2019				9.1E-05 (J)		7.9E-05 (J)
3/6/2019					<0.0005	
4/2/2019				9E-05 (J)		
4/3/2019					<0.0005	7.5E-05 (J)
8/20/2019	<0.0005	<0.0005	<0.0005			
9/25/2019				8.1E-05 (J)		
9/26/2019					<0.0005	8.4E-05 (J)
2/11/2020				7.8E-05 (J)	<0.0005	7.6E-05 (J)
3/24/2020				8E-05 (J)	<0.0005	8.9E-05 (J)
8/27/2020	4.7E-05 (J)	<0.0005				
8/28/2020			<0.0005			
9/22/2020	<0.0005	<0.0005				
9/23/2020			<0.0005	8.1E-05 (J)	<0.0005	8.8E-05 (J)
2/9/2021					<0.0005	9.8E-05 (J)
3/1/2021	5.5E-05 (J)	<0.0005	<0.0005			
3/3/2021				9.9E-05 (J)	<0.0005	0.00011 (J)
8/19/2021	<0.0005	<0.0005	<0.0005			
8/26/2021						9.3E-05 (J)
8/27/2021				0.0001 (J)	<0.0005	

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
2/8/2022	5.6E-05 (J)					
2/9/2022		<0.0005	<0.0005	0.00011 (J)	<0.0005	8.9E-05 (J)

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.0005	<0.0005
6/7/2016	<0.0005	<0.0005				
7/26/2016					<0.0005	<0.0005
7/27/2016	<0.0005					
7/28/2016		<0.0005				
9/14/2016					<0.0005	<0.0005
9/19/2016	<0.0005	<0.0005				
11/2/2016	<0.0005				<0.0005	<0.0005
11/3/2016		<0.0005				
1/12/2017						<0.0005
1/13/2017	<0.0005	<0.0005			<0.0005	
3/6/2017	<0.0005	<0.0005			<0.0005	
3/7/2017						<0.0005
4/26/2017	<0.0005	<0.0005				
5/1/2017					<0.0005	<0.0005
6/27/2017						<0.0005
6/29/2017	<0.0005	<0.0005			<0.0005	
10/11/2017			<0.0005			
10/12/2017				0.0002 (J)		
11/20/2017			<0.0005	0.0003 (J)		
1/10/2018				0.0003 (J)		
1/11/2018			<0.0005			
2/19/2018				<0.0005		
2/20/2018			<0.0005			
3/29/2018	<0.0005	<0.0005			<0.0005	<0.0005
4/3/2018			<0.0005	<0.0005		
6/5/2018		<0.0005				
6/6/2018	8E-05 (J)					<0.0005
6/7/2018					<0.0005	
6/28/2018			<0.0005	0.00029 (J)		
8/7/2018			<0.0005	0.00024 (J)		
9/24/2018			<0.0005	0.00019 (J)		
9/25/2018	6.1E-05 (J)	<0.0005				
9/26/2018					<0.0005	<0.0005
3/4/2019					<0.0005	<0.0005
3/5/2019	0.00011 (J)	<0.0005				
4/2/2019		<0.0005				
4/3/2019	6.4E-05 (J)				<0.0005	<0.0005
8/21/2019			<0.0005	0.0002 (J)		
9/24/2019		<0.0005				<0.0005
9/25/2019	<0.0005				<0.0005	
10/9/2019			<0.0005	0.0002 (J)		
2/12/2020	7.8E-05 (J)	<0.0005	<0.0005	0.00018 (J)	<0.0005	<0.0005
3/24/2020	7.6E-05 (J)	<0.0005		0.00022 (J)		<0.0005
3/25/2020			<0.0005		<0.0005	
9/22/2020					<0.0005	<0.0005
9/24/2020	8.3E-05 (J)	<0.0005	<0.0005	0.0002 (J)		
2/8/2021						<0.0005
2/9/2021	6.8E-05 (J)	<0.0005			<0.0005	
2/10/2021			5.1E-05 (J)	0.00021 (J)		
3/2/2021						<0.0005
3/3/2021	6.8E-05 (J)				<0.0005	

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		<0.0005	<0.0005	0.00021 (J)		
8/26/2021			<0.0005		<0.0005	<0.0005
8/27/2021	5.9E-05 (J)					
9/1/2021		<0.0005				
9/3/2021				0.00024 (J)		
2/8/2022			<0.0005	0.00028 (J)		
2/9/2022	7.7E-05 (J)	<0.0005				
2/10/2022						<0.0005
2/11/2022					<0.0005	



# Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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		<0.0005				
6/1/2016				<0.0005	<0.0005	
6/2/2016	<0.0005		<0.0005			
7/25/2016					<0.0005	
7/26/2016	<0.0005		0.0002 (J)	<0.0005		
8/31/2016		<0.0005				
9/13/2016				<0.0005	<0.0005	
9/14/2016	<0.0005					<0.0005
9/15/2016			0.0002 (J)			
11/1/2016				<0.0005		
11/2/2016			0.0002 (J)			
11/4/2016	<0.0005				<0.0005	<0.0005
11/28/2016		<0.0005				
12/15/2016						<0.0005
1/10/2017			0.0002 (J)			
1/11/2017				<0.0005		
1/12/2017	<0.0005					
1/16/2017					<0.0005	<0.0005
2/22/2017		<0.0005				
3/2/2017				<0.0005	<0.0005	
3/3/2017						<0.0005
3/7/2017	<0.0005					
3/8/2017			0.0002 (J)			
4/26/2017			0.0002 (J)			
4/27/2017				<0.0005	<0.0005	
4/28/2017						<0.0005
5/2/2017	<0.0005					
5/8/2017		<0.0005				
5/26/2017						<0.0005
6/27/2017	<0.0005			<0.0005	<0.0005	
6/28/2017						<0.0005
6/30/2017			0.0002 (J)			
7/17/2017		<0.0005				
10/16/2017		<0.0005				

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.0005				
3/27/2018			<0.0005		<0.0005	
3/28/2018						<0.0005
3/29/2018	<0.0005			<0.0005		
6/7/2018	<0.0005					
8/6/2018		<0.0005				
9/26/2018	<0.0005					
2/25/2019		<0.0005				
2/26/2019			0.00016 (J)			
2/27/2019				<0.0005	<0.0005	<0.0005
3/4/2019	<0.0005					
3/28/2019				<0.0005	<0.0005	
3/29/2019			0.00017 (J)			<0.0005
4/3/2019	<0.0005					
6/12/2019		<0.0005				
8/19/2019		<0.0005				
9/24/2019	<0.0005			<0.0005	<0.0005	<0.0005
9/25/2019			0.00018 (J)			
10/8/2019		<0.0005				
2/10/2020				<0.0005	<0.0005	
2/11/2020						<0.0005
2/12/2020	<0.0005		0.00019 (J)			
3/17/2020		<0.0005				
3/18/2020			0.00021 (J)		<0.0005	
3/19/2020				<0.0005		<0.0005
3/24/2020	<0.0005					
8/26/2020		<0.0005				
9/22/2020	<0.0005	<0.0005				
9/23/2020				<0.0005	<0.0005	<0.0005
9/25/2020			0.00018 (J)			
2/8/2021	<0.0005					
2/10/2021			0.00019 (J)			<0.0005
2/12/2021				<0.0005	<0.0005	
3/2/2021	<0.0005	<0.0005	0.00018 (J)			
3/3/2021				<0.0005	<0.0005	<0.0005
8/19/2021			0.00022 (J)	<0.0005	<0.0005	
8/20/2021		<0.0005				
8/26/2021	<0.0005					
8/27/2021						<0.0005
2/8/2022		<0.0005				
2/9/2022				<0.0005	<0.0005	<0.0005
2/10/2022	<0.0005		0.00025 (J)			

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.0005		
6/2/2016	<0.0005	<0.0005			
7/25/2016	<0.0005		<0.0005		
7/26/2016		<0.0005			
9/1/2016				<0.0005	
9/14/2016			<0.0005		
9/15/2016		<0.0005			
9/19/2016	<0.0005				
11/1/2016	<0.0005	<0.0005	<0.0005		
11/16/2016				<0.0005	
1/11/2017		<0.0005	<0.0005		
1/16/2017	<0.0005				
2/21/2017	<0.0005				
2/27/2017				<0.0005	
3/1/2017			<0.0005		
3/2/2017		<0.0005			
4/26/2017	<0.0005	<0.0005	<0.0005		
5/8/2017				<0.0005	
6/28/2017		<0.0005	<0.0005		
6/30/2017	<0.0005				
7/13/2017				<0.0005	
10/11/2017				<0.0005	
3/27/2018	<0.0005				
3/28/2018		<0.0005	<0.0005		
4/4/2018				<0.0005	
9/19/2018				<0.0005	
2/26/2019	7.2E-05 (J)				
2/27/2019		<0.0005	<0.0005		
4/1/2019	<0.0005	<0.0005	<0.0005		
8/21/2019				<0.0005	
9/25/2019	<0.0005	<0.0005	<0.0005		
2/11/2020			<0.0005		
2/12/2020	<0.0005	<0.0005			
3/19/2020	<0.0005	<0.0005	<0.0005		
7/6/2020				<0.0005	
8/27/2020					<0.0005
8/28/2020				<0.0005	
9/22/2020					<0.0005
9/23/2020		<0.0005	5.9E-05 (J)	<0.0005	
9/24/2020	<0.0005				
10/7/2020				<0.0005	<0.0005
11/12/2020				<0.0005	<0.0005
2/10/2021		<0.0005	<0.0005		
2/11/2021	4.7E-05 (J)				
3/1/2021	<0.0005				<0.0005
3/2/2021				<0.0005	
3/3/2021		<0.0005	<0.0005		
8/19/2021	<0.0005	<0.0005			
8/20/2021					<0.0005
8/27/2021			<0.0005	<0.0005	
2/9/2022		<0.0005	<0.0005	<0.0005	<0.0005
2/11/2022	<0.0005				

# Time Series

Constituent: Boron, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.04	<0.04
6/7/2016				<0.04		
7/27/2016				0.008 (J)	<0.04	0.0059 (J)
8/30/2016	0.0166 (J)					
8/31/2016		0.541	0.308			
9/16/2016				0.0086 (J)		0.0079 (J)
9/19/2016					<0.04	
11/3/2016				0.0077 (J)	<0.04	0.0082 (J)
11/14/2016	0.0166 (J)		0.368			
11/15/2016		0.706				
1/11/2017				0.0092 (J)	<0.04	0.0096 (J)
2/24/2017	0.0145 (J)					
2/27/2017			0.321			
2/28/2017		0.623				
3/1/2017					<0.04	<0.04
3/2/2017				0.0095 (J)		
4/26/2017					<0.04	0.0091 (J)
5/2/2017				<0.04		
5/8/2017	0.0141 (J)	0.69				
5/9/2017			0.338			
6/28/2017					<0.04	0.0079 (J)
6/29/2017				0.0074 (J)		
7/11/2017	0.0131 (J)					
7/13/2017		0.649	0.34			
10/4/2017				0.0077 (J)		0.009 (J)
10/5/2017					<0.04	
10/10/2017	0.0124 (J)	0.603	0.319			
4/2/2018	0.013 (J)					
4/3/2018			0.35			
4/4/2018		0.66				
6/7/2018					<0.04	
6/11/2018				0.01 (J)		0.0093 (J)
9/19/2018	0.012 (J)	0.66	0.35			
9/25/2018				0.0096 (J)	0.0046 (J)	0.007 (J)
3/27/2019	0.013 (J)	0.57	0.33			
4/2/2019				0.0066 (J)		
4/3/2019					<0.04	0.0053 (J)
9/25/2019				0.0081 (J)		
9/26/2019					0.0062 (J)	0.0072 (J)
10/8/2019	0.012 (J)	0.58				
10/9/2019			0.35			
3/17/2020	0.023 (J)	0.61	0.37			
3/24/2020				0.0092 (J)	0.0054 (J)	0.01 (J)
9/22/2020	0.0076 (J)	0.59				
9/23/2020			0.32	0.0066 (J)	0.021 (J)	0.006 (J)
3/1/2021	0.013 (J)	0.54	0.32			
3/3/2021				0.01 (J)	<0.04	0.0094 (J)
8/19/2021	0.011 (J)	0.56	0.31			
8/26/2021						<0.04
8/27/2021				0.011 (J)	<0.04	
2/8/2022	0.015 (J)					
2/9/2022		0.58	0.34	0.0098 (J)	<0.04	<0.04

# Time Series

Constituent: Boron, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.04	<0.04
6/7/2016	<0.04	<0.04				
7/26/2016					0.0047 (J)	0.0052 (J)
7/27/2016	<0.04					
7/28/2016		<0.04				
9/14/2016					<0.04	0.0071 (J)
9/19/2016	<0.04	<0.04				
11/2/2016	<0.04				<0.04	<0.04
11/3/2016		<0.04				
1/12/2017						0.0076 (J)
1/13/2017	<0.04	<0.04			<0.04	
3/6/2017	<0.04	<0.04			<0.04	
3/7/2017						0.0089 (J)
4/26/2017	<0.04	<0.04				
5/1/2017					<0.04	0.0061 (J)
6/27/2017						0.0079 (J)
6/29/2017	<0.04	<0.04			<0.04	
10/3/2017		<0.04				0.0094 (J)
10/4/2017	<0.04					
10/5/2017					<0.04	
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			<0.04			
4/3/2018			0.033 (J)	0.12		
6/5/2018		0.0092 (J)				
6/6/2018	0.0049 (J)					0.0098 (J)
6/7/2018					0.0045 (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	<0.04	0.0054 (J)				
9/26/2018					0.005 (J)	0.01 (J)
3/26/2019				0.096		
3/27/2019			0.017 (J)			
4/2/2019		0.011 (J)				
4/3/2019	<0.04				0.0055 (J)	0.0076 (J)
9/24/2019		0.018 (J)				0.01 (J)
9/25/2019	<0.04				<0.04	
10/9/2019			0.017 (J)	0.079		
3/24/2020	<0.04	0.016 (J)		0.088 (J)		0.011 (J)
3/25/2020			0.043 (J)		0.011 (J)	
9/22/2020					<0.04	0.0079 (J)
9/24/2020	0.0094 (J)	0.013 (J)	0.037 (J)	0.087 (J)		
3/2/2021						0.0068 (J)
3/3/2021	<0.04				0.0056 (J)	
3/4/2021		0.0079 (J)	0.033 (J)	0.078		
8/26/2021			0.095		<0.04	0.009 (J)
8/27/2021	<0.04					

# Time Series

Constituent: Boron, total (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		<0.04				
9/3/2021				0.077		
2/8/2022			0.13	0.074		
2/9/2022	<0.04	<0.04				
2/10/2022						0.011 (J)
2/11/2022					<0.04	

# Time Series

Constituent: Boron, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				<0.04	<0.04	
6/2/2016	<0.04		<0.04			
7/25/2016					<0.04	
7/26/2016	<0.04		0.0177 (J)	0.0055 (J)		
8/31/2016		0.0315 (J)				
9/13/2016				<0.04	<0.04	
9/14/2016	0.01 (J)					<0.04
9/15/2016			0.0214 (J)			
11/1/2016				0.0086 (J)		
11/2/2016			<0.04			
11/4/2016	<0.04				<0.04	<0.04
11/28/2016		0.0095 (J)				
12/15/2016						0.0107 (J)
1/10/2017			0.0198 (J)			
1/11/2017				0.0074 (J)		
1/12/2017	<0.04					
1/16/2017					<0.04	<0.04
2/22/2017		<0.04				
3/2/2017				0.008 (J)	<0.04	
3/3/2017						<0.04
3/7/2017	<0.04					
3/8/2017			0.0189 (J)			
4/26/2017			0.0161 (J)			
4/27/2017				0.0066 (J)	<0.04	
4/28/2017						<0.04
5/2/2017	<0.04					
5/8/2017		0.0084 (J)				
5/26/2017						<0.04
6/27/2017	<0.04			0.0087 (J)	0.006 (J)	
6/28/2017						<0.04
6/30/2017			0.0173 (J)			
7/17/2017		0.0092 (J)				
10/3/2017	<0.04			0.0072 (J)	0.0071 (J)	<0.04
10/5/2017			0.0173 (J)			
10/16/2017		<0.04				
2/19/2018		<0.04				
6/5/2018				0.0052 (J)		
6/6/2018					<0.04	
6/7/2018	<0.04					<0.04
6/8/2018			0.013 (J)			
8/6/2018		<0.04				
9/26/2018	0.0057 (J)					
10/1/2018			0.015 (J)	0.021 (J)	0.0049 (J)	<0.04
2/25/2019		<0.04				
3/28/2019				0.005 (J)	<0.04	
3/29/2019			0.014 (J)			0.0065 (J)
4/3/2019	0.0044 (J)					
6/12/2019		<0.04				
9/24/2019	0.0049 (J)			0.0064 (J)	0.0055 (J)	0.0076 (J)
9/25/2019			0.018 (J)			
10/8/2019		<0.04				
3/17/2020		0.0051 (J)				

# Time Series

Constituent: Boron, total (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			0.02 (J)		0.0087 (J)	
3/19/2020				0.0085 (J)		0.0073 (J)
3/24/2020	0.0068 (J)					
9/22/2020	0.0053 (J)	0.0079 (J)				
9/23/2020				<0.04	<0.04	<0.04
9/25/2020			0.02 (J)			
3/2/2021	0.011 (J)	<0.04	0.017 (J)			
3/3/2021				<0.04	<0.04	<0.04
8/19/2021			0.018 (J)	<0.04	<0.04	
8/20/2021		<0.04				
8/26/2021	<0.04					
8/27/2021						<0.04
2/8/2022		<0.04				
2/9/2022				<0.04	<0.04	<0.04
2/10/2022	<0.04		0.02 (J)			



# Time Series

Constituent: Boron, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.04		
6/2/2016	<0.04	<0.04			
7/25/2016	<0.04		<0.04		
7/26/2016		0.0097 (J)			
9/1/2016				2.12	
9/14/2016			<0.04		
9/15/2016		0.0102 (J)			
9/19/2016	<0.04				
11/1/2016	<0.04	<0.04	<0.04		
11/16/2016				2.03	
1/11/2017		<0.04	<0.04		
1/16/2017	<0.04				
2/21/2017	<0.04				
2/27/2017				1.29	
3/1/2017			<0.04		
3/2/2017		0.0084 (J)			
4/26/2017	<0.04	<0.04	<0.04		
5/8/2017				1.71	
6/28/2017		<0.04	<0.04		
6/30/2017	<0.04				
7/13/2017				1.62	
10/4/2017	<0.04	<0.04	<0.04		
10/11/2017				1.17	
4/4/2018				1.2	
6/7/2018		0.004 (J)			
6/8/2018			<0.04		
6/11/2018	0.014 (J)				
9/19/2018				1.2	
10/1/2018		<0.04	<0.04		
10/2/2018	<0.04				
3/27/2019				0.89	
4/1/2019	<0.04	<0.04	<0.04		
9/25/2019	<0.04	0.0054 (J)	<0.04		
10/9/2019				1.1	
3/17/2020				1.3	
3/19/2020	0.0052 (J)	0.0073 (J)	0.0053 (J)		
7/6/2020				2	
8/27/2020					0.014 (J)
8/28/2020				1.8	
9/22/2020					<0.04
9/23/2020		0.012 (J)	0.0073 (J)	2	
9/24/2020	0.0075 (J)				
10/7/2020				1.8	0.018 (J)
11/12/2020				1.8	0.012 (J)
3/1/2021	<0.04				0.015 (J)
3/2/2021				1.9	
3/3/2021		<0.04	<0.04		
8/19/2021	<0.04	<0.04			
8/20/2021					<0.04
8/27/2021			<0.04	1.9	
2/9/2022		0.01 (J)	<0.04	2.1	0.0089 (J)
2/11/2022	<0.04				

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.0005	<0.0005
6/7/2016				<0.0005		
7/27/2016				<0.0005	<0.0005	<0.0005
8/30/2016	0.0001 (J)					
8/31/2016		<0.0005	<0.0005			
9/16/2016				<0.0005		<0.0005
9/19/2016					<0.0005	
11/3/2016				<0.0005	<0.0005	<0.0005
11/14/2016	0.0001 (J)		<0.0005			
11/15/2016		<0.0005				
1/11/2017				0.0001 (J)	<0.0005	0.0001 (J)
2/24/2017	9E-05 (J)					
2/27/2017			<0.0005			
2/28/2017		<0.0005				
3/1/2017					<0.0005	<0.0005
3/2/2017				<0.0005		
4/26/2017					<0.0005	<0.0005
5/2/2017				<0.0005		
5/8/2017	0.0001 (J)	<0.0005				
5/9/2017			<0.0005			
6/28/2017					<0.0005	<0.0005
6/29/2017				<0.0005		
7/11/2017	<0.0005					
7/13/2017		<0.0005	<0.0005			
10/10/2017	<0.0005	<0.0005	<0.0005			
3/28/2018				<0.0005	<0.0005	<0.0005
4/2/2018	<0.0005					
4/3/2018			<0.0005			
4/4/2018		<0.0005				
6/7/2018					<0.0005	
6/11/2018				<0.0005		<0.0005
9/19/2018	<0.0005	<0.0005	<0.0005			
9/25/2018				<0.0005	<0.0005	<0.0005
3/5/2019				<0.0005		<0.0005
3/6/2019					<0.0005	
4/2/2019				<0.0005		
4/3/2019					<0.0005	<0.0005
8/20/2019	<0.0005	<0.0005	<0.0005			
9/25/2019				<0.0005		
9/26/2019					<0.0005	<0.0005
10/8/2019	<0.0005	<0.0005				
10/9/2019			<0.0005			
2/11/2020				<0.0005	<0.0005	<0.0005
3/17/2020	<0.0005	<0.0005	<0.0005			
3/24/2020				<0.0005	<0.0005	<0.0005
8/27/2020	<0.0005	<0.0005				
8/28/2020			<0.0005			
9/23/2020				<0.0005	<0.0005	<0.0005
2/9/2021					<0.0005	<0.0005
3/3/2021				<0.0005	<0.0005	<0.0005
8/19/2021	<0.0005	<0.0005	<0.0005			
8/26/2021						<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/27/2021				<0.0005	<0.0005	
2/8/2022	<0.0005					
2/9/2022		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.0005	<0.0005
6/7/2016	<0.0005	<0.0005				
7/26/2016					<0.0005	<0.0005
7/27/2016	<0.0005					
7/28/2016		<0.0005				
9/14/2016					<0.0005	<0.0005
9/19/2016	<0.0005	<0.0005				
11/2/2016	<0.0005				<0.0005	<0.0005
11/3/2016		<0.0005				
1/12/2017						<0.0005
1/13/2017	<0.0005	<0.0005			<0.0005	
3/6/2017	<0.0005	<0.0005			<0.0005	
3/7/2017						<0.0005
4/26/2017	<0.0005	<0.0005				
5/1/2017					<0.0005	<0.0005
6/27/2017						<0.0005
6/29/2017	<0.0005	<0.0005			<0.0005	
10/11/2017			<0.0005			
10/12/2017				<0.0005		
11/20/2017			<0.0005	<0.0005		
1/10/2018				<0.0005		
1/11/2018			<0.0005			
2/19/2018				<0.0005		
2/20/2018			<0.0005			
3/29/2018	<0.0005	<0.0005			<0.0005	<0.0005
4/3/2018			<0.0005	<0.0005		
6/5/2018		<0.0005				
6/6/2018	<0.0005					<0.0005
6/7/2018					<0.0005	
6/28/2018			<0.0005	<0.0005		
8/7/2018			<0.0005	<0.0005		
9/24/2018			<0.0005	<0.0005		
9/25/2018	<0.0005	9.6E-05 (J)				
9/26/2018					<0.0005	<0.0005
3/4/2019					<0.0005	<0.0005
3/5/2019	<0.0005	<0.0005				
4/2/2019		<0.0005				
4/3/2019	<0.0005				<0.0005	<0.0005
8/21/2019			<0.0005	<0.0005		
9/24/2019		<0.0005				<0.0005
9/25/2019	<0.0005				<0.0005	
10/9/2019			<0.0005	<0.0005		
2/12/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/24/2020	<0.0005	<0.0005		<0.0005		<0.0005
3/25/2020			<0.0005		<0.0005	
9/22/2020					<0.0005	<0.0005
9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005		
2/8/2021						<0.0005
2/9/2021	<0.0005	0.00041 (J)			<0.0005	
2/10/2021			0.00019 (J)	<0.0005		
3/2/2021						<0.0005
3/3/2021	<0.0005				<0.0005	

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		<0.0005	0.0003 (J)	<0.0005		
8/26/2021			0.00049 (J)		<0.0005	<0.0005
8/27/2021	<0.0005					
9/1/2021		<0.0005				
9/3/2021				<0.0005		
2/8/2022			0.00063	<0.0005		
2/9/2022	<0.0005	<0.0005				
2/10/2022						<0.0005
2/11/2022					<0.0005	

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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		<0.0005				
6/1/2016				<0.0005	<0.0005	
6/2/2016	<0.0005		<0.0005			
7/25/2016					<0.0005	
7/26/2016	<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			
11/4/2016	<0.0005				<0.0005	<0.0005
11/28/2016		<0.0005				
12/15/2016						<0.0005
1/10/2017			<0.0005			
1/11/2017				0.0002 (J)		
1/12/2017	9E-05 (J)					
1/16/2017					<0.0005	<0.0005
2/22/2017		<0.0005				
3/2/2017				<0.0005	<0.0005	
3/3/2017						<0.0005
3/7/2017	<0.0005					
3/8/2017			7E-05 (J)			
4/26/2017			<0.0005			
4/27/2017				<0.0005	<0.0005	
4/28/2017						<0.0005
5/2/2017	<0.0005					
5/8/2017		<0.0005				
5/26/2017						<0.0005
6/27/2017	<0.0005			<0.0005	<0.0005	
6/28/2017						<0.0005
6/30/2017			<0.0005			
7/17/2017		<0.0005				
10/16/2017		<0.0005				

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.0005				
3/27/2018			<0.0005		<0.0005	
3/28/2018						<0.0005
3/29/2018	<0.0005			<0.0005		
6/7/2018	<0.0005					
8/6/2018		<0.0005				
9/26/2018	<0.0005					
2/25/2019		<0.0005				
2/26/2019			<0.0005			
2/27/2019				<0.0005	<0.0005	<0.0005
3/4/2019	<0.0005					
3/28/2019				<0.0005	<0.0005	
3/29/2019			<0.0005			<0.0005
4/3/2019	<0.0005					
6/12/2019		<0.0005				
8/19/2019		<0.0005				
9/24/2019	<0.0005			<0.0005	<0.0005	<0.0005
9/25/2019			<0.0005			
10/8/2019		<0.0005				
2/10/2020				<0.0005	<0.0005	
2/11/2020						<0.0005
2/12/2020	<0.0005		<0.0005			
3/17/2020		<0.0005				
3/18/2020			<0.0005		<0.0005	
3/19/2020				<0.0005		<0.0005
3/24/2020	<0.0005					
8/26/2020		<0.0005				
9/22/2020	<0.0005	<0.0005				
9/23/2020				<0.0005	<0.0005	<0.0005
9/25/2020			<0.0005			
2/8/2021	<0.0005					
2/10/2021			<0.0005			<0.0005
2/12/2021				<0.0005	<0.0005	
3/2/2021	<0.0005	<0.0005	<0.0005			
3/3/2021				<0.0005	<0.0005	<0.0005
8/19/2021			<0.0005	<0.0005	<0.0005	
8/20/2021		<0.0005				
8/26/2021	<0.0005					
8/27/2021						<0.0005
2/8/2022		<0.0005				
2/9/2022				<0.0005	<0.0005	<0.0005
2/10/2022	<0.0005		<0.0005			

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.0005		
6/2/2016	<0.0005	<0.0005			
7/25/2016	<0.0005		<0.0005		
7/26/2016		<0.0005			
9/1/2016				<0.0005	
9/14/2016			<0.0005		
9/15/2016		<0.0005			
9/19/2016	<0.0005				
11/1/2016	<0.0005	<0.0005	<0.0005		
11/16/2016				<0.0005	
1/11/2017		0.0001 (J)	8E-05 (J)		
1/16/2017	<0.0005				
2/21/2017	<0.0005				
2/27/2017				<0.0005	
3/1/2017			<0.0005		
3/2/2017		<0.0005			
4/26/2017	<0.0005	<0.0005	<0.0005		
5/8/2017				0.0001 (J)	
6/28/2017		<0.0005	<0.0005		
6/30/2017	<0.0005				
7/13/2017				<0.0005	
10/11/2017				<0.0005	
3/27/2018	<0.0005				
3/28/2018		<0.0005	<0.0005		
4/4/2018				<0.0005	
9/19/2018				<0.0005	
2/26/2019	<0.0005				
2/27/2019		<0.0005	<0.0005		
4/1/2019	<0.0005	<0.0005	<0.0005		
8/21/2019				0.00012 (J)	
9/25/2019	<0.0005	<0.0005	<0.0005		
10/9/2019				<0.0005	
2/11/2020			<0.0005		
2/12/2020	<0.0005	<0.0005			
3/17/2020				0.00012 (J)	
3/19/2020	<0.0005	<0.0005	<0.0005		
7/6/2020				<0.0005	
8/27/2020					<0.0005
8/28/2020				<0.0005	
9/23/2020		<0.0005	<0.0005		
9/24/2020	<0.0005				
11/12/2020				<0.0005	<0.0005
2/10/2021		<0.0005	<0.0005		
2/11/2021	<0.0005				
3/1/2021	<0.0005				
3/3/2021		<0.0005	<0.0005		
8/19/2021	<0.0005	<0.0005			
8/20/2021					<0.0005
8/27/2021			<0.0005	<0.0005	
2/9/2022		<0.0005	<0.0005	<0.0005	<0.0005
2/11/2022	<0.0005				



# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					6.2	1.4
6/7/2016				2.2		
7/27/2016				2	4.73	1.19
8/30/2016	20.9					
8/31/2016		27.3	46.7			
9/16/2016				1.97		1.5
9/19/2016					4.76	
11/3/2016				1.99	5.25	1.31
11/14/2016	18.6		50.6			
11/15/2016		27.8				
1/11/2017				2.28	4.74	1.25
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		
4/26/2017					4.28	1.05
5/2/2017				1.95		
5/8/2017	14.6	29.9				
5/9/2017			56			
6/28/2017					4.95	1.06
6/29/2017				2.02		
7/11/2017	14.3					
7/13/2017		30.2	54.8			
10/4/2017				2.03		1.1
10/5/2017					5.28	
10/10/2017	12.1	27.2	52.8			
4/2/2018	<25					
4/3/2018			50.6			
4/4/2018		30.1				
6/7/2018					4.8	
6/11/2018				2.1		1.4
9/19/2018	11.1 (J)	29.2	50.5			
9/25/2018				2.1	4.6	1
3/27/2019	10.8 (J)	27.9	48.8			
4/2/2019				2.5		
4/3/2019					5.3	1.2
9/25/2019				2.6		
9/26/2019					4.9	1.1
10/8/2019	9.7	28.1				
10/9/2019			47.9			
3/17/2020	14.8	31.9	54.8			
3/24/2020				2.7	5.3	1
9/22/2020	10.1	30.4				
9/23/2020			50	2.6	5.2	0.91 (J)
3/1/2021	10.3	31.9	50.7			
3/3/2021				2.5	5.2	0.96 (J)
8/19/2021	9.6	31.7	50.4			
8/26/2021						0.98 (J)
8/27/2021				2.7	5.1	
2/8/2022	9.4					
2/9/2022		30.8	49.3	2.8	5.1	0.87 (J)

# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					8.8	33
6/7/2016	2.3	3.7				
7/26/2016					7.69	32.3
7/27/2016	2.08					
7/28/2016		3.15				
9/14/2016					8.49	31
9/19/2016	1.97	3.17				
11/2/2016	2.13				7.83	30.9
11/3/2016		3.4				
1/12/2017						35.7
1/13/2017	2.45	4.98			8.08	
3/6/2017	2.48	6.28			8.64	
3/7/2017						32.7
4/26/2017	2.3	6.65				
5/1/2017					13.4	37
6/27/2017						36.5
6/29/2017	2.54	6.04			8.81	
10/3/2017		8.28				30.9
10/4/2017	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					26.2
6/7/2018					8.2	
6/28/2018			1.4	6.7		
8/7/2018			1.2	6.3		
9/24/2018			1.1	5.7		
9/25/2018	2.3	10.4 (J)				
9/26/2018					9.5 (J)	25.8
3/26/2019				5.6		
3/27/2019			1.5			
4/2/2019		8.8				
4/3/2019	2.9				8.4	24.7 (J)
9/24/2019		7.7				25.8
9/25/2019	2.4				9.5	
10/9/2019			2.4	4.9		
3/24/2020	2.6	6		4.8		26.1
3/25/2020			2.7		10.5	
9/22/2020					9.6	27.2
9/24/2020	2.6	7.8	3.7	4.4		
3/2/2021						1.6
3/3/2021	2.4				7.7	
3/4/2021		8.7	8.2	4.6		
8/26/2021			14.1		7.6	25.2
8/27/2021	2.4					

# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		9.5				
9/3/2021				5.6		
2/8/2022			15.2	6		
2/9/2022	2.3	9.8				
2/10/2022						24.8
2/11/2022				7.5		

# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				12	2.5	
6/2/2016	2.4		1.3			
7/25/2016					2.16	
7/26/2016	2.12		1.24	11		
8/31/2016		9.31				
9/13/2016				11.8	2.21	
9/14/2016	2.18					23.5
9/15/2016			1.17			
11/1/2016				11		
11/2/2016			1.23			
11/4/2016	2.17 (J)				2.67	23.7
11/28/2016		9.47 (B)				
12/15/2016						23.1
1/10/2017			1.24			
1/11/2017				11.2		
1/12/2017	2.37					
1/16/2017					2.45	23.3
2/22/2017		10.4				
3/2/2017				11	2.57	
3/3/2017						25.1
3/7/2017	2.34					
3/8/2017			1.21			
4/26/2017			1.14			
4/27/2017				11.1	2.38	
4/28/2017						30.7
5/2/2017	2.17					
5/8/2017		14.2				
5/26/2017						26.2
6/27/2017	2.13			13.8	2.36	
6/28/2017						26.1
6/30/2017			1.24			
7/17/2017		14.1				
10/3/2017	2.15			14	2.21	26.7
10/5/2017			1.11			
10/16/2017		13.6				
2/19/2018		<25				
6/5/2018				15.2 (J)		
6/6/2018					2.3	
6/7/2018	2.3					25
6/8/2018			1.1			
8/6/2018		11.4 (J)				
9/26/2018	2.3					
10/1/2018			0.99	15.1	1.8	25
2/25/2019		12.7 (J)				
3/28/2019				13.3 (J)	2.2	
3/29/2019			1.1			23.5 (J)
4/3/2019	2.8					
6/12/2019		18.9				
9/24/2019	2.5			15.8	2.3	26.4
9/25/2019			1.1			
10/8/2019		28.3				
3/17/2020		24.3				

# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			1.1		2.1	
3/19/2020				15		27.4
3/24/2020	2.5					
9/22/2020	2.6	31				
9/23/2020				14.1	1.8	26.3
9/25/2020			1.3			
3/2/2021	2.6	34.2	1.2			
3/3/2021				14.1	1.8	25.6
8/19/2021			1.2	14.2	2	
8/20/2021		26.5				
8/26/2021	2.5					
8/27/2021						22.6
2/8/2022		25.6				
2/9/2022				14.9	2.1	23.4
2/10/2022	2.5		1.3			

# Time Series

Constituent: Calcium, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			21		
6/2/2016	1.3	28			
7/25/2016	1.17		20.3		
7/26/2016		24.5			
9/1/2016				96.8	
9/14/2016			19.7		
9/15/2016		27			
9/19/2016	1.05				
11/1/2016	1.14	25.6	18.4		
11/16/2016				107	
1/11/2017		27.5	20.3		
1/16/2017	1.23				
2/21/2017	1.25				
2/27/2017				104	
3/1/2017			18.6		
3/2/2017		27.5			
4/26/2017	1.03	30.4	25.6		
5/8/2017				103	
6/28/2017		29.8	23.9		
6/30/2017	1.13				
7/13/2017				83.7	
10/4/2017	1.09	29.7	22.1		
10/11/2017				69	
4/4/2018				51.9	
6/7/2018		29.1			
6/8/2018			21.9 (J)		
6/11/2018	1.1				
9/19/2018				51.9	
10/1/2018		26.9	19.7		
10/2/2018	1.1				
3/27/2019				54.2	
4/1/2019	1.3	30.1	20.4 (J)		
9/25/2019	1.1	29.5	22.4		
10/9/2019				64.2	
3/17/2020				70.4	
3/19/2020	1.2	31.5	21.9		
7/6/2020				105	
8/27/2020					52.3
8/28/2020				102	
9/22/2020					53.5
9/23/2020		28.6	23.6	104	
9/24/2020	1.1				
10/7/2020				105	53.8
11/12/2020				110	53.6
3/1/2021	1.2				50.6
3/2/2021				110	
3/3/2021		29.8	20.6		
8/19/2021	1.2	28.1			
8/20/2021					47.9
8/27/2021			24.7	108	
2/9/2022		30.3	23.7	109	42.2
2/11/2022	1.5				

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					6.8	6.4
6/7/2016				4.5		
7/27/2016				4.5	6.7	6.2
8/30/2016	5.2					
8/31/2016		13	5.8			
9/16/2016				4.5		6.1
9/19/2016					7	
11/3/2016				5.4	7.5	7.4
11/14/2016	6.4		5.8			
11/15/2016		14				
1/11/2017				4.7	6.5	6.1
2/24/2017	5.5					
2/27/2017			5			
2/28/2017		12				
3/1/2017					6.9	6
3/2/2017				4.8		
4/26/2017					7	6.5
5/2/2017				4.6		
5/8/2017	5.8	13				
5/9/2017			4.6			
6/28/2017					7	6.4
6/29/2017				4.5		
7/11/2017	5.8					
7/13/2017		13	4.7			
10/4/2017				4.7		6.8
10/5/2017					7	
10/10/2017	5.9	14	4.5			
4/2/2018	4.8					
4/3/2018			4.6			
4/4/2018		13.4				
6/7/2018					6.8	
6/11/2018				4.9		6.8
9/19/2018	4	14.2	4.7			
9/25/2018				5.6	7.9	7.8
3/27/2019	4.3	14	4.6			
4/2/2019				4.8		
4/3/2019					6.9	6.3
9/25/2019				5.7		
9/26/2019					7	7.1
10/8/2019	4.4	14.8				
10/9/2019			5.1			
3/17/2020	4.1	14	4.6			
3/24/2020				5	7	6.8
9/22/2020	4.2	14.4				
9/23/2020			4.9	6.6	7.2	7.2
3/1/2021	3.7	14	5			
3/3/2021				7.1	7	7.2
8/19/2021	3.5	13	4.1			
8/26/2021						7.3
8/27/2021				8.5	7.4	
2/8/2022	3.2					
2/9/2022		13.5	4.9	10.9	7.5	7

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					3.7	7.2
6/7/2016	1.9	2.8				
7/26/2016					3.6	6.6
7/27/2016	1.9					
7/28/2016		2.6				
9/14/2016					3.4	6.6
9/19/2016	1.9	2.4				
11/2/2016	2.6				4.5	7.6
11/3/2016		2.9				
1/12/2017						6.8
1/13/2017	2.3	2.5			4.2	
3/6/2017	1.9	2.1			3.6	
3/7/2017						6.8
4/26/2017	2	2.1				
5/1/2017					4.3	7.2
6/27/2017						7
6/29/2017	2.6	2.8			4.2	
10/3/2017		2.2				6.5
10/4/2017	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					4.7
6/7/2018					4.4	
6/28/2018			2.1	5		
8/7/2018			1.2	4.3		
9/24/2018			1.3	4.9		
9/25/2018	3.6	2.2				
9/26/2018					4.8	4.8
3/26/2019				4.4		
3/27/2019			1.4			
4/2/2019		2.5				
4/3/2019	3.1				4.3	4
9/24/2019		3.1				3.7
9/25/2019	2.8				4.5	
10/9/2019			2.1	5.1		
3/24/2020	2.7	2.8		4.7		3.5
3/25/2020			1.9		3.9	
9/22/2020					4.5	3.6
9/24/2020	2.7	2	2.7	5		
3/2/2021						3.2
3/3/2021	2.7				4.1	
3/4/2021		1.8	4.9	4.9		
8/26/2021			7.2		4.4	3.4
8/27/2021	2.8					



# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		1.8				
9/3/2021				5.5		
2/8/2022			7.4	6.2		
2/9/2022	2.8	1.7				
2/10/2022						3.2
2/11/2022				4.1		

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				1.3	1.6	
6/2/2016	4.3		4.1			
7/25/2016					1.4	
7/26/2016	4.4		4	1.2		
8/31/2016		4				
9/13/2016				1.1	1.3	
9/14/2016	3.8					1.1
9/15/2016			4.2			
11/1/2016				1.3		
11/2/2016			4.9			
11/4/2016	4.8				1.6	1.4
11/28/2016		4.2				
12/15/2016						2.9
1/10/2017			4.1			
1/11/2017				1.1		
1/12/2017	3.8					
1/16/2017					1.4	0.98
2/22/2017		3.7				
3/2/2017				1	1.3	
3/3/2017						1.1
3/7/2017	4.5					
3/8/2017			4.2			
4/26/2017			4.1			
4/27/2017				1	1.3	
4/28/2017						0.91
5/2/2017	4.6					
5/8/2017		4.2				
5/26/2017						0.93
6/27/2017	4.3			1.1	1.4	
6/28/2017						1
6/30/2017			3.7			
7/17/2017		3.8				
10/3/2017	4.2			1.1	1.7	1.2
10/5/2017			3.8			
10/16/2017		4.2				
2/19/2018		4.3				
6/5/2018				1.1		
6/6/2018					1.4	
6/7/2018	4.5					1
6/8/2018			3.4			
8/6/2018		3.8				
9/26/2018	5.1					
10/1/2018			3.8	1.1	1.4	1.1
2/25/2019		4.1				
3/28/2019				1.4	1.5	
3/29/2019			4.2			1.2
4/3/2019	4.2					
6/12/2019		4.7				
9/24/2019	4.5			1.1	1.3	0.95 (J)
9/25/2019			4.8			
10/8/2019		5.1				
3/17/2020		4.8				

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			5.2		1.4	
3/19/2020				1.1		0.97 (J)
3/24/2020	4.3					
9/22/2020	4.2	4.2				
9/23/2020				0.99 (J)	1.2	0.88 (J)
9/25/2020			5.3			
3/2/2021	4.3	4.1	4.9			
3/3/2021				0.96 (J)	1.2	0.86 (J)
8/19/2021			5	1.1	1.3	
8/20/2021		5.2				
8/26/2021	4.3					
8/27/2021						0.99 (J)
2/8/2022		5.7				
2/9/2022				1	1.3	1 (J)
2/10/2022	4.4		4.7			

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			1.3		
6/2/2016	1.9	1.4			
7/25/2016	1.7		1.3		
7/26/2016		1.6			
9/1/2016				37	
9/14/2016			1.3		
9/15/2016		1.5			
9/19/2016	1.6				
11/1/2016	1.8	1.7	1.4		
11/16/2016				37	
1/11/2017		1.2	1.1		
1/16/2017	1.7				
2/21/2017	1.7				
2/27/2017				33	
3/1/2017			1.1		
3/2/2017		1.2			
4/26/2017	1.7	1.2	1.1		
5/8/2017				33	
6/28/2017		1.3	1.2		
6/30/2017	1.8				
7/13/2017				32	
10/4/2017	1.8	1.5	1.2		
10/11/2017				29	
4/4/2018				26.6	
6/7/2018		1.2			
6/8/2018			1.2		
6/11/2018	2				
9/19/2018				26.5	
10/1/2018		1.5	1.2		
10/2/2018	1.8				
3/27/2019				20.9	
4/1/2019	1.7	1.2	1.1		
9/25/2019	1.6	1.1	1.1		
10/9/2019				25	
3/17/2020				24.8	
3/19/2020	1.8	1.2	1.1		
7/6/2020				25.8	
8/27/2020					3.9
8/28/2020				25.9	
9/22/2020					4.1
9/23/2020		1.1	1	28.1	
9/24/2020	1.5				
10/7/2020				28.2	4
11/12/2020				26.7	3.8
3/1/2021	1.6				3.7
3/2/2021				27.4	
3/3/2021		1.1	0.99 (J)		
8/19/2021	1.6	1.1			
8/20/2021					3.1
8/27/2021			1.1	29.3	
2/9/2022		1.1	1.1	28.2	3.2
2/11/2022	2.1				

# Time Series

Constituent: Chromium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					0.0012 (J)	<0.005
6/7/2016				<0.005		
7/27/2016				0.0008 (J)	0.0007 (J)	0.0006 (J)
8/30/2016	<0.005					
8/31/2016		<0.005	<0.005			
9/16/2016				<0.005		<0.005
9/19/2016					<0.005	
11/3/2016				<0.005	<0.005	<0.005
11/14/2016	0.0093 (J)		0.0061 (J)			
11/15/2016		<0.005				
1/11/2017				<0.005	<0.005	<0.005
2/24/2017	<0.005					
2/27/2017			<0.005			
2/28/2017		<0.005				
3/1/2017					0.0012 (J)	<0.005
3/2/2017				0.001 (J)		
4/26/2017					0.0005 (J)	0.0003 (J)
5/2/2017				0.0007 (J)		
5/8/2017	<0.005	<0.005				
5/9/2017			<0.005			
6/28/2017					0.0006 (J)	<0.005
6/29/2017				0.0006 (J)		
7/11/2017	<0.005					
7/13/2017		<0.005	0.0006 (J)			
10/10/2017	<0.005	<0.005	<0.005			
3/28/2018				<0.005	<0.005	<0.005
4/2/2018	<0.005					
4/3/2018			<0.005			
4/4/2018		<0.005				
9/19/2018	<0.005	<0.005	<0.005			
3/5/2019				<0.005		<0.005
3/6/2019					<0.005	
8/20/2019	<0.005	<0.005	<0.005			
2/11/2020				0.00087 (J)	0.001 (J)	0.00088 (J)
3/24/2020				0.00087 (J)	0.00095 (J)	0.0011 (J)
8/27/2020	<0.005	<0.005				
8/28/2020			<0.005			
9/22/2020	<0.005	<0.005				
9/23/2020			0.00058 (J)	0.00098 (J)	0.00092 (J)	0.0012 (J)
2/9/2021					0.00083 (J)	0.0013 (J)
3/1/2021	<0.005	<0.005	<0.005			
3/3/2021				0.00082 (J)	0.00087 (J)	0.001 (J)
8/19/2021	<0.005	<0.005	<0.005			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	
2/8/2022	<0.005					
2/9/2022		<0.005	<0.005	<0.005	<0.005	0.0014 (J)

# Time Series

Constituent: Chromium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.005	<0.005
6/7/2016	<0.005	<0.005				
7/26/2016					<0.005	<0.005
7/27/2016	0.0005 (J)					
7/28/2016		<0.005				
9/14/2016					<0.005	<0.005
9/19/2016	<0.005	<0.005				
11/2/2016	<0.005				<0.005	<0.005
11/3/2016		<0.005				
1/12/2017						<0.005
1/13/2017	<0.005	<0.005			<0.005	
3/6/2017	<0.005	<0.005			<0.005	
3/7/2017						<0.005
4/26/2017	0.0007 (J)	<0.005				
5/1/2017					<0.005	0.0004 (J)
6/27/2017						<0.005
6/29/2017	0.0005 (J)	<0.005			<0.005	
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			
3/29/2018	<0.005	<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	<0.005
3/5/2019	<0.005	<0.005				
8/21/2019			<0.005	0.00053 (J)		
10/9/2019			<0.005	0.0012 (J)		
2/12/2020	0.00045 (J)	<0.005	<0.005	0.00065 (J)	<0.005	<0.005
3/24/2020	0.00077 (J)	<0.005		0.00055 (J)		<0.005
3/25/2020			<0.005		0.00058 (J)	
9/22/2020					<0.005	0.0011 (J)
9/24/2020	0.00076 (J)	<0.005	<0.005	<0.005		
2/8/2021						<0.005
2/9/2021	0.00056 (J)	<0.005			<0.005	
2/10/2021			<0.005	<0.005		
3/2/2021						<0.005
3/3/2021	<0.005				0.0013 (J)	
3/4/2021		<0.005	<0.005	<0.005		
8/26/2021			<0.005		<0.005	<0.005
8/27/2021	<0.005					
9/1/2021		<0.005				
9/3/2021				<0.005		
2/8/2022			<0.005	<0.005		
2/9/2022	<0.005	<0.005				
2/10/2022						<0.005
2/11/2022					<0.005	

# Time Series

Constituent: Chromium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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		<0.005				
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		0.0059				
8/5/2014		<0.005				
2/4/2015		<0.005				
8/3/2015		0.0011 (J)				
2/16/2016		<0.005				
6/1/2016				0.0035	<0.005	
6/2/2016	<0.005		<0.005			
7/25/2016					<0.005	
7/26/2016	<0.005		<0.005	<0.005		
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			
11/4/2016	<0.005				<0.005	<0.005
11/28/2016		<0.005				
12/15/2016						<0.005
1/10/2017			<0.005			
1/11/2017				<0.005		
1/12/2017	<0.005					
1/16/2017					<0.005	<0.005
2/22/2017		<0.005				
3/2/2017				0.0009 (J)	0.0004 (J)	
3/3/2017						0.0005 (J)
3/7/2017	<0.005					
3/8/2017			<0.005			
4/26/2017			<0.005			
4/27/2017				<0.005	<0.005	
4/28/2017						0.0004 (J)
5/2/2017	<0.005					
5/8/2017		<0.005				
5/26/2017						<0.005
6/27/2017	<0.005			<0.005	<0.005	
6/28/2017						<0.005
6/30/2017			<0.005			
7/17/2017		<0.005				
10/16/2017		<0.005				

# Time Series

Constituent: Chromium (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						<0.005
3/29/2018	<0.005			<0.005		
8/6/2018		<0.005				
2/25/2019		<0.005				
2/26/2019			<0.005			
2/27/2019				<0.005	<0.005	<0.005
3/4/2019	<0.005					
3/28/2019				<0.005	0.0021 (J)	
3/29/2019			<0.005			<0.005
6/12/2019		<0.005				
8/19/2019		<0.005				
9/24/2019				0.00072 (J)	0.0028 (J)	<0.005
9/25/2019			<0.005			
10/8/2019		<0.005				
2/10/2020				0.00042 (J)	<0.005	
2/11/2020						<0.005
2/12/2020	0.00043 (J)		<0.005			
3/17/2020		<0.005				
3/18/2020			<0.005		0.00044 (J)	
3/19/2020				0.00084 (J)		0.00048 (J)
3/24/2020	0.0014 (J)					
8/26/2020		<0.005				
9/22/2020	<0.005	<0.005				
9/23/2020				0.00062 (J)	0.00058 (J)	<0.005
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				<0.005	<0.005	
3/2/2021	<0.005	<0.005	<0.005			
3/3/2021				<0.005	<0.005	<0.005
8/19/2021			<0.005	<0.005	<0.005	
8/20/2021		<0.005				
8/26/2021	<0.005					
8/27/2021						<0.005
2/8/2022		<0.005				
2/9/2022				<0.005	<0.005	<0.005
2/10/2022	<0.005		<0.005			



# Time Series

Constituent: Chromium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.005		
6/2/2016	<0.005	0.0013 (J)			
7/25/2016	<0.005		<0.005		
7/26/2016		<0.005			
9/1/2016				<0.005	
9/14/2016			<0.005		
9/15/2016		<0.005			
9/19/2016	<0.005				
11/1/2016	<0.005	<0.005	<0.005		
11/16/2016				<0.005	
1/11/2017		<0.005	<0.005		
1/16/2017	<0.005				
2/21/2017	<0.005				
2/27/2017				<0.005	
3/1/2017			0.0004 (J)		
3/2/2017		0.0006 (J)			
4/26/2017	0.0016 (J)	<0.005	<0.005		
5/8/2017				<0.005	
6/28/2017		<0.005	<0.005		
6/30/2017	<0.005				
7/13/2017				<0.005	
10/11/2017				<0.005	
3/27/2018	<0.005				
3/28/2018		<0.005	<0.005		
4/4/2018				<0.005	
9/19/2018				<0.005	
2/26/2019	<0.005				
2/27/2019		<0.005	<0.005		
4/1/2019	<0.005	<0.005	<0.005		
8/21/2019				<0.005	
9/25/2019	<0.005	0.0014 (J)	0.0019 (J)		
2/11/2020			<0.005		
2/12/2020	<0.005	<0.005			
3/19/2020	<0.005	<0.005	<0.005		
7/6/2020				<0.005	
8/27/2020					<0.005
8/28/2020				<0.005	
9/22/2020					0.00073 (J)
9/23/2020		<0.005	<0.005	<0.005	
9/24/2020	<0.005				
10/7/2020				<0.005	0.00086 (J)
11/12/2020				<0.005	<0.005
2/10/2021		<0.005	<0.005		
2/11/2021	<0.005				
3/1/2021	<0.005				0.00094 (J)
3/2/2021				<0.005	
3/3/2021		<0.005	<0.005		
8/19/2021	<0.005	<0.005			
8/20/2021					<0.005
8/27/2021			<0.005	<0.005	
2/9/2022		<0.005	<0.005	<0.005	0.0012 (J)
2/11/2022	<0.005				

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.005	0.00061 (J)
6/7/2016				<0.005		
7/27/2016				<0.005	<0.005	0.0004 (J)
8/30/2016	0.0073 (J)					
8/31/2016		0.0119	0.0009 (J)			
9/16/2016				<0.005		0.0008 (J)
9/19/2016					<0.005	
11/3/2016				<0.005	<0.005	<0.005
11/14/2016	0.0115		0.0009 (J)			
11/15/2016		0.0033 (J)				
1/11/2017				<0.005	<0.005	<0.005
2/24/2017	0.0106					
2/27/2017			0.001 (J)			
2/28/2017		0.0017 (J)				
3/1/2017					<0.005	<0.005
3/2/2017				<0.005		
4/26/2017					<0.005	<0.005
5/2/2017				<0.005		
5/8/2017	0.0099 (J)	0.0018 (J)				
5/9/2017			0.0008 (J)			
6/28/2017					<0.005	<0.005
6/29/2017				<0.005		
7/11/2017	0.0096 (J)					
7/13/2017		0.0022 (J)	0.0009 (J)			
10/10/2017	0.0036 (J)	0.0017 (J)	0.0008 (J)			
3/28/2018				<0.005	<0.005	<0.005
4/2/2018	<0.005					
4/3/2018			<0.01 (O)			
4/4/2018		<0.005				
6/7/2018					<0.005	
6/11/2018				<0.005		<0.005
9/19/2018	0.0036 (J)	0.0025 (J)	0.00081 (J)			
9/25/2018				<0.005	<0.005	<0.005
3/5/2019				<0.005		<0.005
3/6/2019					<0.005	
4/2/2019				<0.005		
4/3/2019					<0.005	<0.005
8/20/2019	0.00092 (J)	0.002 (J)	0.00071 (J)			
9/25/2019				<0.005		
9/26/2019					<0.005	<0.005
10/8/2019	0.0014 (J)	0.0017 (J)				
10/9/2019			0.0007 (J)			
2/11/2020				<0.005	<0.005	<0.005
3/17/2020	0.0017 (J)	0.004 (J)	0.00081 (J)			
3/24/2020				<0.005	<0.005	<0.005
8/27/2020	0.0011 (J)	0.003 (J)				
8/28/2020			0.00055 (J)			
9/22/2020	0.00097 (J)	0.0065				
9/23/2020			0.00053 (J)	<0.005	<0.005	<0.005
2/9/2021					<0.005	<0.005
3/1/2021	0.001 (J)	0.0033 (J)	0.00062 (J)			
3/3/2021				<0.005	<0.005	<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	0.00099 (J)	0.0014 (J)	0.00048 (J)			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	
2/8/2022	0.0013 (J)					
2/9/2022		0.0027 (J)	0.00051 (J)	<0.005	<0.005	<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					0.00082 (J)	<0.005
6/7/2016	<0.005	0.0056				
7/26/2016					0.0012 (J)	<0.005
7/27/2016	<0.005					
7/28/2016		0.0032 (J)				
9/14/2016					0.0006 (J)	<0.005
9/19/2016	<0.005	0.0047 (J)				
11/2/2016	<0.005				<0.005	<0.005
11/3/2016		0.013				
1/12/2017						<0.005
1/13/2017	<0.005	0.011			0.0029 (J)	
3/6/2017	<0.005	0.011			0.0006 (J)	
3/7/2017						<0.005
4/26/2017	<0.005	0.009 (J)				
5/1/2017					<0.005	<0.005
6/27/2017						<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			
3/29/2018	<0.005	<0.005			<0.005	<0.005
4/3/2018			<0.005	<0.005		
6/5/2018		0.0041 (J)				
6/6/2018	<0.005					<0.005
6/7/2018					0.00058 (J)	
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	0.0044 (J)				
9/26/2018					<0.005	<0.005
3/4/2019					<0.005	<0.005
3/5/2019	<0.005	0.0039 (J)				
4/2/2019		0.0039 (J)				
4/3/2019	<0.005				0.00083 (J)	<0.005
8/21/2019			0.00034 (J)	<0.005		
9/24/2019		0.0032 (J)				<0.005
9/25/2019	<0.005				<0.005	
10/9/2019			<0.005	<0.005		
2/12/2020	<0.005	0.0081	0.00034 (J)	<0.005	<0.005	0.00037 (J)
3/24/2020	<0.005	0.0061		<0.005		0.00035 (J)
3/25/2020			0.00034 (J)		0.00056 (J)	
9/22/2020					<0.005	<0.005
9/24/2020	<0.005	0.0079	0.00053 (J)	<0.005		
2/8/2021						<0.005
2/9/2021	<0.005	0.009			<0.005	
2/10/2021			0.00098 (J)	<0.005		
3/2/2021						<0.005
3/3/2021	<0.005				<0.005	

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.0065	0.00071 (J)	<0.005		
8/26/2021			0.0011 (J)		0.00042 (J)	<0.005
8/27/2021	<0.005					
9/1/2021		0.0068				
9/3/2021				<0.005		
2/8/2022			0.0012 (J)	<0.005		
2/9/2022	<0.005	0.0078				
2/10/2022						<0.005
2/11/2022				<0.005		

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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			
7/25/2016					0.0008 (J)	
7/26/2016	<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			
11/4/2016	<0.005				0.0025 (J)	<0.005
11/28/2016		0.0036 (J)				
12/15/2016						<0.005
1/10/2017			<0.005			
1/11/2017				<0.005		
1/12/2017	<0.005					
1/16/2017					0.0027 (J)	<0.005
2/22/2017		0.0049 (J)				
3/2/2017				<0.005	0.0022 (J)	
3/3/2017						<0.005
3/7/2017	<0.005					
3/8/2017			<0.005			
4/26/2017			<0.005			
4/27/2017				<0.005	0.0018 (J)	
4/28/2017						<0.005
5/2/2017	<0.005					
5/8/2017		0.0059 (J)				
5/26/2017						<0.005
6/27/2017	<0.005			<0.005	0.0023 (J)	
6/28/2017						<0.005
6/30/2017			<0.005			
7/17/2017		0.0046 (J)				
10/16/2017		0.0034 (J)				

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						<0.005
3/29/2018	<0.005			<0.005		
6/5/2018				<0.005		
6/6/2018					<0.005	
6/7/2018	<0.005					<0.005
6/8/2018			<0.005			
8/6/2018		0.003 (J)				
9/26/2018	<0.005					
10/1/2018			<0.005	<0.005	0.00059 (J)	<0.005
2/25/2019		0.001 (J)				
2/26/2019			<0.005			
2/27/2019				<0.005	0.00064 (J)	<0.005
3/4/2019	<0.005					
3/28/2019				<0.005	0.00091 (J)	
3/29/2019			<0.005			<0.005
4/3/2019	<0.005					
6/12/2019		0.003 (J)				
8/19/2019		0.0035 (J)				
9/24/2019	<0.005			<0.005	0.0013 (J)	<0.005
9/25/2019			<0.005			
10/8/2019		0.0039 (J)				
2/10/2020				<0.005	0.0016 (J)	
2/11/2020						<0.005
2/12/2020	<0.005		<0.005			
3/17/2020		0.003 (J)				
3/18/2020			<0.005		0.00087 (J)	
3/19/2020				<0.005		<0.005
3/24/2020	<0.005					
8/26/2020		0.2 (O)				
9/22/2020	<0.005	0.16 (O)				
9/23/2020				<0.005	0.0013 (J)	<0.005
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				0.00086 (J)	0.0028 (J)	
3/2/2021	<0.005	0.21 (O)	<0.005			
3/3/2021				<0.005	0.003 (J)	<0.005
8/19/2021			<0.005	0.00055 (J)	0.0017 (J)	
8/20/2021		0.074 (O)				
8/26/2021	<0.005					
8/27/2021						<0.005
2/8/2022		0.072 (O)				
2/9/2022				0.00072 (J)	0.0023 (J)	<0.005
2/10/2022	<0.005		<0.005			

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.005		
6/2/2016	0.035	<0.005			
7/25/2016	0.0312		<0.005		
7/26/2016		<0.005			
9/1/2016				0.0171	
9/14/2016			<0.005		
9/15/2016		<0.005			
9/19/2016	0.0275				
11/1/2016	0.0255	<0.005	<0.005		
11/16/2016				0.0145	
1/11/2017		<0.005	<0.005		
1/16/2017	0.0245				
2/21/2017	0.0272				
2/27/2017				0.0161	
3/1/2017			<0.005		
3/2/2017		<0.005			
4/26/2017	0.0244	<0.005	<0.005		
5/8/2017				0.0367	
6/28/2017		<0.005	<0.005		
6/30/2017	0.0233				
7/13/2017				0.0265	
10/11/2017				0.0556	
3/27/2018	0.023				
3/28/2018		<0.005	<0.005		
4/4/2018				0.025	
6/7/2018		<0.005			
6/8/2018			<0.005		
6/11/2018	0.023				
9/19/2018				0.042	
10/1/2018		<0.005	<0.005		
10/2/2018	0.022				
2/26/2019	0.021				
2/27/2019		<0.005	<0.005		
4/1/2019	0.022	<0.005	<0.005		
8/21/2019				0.027	
9/25/2019	0.016	<0.005	<0.005		
10/9/2019				0.024	
2/11/2020			<0.005		
2/12/2020	0.014	<0.005			
3/17/2020				0.022	
3/19/2020	0.014	<0.005	<0.005		
7/6/2020				0.0041 (J)	
8/27/2020					0.0022 (J)
8/28/2020				0.0038 (J)	
9/22/2020					0.0019 (J)
9/23/2020		<0.005	<0.005	0.0015 (J)	
9/24/2020	0.0064				
10/7/2020				0.0014 (J)	0.0019 (J)
11/12/2020				0.001 (J)	0.0015 (J)
2/10/2021		<0.005	<0.005		
2/11/2021	0.0078				
3/1/2021	0.0061				0.0013 (J)



# Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.00096 (J)	
3/3/2021		<0.005	<0.005		
8/19/2021	0.0052	<0.005			
8/20/2021					0.0013 (J)
8/27/2021			<0.005	0.00056 (J)	
2/9/2022		<0.005	<0.005	0.0006 (J)	0.0015 (J)
2/11/2022	0.0038 (J)				

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					0.0804 (U)	0.301 (U)
6/7/2016				0.158 (U)		
7/27/2016				0.0354 (U)	0.206 (U)	0.196 (U)
8/30/2016	1.09					
8/31/2016		2.15	1.65			
9/16/2016				1.04		0.915 (U)
9/19/2016					1.58	
11/3/2016				0.314 (U)	0.342 (U)	0.928 (U)
11/14/2016			0.981 (U)			
11/15/2016		0.676 (U)				
12/15/2016	1 (U)					
1/11/2017				0.34 (U)	0.365 (U)	0.502 (U)
2/24/2017	0.504 (U)					
2/27/2017			0.528 (U)			
2/28/2017		0.241 (U)				
3/1/2017					0.395 (U)	0.202 (U)
3/2/2017				0.746 (U)		
4/26/2017					0.507 (U)	0.264 (U)
5/2/2017				0.111 (U)		
5/8/2017	0.455 (U)	0.508 (U)				
5/9/2017			1.4			
6/28/2017					0.892	0.636 (U)
6/29/2017				0.576 (U)		
7/11/2017	0.471 (U)					
7/13/2017		0.77 (U)	0.611 (U)			
10/10/2017	0.649 (U)	1.43	1.47			
3/28/2018				0.438 (U)	0.92 (U)	0.56 (U)
4/2/2018	0.512 (U)					
4/3/2018			1.53			
4/4/2018		0.325 (U)				
6/7/2018					0.668 (U)	
6/11/2018				0.901 (U)		0.649 (U)
9/19/2018	0.789 (U)	0.386 (U)	0.839 (U)			
9/25/2018				0.68 (U)	0.141 (U)	0.574 (U)
3/5/2019				0.272 (U)		0.474 (U)
3/6/2019					0.714 (U)	
4/2/2019				0.847 (U)		
4/3/2019					0.385 (U)	0.429 (U)
8/20/2019	2.44	1.71	2.23			
9/25/2019				0.412 (U)		
9/26/2019					0.386 (U)	0.222 (U)
10/8/2019	1.72	0.769 (U)				
10/9/2019			1.61			
2/11/2020				0.461 (U)	1.48	0.597 (U)
3/17/2020	1.22 (U)	1.37	1.44			
3/24/2020				0.534 (U)	0.632 (U)	0.262 (U)
8/27/2020	1.26 (U)	0.0859 (U)				
8/28/2020			0.983 (U)			
9/22/2020	1.06 (U)	0.327 (U)				
9/23/2020			0.746 (U)	0.466 (U)	0.887 (U)	0.43 (U)
2/9/2021				0.529 (U)	0.314 (U)	0.259 (U)
3/1/2021	1.2	0.0694 (U)	1.28			

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
3/3/2021				0.59 (U)	0.565 (U)	0.352 (U)
8/19/2021	1.07 (U)	0.261 (U)	1.38			
8/26/2021						0.686 (U)
8/27/2021				0.9 (U)	0.761 (U)	
2/8/2022	0.4 (U)					
2/9/2022		0.332 (U)	1.11	0.133 (U)	0.571 (U)	0.0618 (U)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					0.721	5.11
6/7/2016	0.0191 (U)	0.347				
7/26/2016					1.26	6.92
7/27/2016	0.541 (U)					
7/28/2016		0.815 (U)				
9/14/2016					0.901 (U)	3.96
9/19/2016	0.826 (U)	0.862 (U)				
11/2/2016	0.791 (U)				1.09 (U)	4.53
11/3/2016		0.797 (U)				
1/12/2017						4.43
1/13/2017	0.296 (U)	0.72 (U)			1.19	
3/6/2017	0.518 (U)	0.518 (U)			0.669 (U)	
3/7/2017						4.8
4/26/2017	0.282 (U)	1.13 (U)				
5/1/2017					0.803 (U)	4.16
6/27/2017						2.8
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			
3/29/2018	1.73	1.91			0.703 (U)	3.42
4/3/2018			0.385 (U)	0.68 (U)		
6/5/2018		1.39				
6/6/2018	0.694 (U)					3.99
6/7/2018					0.628 (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	0.772 (U)	1.62				
9/26/2018					0.756 (U)	2.73
3/4/2019					1.21 (U)	4.43
3/5/2019	0.84 (U)	0.985 (U)				
4/2/2019		1.42				
4/3/2019	1.01				1.07 (U)	4.79
8/21/2019			1.01 (U)	1.24 (U)		
9/24/2019		1.35				4.06
9/25/2019	1.18 (U)				1.86	
10/8/2019			1.02 (U)	0.866 (U)		
2/12/2020	1.11 (U)	1.61	0.45 (U)	1.83	1.25	4.02
3/24/2020	1.88	1.24 (U)		1.27 (U)		3.52
3/25/2020			0.377 (U)		0.766 (U)	
9/22/2020					0.795 (U)	2.98
9/24/2020	0.611 (U)	1.8	0.568 (U)	0.634 (U)		
2/8/2021						2.89
2/9/2021	0.284 (U)	1.24			0.626 (U)	
2/10/2021			0.518 (U)	0.783 (U)		
3/2/2021						1.67
3/3/2021	0.133 (U)	1.2			1	

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021			0.636 (U)	0.818 (U)		
8/26/2021			0.674 (U)		1.17 (U)	4.68
8/27/2021	0.779 (U)					
9/1/2021		1.86				
9/3/2021				0.971 (U)		
2/8/2022			0.834	0.534 (U)		
2/9/2022	0.504 (U)	1.94				
2/10/2022						3.33
2/11/2022					0.996	

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				0.321 (U)	0.42	
6/2/2016	0.614		0.329 (U)			
7/25/2016					1.83	
7/26/2016	1.47		1.51	0.707 (U)		
8/31/2016		1.2				
9/13/2016				1.22	0.841	
9/14/2016	1.27					0.98 (U)
9/15/2016			1.04 (U)			
11/1/2016				0.805 (U)		
11/2/2016			0.496 (U)			
11/4/2016	0.434 (U)				0.166 (U)	0.277 (U)
11/28/2016		0.264 (U)				
12/15/2016						0.071 (U)
1/10/2017			0.376 (U)			
1/11/2017				0.705 (U)		
1/12/2017	0.202 (U)					
1/16/2017					0	0.44 (U)
2/22/2017		1.06 (U)				
3/2/2017				0.251 (U)	0.504 (U)	
3/3/2017						0.448 (U)
3/7/2017	0.0674 (U)					
3/8/2017			0.0745 (U)			
4/26/2017			0.282 (U)			
4/27/2017				1.08	0.593 (U)	
4/28/2017						0.548 (U)
5/2/2017	0.444 (U)					
5/8/2017		0.187 (U)				
5/26/2017						0 (U)
6/27/2017	0.77 (U)			1.02 (U)	0.657 (U)	
6/28/2017						0.608 (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)	
3/28/2018						0.412 (U)
3/29/2018	0.648 (U)			0.503 (U)		
6/5/2018				0.771 (U)		
6/6/2018					2.8	
6/7/2018	0.745 (U)					0.73 (U)
6/8/2018			0.218 (U)			
8/6/2018		0.196 (U)				
9/26/2018	0.377 (U)					
10/1/2018			1.24	0.783 (U)	1.06 (U)	0.756 (U)
2/26/2019			0.202 (U)			
2/27/2019				1.21 (U)	0.637 (U)	0.635 (U)
3/4/2019	1 (U)					
3/28/2019				1.13 (U)	0.125 (U)	
3/29/2019			0 (U)			0.224 (U)
4/3/2019	0.43 (U)					
8/19/2019		1.39				
9/24/2019	0.699 (U)			1.22 (U)	0.949 (U)	0.429 (U)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
9/25/2019			0.707 (U)			
10/8/2019		1.32 (U)				
2/10/2020				1.41	1.25 (U)	
2/11/2020						0.817 (U)
2/12/2020	0.913 (U)		1.07 (U)			
3/17/2020		1 (U)				
3/18/2020			0.207 (U)		0.458 (U)	
3/19/2020				1.1		0.715 (U)
8/26/2020		1.75				
9/22/2020	0.428 (U)	0.688 (U)				
9/23/2020				1.35 (U)	0.00884 (U)	0.565 (U)
9/25/2020			0.603 (U)			
2/8/2021	0.613 (U)					
2/10/2021			0.353 (U)			1.04 (U)
2/12/2021				0.366 (U)	0.458 (U)	
3/2/2021	0.579 (U)	0.948 (U)	0.71 (U)			
3/3/2021				0.492 (U)	0.105 (U)	0.459 (U)
8/19/2021			0.786 (U)	1.17 (U)	0.0732 (U)	
8/20/2021		0.528 (U)				
8/26/2021	0.798 (U)					
8/27/2021						0.409 (U)
2/8/2022		0.462 (U)				
2/9/2022				1.19	0.422 (U)	0.894 (U)
2/10/2022	0.375 (U)		0 (U)			

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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			
9/1/2016				2.28	
9/14/2016			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)		
11/16/2016				0.639 (U)	
11/28/2016				0.996	
1/11/2017		2.52	1.22		
1/16/2017	0.284 (U)				
2/21/2017	0.503 (U)				
2/27/2017				0.617 (U)	
3/1/2017			0.877 (U)		
3/2/2017		3.13			
4/26/2017	0.204 (U)	2.35	0.672 (U)		
5/8/2017				0.949	
6/28/2017		2.6	1.07 (U)		
6/30/2017	0.738 (U)				
7/13/2017				1.41	
10/11/2017				0.856 (U)	
3/27/2018	0.31 (U)				
3/28/2018		3	0.65 (U)		
4/4/2018				0.974	
6/7/2018		2.79			
6/8/2018			1.89		
6/11/2018	0.608 (U)				
9/19/2018				1.15 (U)	
10/1/2018		3.14	1.58		
10/2/2018	0.97 (U)				
2/26/2019	0.524 (U)				
2/27/2019		3.79	3.67		
4/1/2019	1.02 (U)	4.33	2.28		
8/21/2019				1.31	
9/25/2019	1.02 (U)	4.2	1.6		
10/9/2019				0.892 (U)	
2/11/2020		3.87	1.85		
2/12/2020	0.301 (U)				
3/17/2020				1.74	
3/19/2020	1	3.96	2.2		
7/6/2020				2.27	
8/27/2020					0.852 (U)
8/28/2020				2.34	
9/22/2020					0.268 (U)
9/23/2020		4.14	1.14 (U)	0.575 (U)	
9/24/2020	0.684 (U)				
10/7/2020				1.81	0.819 (U)
2/10/2021		3.65	2.46		
2/11/2021	0.678 (U)				
3/1/2021	0.412 (U)				0.846 (U)



# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				1.64	
3/3/2021		3.58	2.03		
8/19/2021	0.234 (U)	3.53			
8/20/2021					0.496 (U)
8/27/2021			1.34	1.83	
2/9/2022		3.28	1.91	1.74	0.926
2/10/2022	0.268 (U)				

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.1	<0.1
6/7/2016				<0.1		
7/27/2016				<0.1	<0.1	<0.1
8/30/2016	0.09 (J)					
8/31/2016		<0.1	0.11 (J)			
9/16/2016				<0.1		<0.1
9/19/2016					<0.1	
11/3/2016				<0.1	<0.1	<0.1
11/14/2016	0.18 (J)		0.71			
11/15/2016		0.12 (J)				
1/11/2017				<0.1	<0.1	<0.1
2/24/2017	0.05 (J)					
2/27/2017			0.22 (J)			
2/28/2017		0.07 (J)				
3/1/2017					<0.1	<0.1
3/2/2017				<0.1		
4/26/2017					<0.1	<0.1
5/2/2017				<0.1		
5/8/2017	0.03 (J)	0.04 (J)				
5/9/2017			0.2 (J)			
6/28/2017					<0.1	<0.1
6/29/2017				<0.1		
7/11/2017	0.07 (J)					
7/13/2017		<0.1	0.11 (J)			
10/4/2017				<0.1		<0.1
10/5/2017					<0.1	
10/10/2017	<0.1	<0.1	0.39			
3/28/2018				<0.1	<0.1	<0.1
4/2/2018	<0.1					
4/3/2018			<0.1			
4/4/2018		<0.1				
6/7/2018					<0.1	
6/11/2018				<0.1		<0.1
9/19/2018	<0.1	<0.1	<0.1			
9/25/2018				<0.1	<0.1	<0.1
3/5/2019				<0.1		<0.1
3/6/2019					<0.1	
3/27/2019	0.081 (J)	<0.1	0.18 (J)			
4/2/2019				<0.1		
4/3/2019					<0.1	<0.1
8/20/2019	<0.1	<0.1	<0.1			
9/25/2019				<0.1		
9/26/2019					<0.1	<0.1
10/8/2019	0.034 (J)	<0.1				
10/9/2019			<0.1			
2/11/2020				<0.1	<0.1	<0.1
3/17/2020	<0.1	<0.1	0.076 (J)			
3/24/2020				<0.1	<0.1	<0.1
8/27/2020	<0.1	<0.1				
8/28/2020			0.07 (J)			
9/22/2020	<0.1	<0.1				
9/23/2020			0.082 (J)	<0.1	<0.1	<0.1

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
2/9/2021					<0.1	<0.1
3/1/2021	<0.1	<0.1	0.073 (J)			
3/3/2021				<0.1	<0.1	<0.1
8/19/2021	<0.1	<0.1	0.075 (J)			
8/26/2021						<0.1
8/27/2021				<0.1	<0.1	
2/8/2022	<0.1					
2/9/2022		<0.1	0.063 (J)	<0.1	<0.1	<0.1

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.1	0.11 (J)
6/7/2016	<0.1	<0.1				
7/26/2016					<0.1	0.05 (J)
7/27/2016	<0.1					
7/28/2016		0.02 (J)				
9/14/2016					<0.1	0.04 (J)
9/19/2016	<0.1	0.02 (J)				
11/2/2016	<0.1				<0.1	<0.1
11/3/2016		<0.1				
1/12/2017						0.04 (J)
1/13/2017	<0.1	<0.1			<0.1	
3/6/2017	<0.1	<0.1			<0.1	
3/7/2017						<0.1
4/26/2017	<0.1	0.04 (J)				
5/1/2017					<0.1	<0.1
6/27/2017						<0.1
6/29/2017	<0.1	<0.1			<0.1	
10/3/2017		<0.1				<0.1
10/4/2017	<0.1					
10/5/2017					<0.1	
10/11/2017			<0.1			
10/12/2017				<0.1		
11/20/2017			<0.1	<0.1		
1/10/2018				<0.1		
1/11/2018			<0.1			
2/19/2018				<0.1		
2/20/2018			0.23			
3/29/2018	<0.1	<0.1			<0.1	<0.1
4/3/2018			<0.1	<0.1		
6/5/2018		0.13 (J)				
6/6/2018	<0.1					0.15 (J)
6/7/2018					<0.1	
6/28/2018			<0.1	<0.1		
8/7/2018			0.048 (J)	<0.1		
9/24/2018			<0.1	<0.1		
9/25/2018	<0.1	0 (J)				
9/26/2018					<0.1	<0.1
3/4/2019					<0.1	0.19 (J)
3/5/2019	<0.1	0.32				
3/26/2019				<0.1		
3/27/2019			<0.1			
4/2/2019		0.12 (J)				
4/3/2019	<0.1				<0.1	0.047 (J)
8/21/2019			<0.1	<0.1		
9/24/2019		0.15 (J)				0.05 (J)
9/25/2019	<0.1				<0.1	
10/9/2019			<0.1	<0.1		
2/12/2020	<0.1	0.1 (J)	<0.1	<0.1	<0.1	<0.1
3/24/2020	<0.1	0.081 (J)		<0.1		<0.1
3/25/2020			<0.1		<0.1	
9/22/2020					<0.1	0.056 (J)
9/24/2020	<0.1	0.079 (J)	<0.1	<0.1		

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
2/8/2021						0.055 (J)
2/9/2021	<0.1	0.092 (J)			<0.1	
2/10/2021			<0.1	<0.1		
3/2/2021						<0.1
3/3/2021	<0.1				<0.1	
3/4/2021		0.091 (J)	<0.1	<0.1		
8/26/2021			0.063 (J)		<0.1	0.061 (J)
8/27/2021	<0.1					
9/1/2021		0.11				
9/3/2021				<0.1		
2/8/2022			0.052 (J)	<0.1		
2/9/2022	<0.1	0.1				
2/10/2022						0.055 (J)
2/11/2022					<0.1	

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				0.12 (J)	<0.1	
6/2/2016	<0.1		<0.1			
7/25/2016					0.06 (J)	
7/26/2016	<0.1		0.02 (J)	0.08 (J)		
8/31/2016		0.14 (J)				
9/13/2016				0.11 (J)	<0.1	
9/14/2016	<0.1					0.08 (J)
9/15/2016			<0.1			
11/1/2016				<0.1		
11/2/2016			<0.1			
11/4/2016	<0.1				<0.1	<0.1
11/28/2016		0.12 (J)				
12/15/2016						0.06 (J)
1/10/2017			<0.1			
1/11/2017				0.05 (J)		
1/12/2017	<0.1					
1/16/2017					<0.1	0.1 (J)
2/22/2017		0.09 (J)				
3/2/2017				<0.1	<0.1	
3/3/2017						<0.1
3/7/2017	<0.1					
3/8/2017			<0.1			
4/26/2017			<0.1			
4/27/2017				0.04 (J)	0.01 (J)	
4/28/2017						0.06 (J)
5/2/2017	<0.1					
5/8/2017		0.05 (J)				
5/26/2017						0.09 (J)
6/27/2017	<0.1			<0.1	<0.1	
6/28/2017						0.11 (J)
6/30/2017			<0.1			
7/17/2017		0.14 (J)				
10/3/2017	<0.1			<0.1	<0.1	<0.1
10/5/2017			<0.1			
10/16/2017		0.12 (J)				
2/19/2018		0.17				
3/27/2018			<0.1		<0.1	
3/28/2018						0.31
3/29/2018	<0.1			<0.1		
6/5/2018				0.055 (J)		
6/6/2018					<0.1	
6/7/2018	<0.1					0.11 (J)
6/8/2018			<0.1			
8/6/2018		0.087 (J)				
9/26/2018	<0.1					
10/1/2018			<0.1	<0.1	<0.1	<0.1
2/25/2019		0.14 (J)				
2/26/2019			<0.1			
2/27/2019				0.052 (J)	<0.1	0.12 (J)
3/4/2019	<0.1					
3/28/2019				0.036 (J)	<0.1	
3/29/2019			<0.1			0.13 (J)

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
4/3/2019	<0.1					
6/12/2019		0.12 (J)				
8/19/2019		<0.1				
9/24/2019	<0.1			0.063 (J)	<0.1	0.081 (J)
9/25/2019			<0.1			
10/8/2019		0.052 (J)				
2/10/2020				0.061 (J)	<0.1	
2/11/2020						0.075 (J)
2/12/2020	<0.1		<0.1			
3/17/2020		0.053 (J)				
3/18/2020			<0.1		<0.1	
3/19/2020				0.064 (J)		0.093 (J)
3/24/2020	<0.1					
8/26/2020		0.068 (J)				
9/22/2020	<0.1	0.058 (J)				
9/23/2020				0.058 (J)	<0.1	0.08 (J)
9/25/2020			<0.1			
2/8/2021	<0.1					
2/10/2021			<0.1			0.094 (J)
2/12/2021				0.068 (J)	<0.1	
3/2/2021	<0.1	0.073 (J)	<0.1			
3/3/2021				0.078 (J)	<0.1	0.085 (J)
8/19/2021			<0.1	0.074 (J)	<0.1	
8/20/2021		0.06 (J)				
8/26/2021	<0.1					
8/27/2021						0.12
2/8/2022		0.064 (J)				
2/9/2022				0.057 (J)	<0.1	0.094 (J)
2/10/2022	<0.1		<0.1			

# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			0.15 (J)		
6/2/2016	<0.1	0.62			
7/25/2016	0.06 (J)		0.14 (J)		
7/26/2016		0.49			
9/1/2016				0.08 (J)	
9/14/2016			0.18 (J)		
9/15/2016		0.54			
9/19/2016	<0.1				
11/1/2016	<0.1	0.68	<0.1		
11/16/2016				0.04 (J)	
1/11/2017		0.49	0.09 (J)		
1/16/2017	<0.1				
2/21/2017	<0.1				
2/27/2017				0.05 (J)	
3/1/2017			<0.1		
3/2/2017		0.48			
4/26/2017	<0.1	0.48	0.08 (J)		
5/8/2017				0.004 (J)	
6/28/2017		0.47	0.12 (J)		
6/30/2017	<0.1				
7/13/2017				0.35	
10/4/2017	<0.1	<0.1	<0.1		
10/11/2017				<0.1	
3/27/2018	<0.1				
3/28/2018		0.56	<0.1		
4/4/2018				<0.1	
6/7/2018		0.48			
6/8/2018			0.2 (J)		
6/11/2018	<0.1				
9/19/2018				<0.1	
10/1/2018		0.44	<0.1		
10/2/2018	<0.1				
2/26/2019	<0.1				
2/27/2019		0.53	0.13 (J)		
3/27/2019				0.12 (J)	
4/1/2019	<0.1	0.45	0.1 (J)		
8/21/2019				<0.1	
9/25/2019	<0.1	0.46	0.1 (J)		
10/9/2019				0.12 (J)	
2/11/2020			0.094 (J)		
2/12/2020	<0.1	0.4			
3/17/2020				<0.1	
3/19/2020	<0.1	0.51	0.11 (J)		
7/6/2020				0.12	
8/27/2020					<0.1
8/28/2020				0.12	
9/22/2020					<0.1
9/23/2020		0.47	0.098 (J)	0.12	
9/24/2020	<0.1				
10/7/2020				0.13	<0.1
11/12/2020				0.084 (J)	<0.1
2/10/2021		0.43	<0.1		



# Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
2/11/2021	<0.1				
3/1/2021	<0.1				<0.1
3/2/2021				0.12	
3/3/2021		0.44	0.1		
8/19/2021	<0.1	0.47			
8/20/2021					<0.1
8/27/2021			0.12	0.13	
2/9/2022		0.43	0.097 (J)	0.12	<0.1
2/11/2022	<0.1				

# Time Series

Constituent: Lead (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.001	<0.001
6/7/2016				<0.001		
7/27/2016				<0.001	<0.001	<0.001
8/30/2016	<0.001					
8/31/2016		<0.001	<0.001			
9/16/2016				<0.001		<0.001
9/19/2016					<0.001	
11/3/2016				<0.001	<0.001	<0.001
11/14/2016	<0.001		<0.001			
11/15/2016		<0.001				
1/11/2017				<0.001	<0.001	<0.001
2/24/2017	<0.001					
2/27/2017			<0.001			
2/28/2017		<0.001				
3/1/2017					<0.001	<0.001
3/2/2017				8E-05 (J)		
4/26/2017					<0.001	<0.001
5/2/2017				<0.001		
5/8/2017	<0.001	<0.001				
5/9/2017			0.0001 (J)			
6/28/2017					<0.001	0.0001 (J)
6/29/2017				8E-05 (J)		
7/11/2017	<0.001					
7/13/2017		<0.001	<0.001			
10/10/2017	<0.001	<0.001	<0.001			
3/28/2018				<0.001	<0.001	<0.001
4/2/2018	<0.001					
4/3/2018			<0.001			
4/4/2018		<0.001				
9/19/2018	<0.001	<0.001	<0.001			
3/5/2019				<0.001		<0.001
3/6/2019					<0.001	
4/2/2019				<0.001		
4/3/2019					<0.001	<0.001
8/20/2019	<0.001	<0.001	<0.001			
9/25/2019				<0.001		
9/26/2019					<0.001	<0.001
2/11/2020				<0.001	<0.001	<0.001
3/24/2020				6.4E-05 (J)	7.1E-05 (J)	5.4E-05 (J)
8/27/2020	<0.001	<0.001				
8/28/2020			<0.001			
9/22/2020	<0.001	<0.001				
9/23/2020			<0.001	4.1E-05 (J)	6E-05 (J)	9.7E-05 (J)
2/9/2021					5E-05 (J)	9.4E-05 (J)
3/1/2021	<0.001	<0.001	<0.001			
3/3/2021				<0.001	<0.001	7.6E-05 (J)
8/19/2021	<0.001	<0.001	<0.001			
8/26/2021						<0.001
8/27/2021				<0.001	<0.001	
2/8/2022	<0.001					
2/9/2022		<0.001	<0.001	<0.001	<0.001	<0.001

# Time Series

Constituent: Lead (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.001	<0.001
6/7/2016	<0.001	<0.001				
7/26/2016					<0.001	<0.001
7/27/2016	<0.001					
7/28/2016		<0.001				
9/14/2016					<0.001	<0.001
9/19/2016	<0.001	<0.001				
11/2/2016	0.0013 (J)				<0.001	<0.001
11/3/2016		<0.001				
1/12/2017						<0.001
1/13/2017	<0.001	<0.001			<0.001	
3/6/2017	<0.001	<0.001			<0.001	
3/7/2017						0.0001 (J)
4/26/2017	<0.001	<0.001				
5/1/2017					<0.001	<0.001
6/27/2017						<0.001
6/29/2017	<0.001	<0.001			<0.001	
10/11/2017			0.0001 (J)			
10/12/2017				9E-05 (J)		
11/20/2017			<0.001	<0.001		
1/10/2018				<0.001		
1/11/2018			0.0002 (J)			
2/19/2018				<0.001		
2/20/2018			<0.001			
3/29/2018	<0.001	<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		
3/4/2019					<0.001	<0.001
3/5/2019	<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				<0.001
9/25/2019	<0.001				<0.001	
10/9/2019			<0.001	<0.001		
2/12/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
3/24/2020	0.00011 (J)	<0.001		<0.001		5.4E-05 (J)
3/25/2020			5.1E-05 (J)		<0.001	
9/22/2020					<0.001	4.5E-05 (J)
9/24/2020	9.2E-05 (J)	4.6E-05 (J)	<0.001	3.8E-05 (J)		
2/8/2021						0.00013 (J)
2/9/2021	6.3E-05 (J)	<0.001			<0.001	
2/10/2021			<0.001	<0.001		
3/2/2021						5.1E-05 (J)
3/3/2021	4.5E-05 (J)				<0.001	
3/4/2021		<0.001	<0.001	<0.001		
8/26/2021			<0.001		<0.001	<0.001
8/27/2021	<0.001					
9/1/2021		<0.001				
9/3/2021				<0.001		

# Time Series

Constituent: Lead (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
2/8/2022			<0.001	<0.001		
2/9/2022	<0.001	<0.001				
2/10/2022						<0.001
2/11/2022					<0.001	

# Time Series

Constituent: Lead (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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				
8/3/2015		<0.001				
2/16/2016		<0.001				
6/1/2016				0.00056 (J)	<0.001	
6/2/2016	<0.001		<0.001			
7/25/2016					<0.001	
7/26/2016	<0.001		<0.001	<0.001		
8/31/2016		<0.001				
9/13/2016				0.0001 (J)	<0.001	
9/14/2016	<0.001					<0.001
9/15/2016			<0.001			
11/1/2016				<0.001		
11/2/2016			<0.001			
11/4/2016	<0.001				<0.001	<0.001
11/28/2016		<0.001				
12/15/2016						<0.001
1/10/2017			<0.001			
1/11/2017				<0.001		
1/12/2017	<0.001					
1/16/2017					<0.001	<0.001
2/22/2017		<0.001				
3/2/2017				0.0001 (J)	<0.001	
3/3/2017						<0.001
3/7/2017	7E-05 (J)					
3/8/2017			0.0001 (J)			
4/26/2017			<0.001			
4/27/2017				<0.001	<0.001	
4/28/2017						<0.001
5/2/2017	<0.001					
5/8/2017		<0.001				
5/26/2017						<0.001
6/27/2017	<0.001			<0.001	<0.001	
6/28/2017						<0.001
6/30/2017			<0.001			
7/17/2017		<0.001				
10/16/2017		<0.001				

# Time Series

Constituent: Lead (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.001				
3/27/2018			<0.001		<0.001	
3/28/2018						<0.001
3/29/2018	<0.001			<0.001		
8/6/2018		<0.001				
2/25/2019		<0.001				
2/26/2019			<0.001			
2/27/2019				<0.001	<0.001	<0.001
3/4/2019	<0.001					
4/3/2019	<0.001					
6/12/2019		<0.001				
8/19/2019		<0.001				
9/24/2019	9E-05 (J)					
10/8/2019		<0.001				
2/10/2020				4.9E-05 (J)	<0.001	
2/11/2020						<0.001
2/12/2020	<0.001		<0.001			
3/17/2020		<0.001				
3/18/2020			<0.001		<0.001	
3/19/2020				0.00012 (J)		<0.001
3/24/2020	6.8E-05 (J)					
8/26/2020		<0.001				
9/22/2020	4.2E-05 (J)	0.0001 (J)				
9/23/2020				<0.001	0.00021 (J)	0.0011 (J)
9/25/2020			<0.001			
2/8/2021	3.7E-05 (J)					
2/10/2021			4.8E-05 (J)			0.00015 (J)
2/12/2021				4.4E-05 (J)	0.00038 (J)	
3/2/2021	9.2E-05 (J)	<0.001	<0.001			
3/3/2021				5.6E-05 (J)	<0.001	<0.001
8/19/2021			<0.001	<0.001	<0.001	
8/20/2021		<0.001				
8/26/2021	<0.001					
8/27/2021						<0.001
2/8/2022		<0.001				
2/9/2022				<0.001	<0.001	<0.001
2/10/2022	<0.001		<0.001			

# Time Series

Constituent: Lead (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.001		
6/2/2016	<0.001	0.00056 (J)			
7/25/2016	<0.001		<0.001		
7/26/2016		0.0001 (J)			
9/1/2016				<0.001	
9/14/2016			<0.001		
9/15/2016		0.0002 (J)			
9/19/2016	<0.001				
11/1/2016	<0.001	<0.001	<0.001		
11/16/2016				<0.001	
1/11/2017		<0.001	<0.001		
1/16/2017	<0.001				
2/21/2017	<0.001				
2/27/2017				<0.001	
3/1/2017			<0.001		
3/2/2017		0.0002 (J)			
4/26/2017	<0.001	<0.001	<0.001		
5/8/2017				<0.001	
6/28/2017		<0.001	<0.001		
6/30/2017	<0.001				
7/13/2017				<0.001	
10/11/2017				<0.001	
3/27/2018	<0.001				
3/28/2018		<0.001	<0.001		
4/4/2018				<0.001	
9/19/2018				<0.001	
2/26/2019	<0.001				
2/27/2019		<0.001	<0.001		
8/21/2019				<0.001	
2/11/2020			<0.001		
2/12/2020	<0.001	<0.001			
3/19/2020	<0.001	0.00017 (J)	<0.001		
7/6/2020				<0.001	
8/27/2020					9.2E-05 (J)
8/28/2020				<0.001	
9/22/2020					6E-05 (J)
9/23/2020		<0.001	0.00015 (J)	<0.001	
9/24/2020	<0.001				
10/7/2020				<0.001	<0.001
11/12/2020				4.4E-05 (J)	6.4E-05 (J)
2/10/2021		<0.001	<0.001		
2/11/2021	4.6E-05 (J)				
3/1/2021	<0.001				8.7E-05 (J)
3/2/2021				<0.001	
3/3/2021		<0.001	<0.001		
8/19/2021	<0.001	<0.001			
8/20/2021					<0.001
8/27/2021			<0.001	<0.001	
2/9/2022		<0.001	<0.001	<0.001	<0.001
2/11/2022	<0.001				

# Time Series

Constituent: Lithium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					0.0088	0.015
6/7/2016				<0.03		
7/27/2016				<0.03	0.0087 (J)	0.0049 (J)
8/30/2016	0.0061 (J)					
8/31/2016		0.0115 (J)	0.0147 (J)			
9/16/2016				<0.03		0.0031 (J)
9/19/2016					0.0043 (J)	
11/3/2016				<0.03	<0.03	0.0021 (J)
11/14/2016	0.0064 (J)		0.0175 (J)			
11/15/2016		0.0148 (J)				
1/11/2017				0.0035 (J)	0.0052 (J)	0.0025 (J)
2/24/2017	0.0049 (J)					
2/27/2017			0.0135 (J)			
2/28/2017		0.0124 (J)				
3/1/2017					0.0053 (J)	0.0029 (J)
3/2/2017				<0.03		
4/26/2017					0.0041 (J)	0.0019 (J)
5/2/2017				<0.03		
5/8/2017	0.0053 (J)	0.0132 (J)				
5/9/2017			0.0136 (J)			
6/28/2017					0.0039 (J)	0.0016 (J)
6/29/2017				<0.03		
7/11/2017	0.0051 (J)					
7/13/2017		0.0124 (J)	0.0129 (J)			
10/10/2017	0.0043 (J)	0.0123 (J)	0.015 (J)			
3/28/2018				<0.03	0.0041 (J)	0.0024 (J)
4/2/2018	0.0045 (J)					
4/3/2018			0.014 (J)			
4/4/2018		0.014 (J)				
6/7/2018					0.0032 (J)	
6/11/2018				<0.03		0.0014 (J)
9/19/2018	0.0043 (J)	0.013 (J)	0.012 (J)			
9/25/2018				<0.03	0.0036 (J)	0.0016 (J)
3/5/2019				<0.03		0.0031 (J)
3/6/2019					0.0033 (J)	
4/2/2019				<0.03		
4/3/2019					0.0035 (J)	0.0028 (J)
8/20/2019	0.0036 (J)	0.013 (J)	0.012 (J)			
9/25/2019				<0.03		
9/26/2019					0.0032 (J)	0.0029 (J)
10/8/2019	0.0036 (J)	0.012 (J)				
10/9/2019			0.012 (J)			
2/11/2020				<0.03	0.0033 (J)	0.005 (J)
3/17/2020	0.0046 (J)	0.013 (J)	0.014 (J)			
3/24/2020				0.0034 (J)	0.0033 (J)	0.0035 (J)
8/27/2020	0.0039 (J)	0.013 (J)				
8/28/2020			0.012 (J)			
9/22/2020	0.0036 (J)	0.013 (J)				
9/23/2020			0.012 (J)	<0.03	0.003 (J)	0.0022 (J)
2/9/2021					0.0031 (J)	0.0019 (J)
3/1/2021	0.0037 (J)	0.013 (J)	0.012 (J)			
3/3/2021				<0.03	0.0034 (J)	0.0021 (J)



# Time Series

Constituent: Lithium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	0.0038 (J)	0.013 (J)	0.012 (J)			
8/26/2021						0.0019 (J)
8/27/2021				<0.03	0.0032 (J)	
2/8/2022	0.0039 (J)					
2/9/2022		0.014 (J)	0.012 (J)	<0.03	0.0032 (J)	0.0015 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					0.013	0.0049 (J)
6/7/2016	<0.03	0.0055				
7/26/2016					0.0123 (J)	0.0063 (J)
7/27/2016	<0.03					
7/28/2016		0.0045 (J)				
9/14/2016					0.0137 (J)	0.0058 (J)
9/19/2016	<0.03	0.0054 (J)				
11/2/2016	<0.03				0.0136 (J)	0.0053 (J)
11/3/2016		<0.03				
1/12/2017						0.0054 (J)
1/13/2017	<0.03	0.0062 (J)			0.0121 (J)	
3/6/2017	<0.03	0.0059 (J)			0.0143 (J)	
3/7/2017						0.0056 (J)
4/26/2017	<0.03	0.0054 (J)				
5/1/2017					0.0132 (J)	0.0031 (J)
6/27/2017						0.0018 (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			
3/29/2018	<0.03	0.0062 (J)			0.014 (J)	0.0058 (J)
4/3/2018			0.0022 (J)	<0.03		
6/5/2018		0.0061 (J)				
6/6/2018	<0.03					0.0068 (J)
6/7/2018					0.013 (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	<0.03	0.0062 (J)				
9/26/2018					0.014 (J)	0.0065 (J)
3/4/2019					0.015 (J)	0.0065 (J)
3/5/2019	<0.03	0.0053 (J)				
4/2/2019		0.0051 (J)				
4/3/2019	<0.03				0.014 (J)	0.007 (J)
8/21/2019			0.0035 (J)	<0.03		
9/24/2019		0.0068 (J)				0.0065 (J)
9/25/2019	<0.03				0.014 (J)	
10/9/2019			0.0036 (J)	<0.03		
2/12/2020	<0.03	0.0065 (J)	0.0041 (J)	<0.03	0.011 (J)	0.0066 (J)
3/24/2020	<0.03	0.0064 (J)		<0.03		0.0064 (J)
3/25/2020			0.0049 (J)		0.014 (J)	
9/22/2020					0.013 (J)	0.0066 (J)
9/24/2020	<0.03	0.0069 (J)	0.0054 (J)	<0.03		
2/8/2021						0.0063 (J)
2/9/2021	<0.03	0.006 (J)			0.011 (J)	
2/10/2021			0.0071 (J)	<0.03		
3/2/2021						0.0018 (J)
3/3/2021	<0.03				0.012 (J)	

# Time Series

Constituent: Lithium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.0062 (J)	0.0084 (J)	<0.03		
8/26/2021			0.0082 (J)		0.0094 (J)	0.0075 (J)
8/27/2021	<0.03					
9/1/2021		0.0057 (J)				
9/3/2021				<0.03		
2/8/2022			0.008 (J)	0.00076 (J)		
2/9/2022	0.00082 (J)	0.0061 (J)				
2/10/2022						0.0076 (J)
2/11/2022					0.012 (J)	

# Time Series

Constituent: Lithium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				0.015	<0.03	
6/2/2016	<0.03		<0.03			
7/25/2016					0.002 (J)	
7/26/2016	0.0027 (J)		<0.03	0.0135 (J)		
8/31/2016		<0.03				
9/13/2016				0.0112 (J)	<0.03	
9/14/2016	0.0029 (J)					0.004 (J)
9/15/2016			<0.03			
11/1/2016				0.0163 (J)		
11/2/2016			<0.03			
11/4/2016	<0.03				<0.03	<0.03
11/28/2016		<0.03				
12/15/2016						0.0026 (J)
1/10/2017			<0.03			
1/11/2017				0.0166 (J)		
1/12/2017	0.0032 (J)					
1/16/2017					0.0023 (J)	0.0023 (J)
2/22/2017		<0.03				
3/2/2017				0.0159 (J)	0.0025 (J)	
3/3/2017						0.0013 (J)
3/7/2017	0.0035 (J)					
3/8/2017			<0.03			
4/26/2017			<0.03			
4/27/2017				0.0137 (J)	0.0027 (J)	
4/28/2017						0.0031 (J)
5/2/2017	0.0031 (J)					
5/8/2017		0.0014 (J)				
5/26/2017						0.0038 (J)
6/27/2017	0.0029 (J)			0.0094 (J)	0.0024 (J)	
6/28/2017						0.0026 (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)	
3/28/2018						0.0025 (J)
3/29/2018	0.0034 (J)			0.0078 (J)		
6/5/2018				0.0079 (J)		
6/6/2018					0.0024 (J)	
6/7/2018	0.0032 (J)					0.0017 (J)
6/8/2018			<0.03			
8/6/2018		<0.03				
9/26/2018	0.0032 (J)					
10/1/2018			<0.03	0.0053 (J)	0.0023 (J)	<0.03
2/26/2019			<0.03			
2/27/2019				0.0093 (J)	0.0023 (J)	0.0011 (J)
3/4/2019	0.0032 (J)					
3/28/2019				0.013 (J)	0.0022 (J)	
3/29/2019			<0.03			0.0016 (J)
4/3/2019	0.0035 (J)					
8/19/2019		0.0019 (J)				
9/24/2019	0.0031 (J)			0.0046 (J)	0.0023 (J)	0.0011 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
9/25/2019			<0.03			
10/8/2019		0.0015 (J)				
2/10/2020				0.011 (J)	0.0023 (J)	
2/11/2020						0.0012 (J)
2/12/2020	0.0032 (J)		<0.03			
3/17/2020		0.0017 (J)				
3/18/2020			<0.03		0.0024 (J)	
3/19/2020				0.013 (J)		0.0022 (J)
3/24/2020	0.0033 (J)					
8/26/2020		0.0032 (J)				
9/22/2020	0.0034 (J)	0.0029 (J)				
9/23/2020				0.014 (J)	0.0024 (J)	0.0016 (J)
9/25/2020			<0.03			
2/8/2021	0.0032 (J)					
2/10/2021			<0.03			0.0039 (J)
2/12/2021				0.01 (J)	0.0025 (J)	
3/2/2021	0.0031 (J)	0.0033 (J)	<0.03			
3/3/2021				0.012 (J)	0.0025 (J)	0.0016 (J)
8/19/2021			<0.03	0.013 (J)	0.0023 (J)	
8/20/2021		0.0028 (J)				
8/26/2021	0.0032 (J)					
8/27/2021						0.0058 (J)
2/8/2022		0.0031 (J)				
2/9/2022				0.013 (J)	0.0027 (J)	0.006 (J)
2/10/2022	0.0036 (J)		<0.03			

# Time Series

Constituent: Lithium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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)			
9/1/2016				0.0077 (J)	
9/14/2016			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)		
11/16/2016				0.0075 (J)	
1/11/2017		0.0177 (J)	0.0085 (J)		
1/16/2017	<0.03				
2/21/2017	<0.03				
2/27/2017				0.0084 (J)	
3/1/2017			0.0114 (J)		
3/2/2017		0.0185 (J)			
4/26/2017	<0.03	0.0183 (J)	0.0092 (J)		
5/8/2017				0.0087 (J)	
6/28/2017		0.0173 (J)	0.0085 (J)		
6/30/2017	<0.03				
7/13/2017				0.0104 (J)	
10/11/2017				0.0099 (J)	
3/27/2018	0.0011 (J)				
3/28/2018		0.02 (J)	0.013 (J)		
4/4/2018				0.012 (J)	
6/7/2018		0.02 (J)			
6/8/2018			0.012 (J)		
6/11/2018	0.0012 (J)				
9/19/2018				0.011 (J)	
10/1/2018		0.02 (J)	0.011 (J)		
10/2/2018	<0.03				
2/26/2019	0.0011 (J)				
2/27/2019		0.021 (J)	0.014 (J)		
4/1/2019	0.001 (J)	0.021 (J)	0.013 (J)		
8/21/2019				0.0076 (J)	
9/25/2019	0.0011 (J)	0.02 (J)	0.01 (J)		
10/9/2019				0.0078 (J)	
2/11/2020			0.013 (J)		
2/12/2020	0.0013 (J)	0.019 (J)			
3/17/2020				0.0071 (J)	
3/19/2020	0.0012 (J)	0.023 (J)	0.014 (J)		
7/6/2020				0.011 (J)	
8/27/2020					0.0048 (J)
8/28/2020				0.012 (J)	
9/22/2020					0.0046 (J)
9/23/2020		0.023 (J)	0.013 (J)	0.013 (J)	
9/24/2020	0.0011 (J)				
10/7/2020				0.011 (J)	0.0041 (J)
11/12/2020				0.014 (J)	0.0044 (J)
2/10/2021		0.023 (J)	0.015 (J)		
2/11/2021	0.0012 (J)				
3/1/2021	0.0011 (J)				0.0043 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.013 (J)	
3/3/2021		0.024 (J)	0.017 (J)		
8/19/2021	0.0012 (J)	0.023 (J)			
8/20/2021					0.0043 (J)
8/27/2021			0.026 (J)	0.014 (J)	
2/9/2022		0.026 (J)	0.021 (J)	0.014 (J)	0.0042 (J)
2/11/2022	0.0014 (J)				

# Time Series

Constituent: Mercury (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.0002	<0.0002
6/7/2016				9.5E-05 (J)		
7/27/2016				<0.0002	<0.0002	<0.0002
8/30/2016	<0.0002					
8/31/2016		<0.0002	<0.0002			
9/16/2016				<0.0002		<0.0002
9/19/2016					<0.0002	
11/3/2016				<0.0002	<0.0002	<0.0002
11/14/2016	<0.0002		<0.0002			
11/15/2016		<0.0002				
1/11/2017				<0.0002	<0.0002	<0.0002
2/24/2017	<0.0002					
2/27/2017			<0.0002			
2/28/2017		<0.0002				
3/1/2017					<0.0002	<0.0002
3/2/2017				<0.0002		
4/26/2017					<0.0002	<0.0002
5/2/2017				<0.0002		
5/8/2017	<0.0002	<0.0002				
5/9/2017			<0.0002			
6/28/2017					<0.0002	<0.0002
6/29/2017				<0.0002		
7/11/2017	<0.0002					
7/13/2017		<0.0002	<0.0002			
10/10/2017	<0.0002	<0.0002	<0.0002			
3/28/2018				<0.0002	<0.0002	<0.0002
4/2/2018	<0.0002					
4/3/2018			<0.0002			
4/4/2018		<0.0002				
9/19/2018	5.3E-05 (J)	6E-05 (J)	7.1E-05 (J)			
9/25/2018				<0.0002	<0.0002	<0.0002
3/5/2019				<0.0002		<0.0002
3/6/2019					<0.0002	
8/20/2019	<0.0002	<0.0002	<0.0002			
2/11/2020				<0.0002	<0.0002	<0.0002
8/27/2020	<0.0002	<0.0002				
8/28/2020			<0.0002			
2/9/2021					<0.0002	<0.0002
3/3/2021				<0.0002	<0.0002	<0.0002
8/19/2021	<0.0002	<0.0002	<0.0002			
8/26/2021						<0.0002
8/27/2021				<0.0002	<0.0002	
2/8/2022	<0.0002					
2/9/2022		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002



# Time Series

Constituent: Mercury (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.0002	<0.0002
6/7/2016	9.6E-05 (J)	9.6E-05 (J)				
7/26/2016					<0.0002	<0.0002
7/27/2016	<0.0002					
7/28/2016		<0.0002				
9/14/2016					<0.0002	<0.0002
9/19/2016	<0.0002	<0.0002				
11/2/2016	<0.0002				<0.0002	<0.0002
11/3/2016		<0.0002				
1/12/2017						<0.0002
1/13/2017	<0.0002	<0.0002			<0.0002	
3/6/2017	<0.0002	<0.0002			<0.0002	
3/7/2017						<0.0002
4/26/2017	<0.0002	<0.0002				
5/1/2017					<0.0002	<0.0002
6/27/2017						<0.0002
6/29/2017	<0.0002	<0.0002			<0.0002	
10/11/2017			<0.0002			
10/12/2017				<0.0002		
11/20/2017			7E-05 (J)	8E-05 (J)		
1/10/2018				<0.0002		
1/11/2018			<0.0002			
2/19/2018				<0.0002		
2/20/2018			<0.0002			
3/29/2018	<0.0002	<0.0002			<0.0002	<0.0002
4/3/2018			<0.0002	<0.0002		
6/28/2018			<0.0002	3.6E-05 (J)		
8/7/2018			<0.0002	<0.0002		
9/24/2018			<0.0002	<0.0002		
9/25/2018	<0.0002	<0.0002				
9/26/2018					<0.0002	<0.0002
3/4/2019					<0.0002	<0.0002
3/5/2019	<0.0002	<0.0002				
8/21/2019			<0.0002	<0.0002		
2/12/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/8/2021						<0.0002
2/9/2021	<0.0002	<0.0002			<0.0002	
2/10/2021			<0.0002	<0.0002		
3/2/2021						<0.0002
3/3/2021	<0.0002				<0.0002	
3/4/2021		<0.0002	<0.0002	<0.0002		
8/26/2021			<0.0002		<0.0002	<0.0002
8/27/2021	<0.0002					
9/1/2021		<0.0002				
9/3/2021				0.00012 (J)		
2/8/2022			<0.0002	0.00013 (J)		
2/9/2022	<0.0002	<0.0002				
2/10/2022						<0.0002
2/11/2022				<0.0002		

# Time Series

Constituent: Mercury (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
5/1/2007		<0.0002				
9/11/2007		<0.0002				
3/20/2008		<0.0002				
8/27/2008		<0.0002				
3/3/2009		<0.0002				
11/18/2009		<0.0002				
3/3/2010		<0.0002				
9/8/2010		<0.0002				
3/10/2011		<0.0002				
9/8/2011		<0.0002				
3/5/2012		<0.0002				
9/10/2012		<0.0002				
2/6/2013		<0.0002				
8/12/2013		<0.0002				
2/5/2014		<0.0002				
8/5/2014		<0.0002				
2/4/2015		<0.0002				
8/3/2015		<0.0002				
2/16/2016		1.36E-05 (J)				
6/1/2016				<0.0002	<0.0002	
6/2/2016	<0.0002		<0.0002			
7/25/2016					<0.0002	
7/26/2016	<0.0002		<0.0002	<0.0002		
8/31/2016		<0.0002				
9/13/2016				<0.0002	<0.0002	
9/14/2016	<0.0002					<0.0002
9/15/2016			<0.0002			
11/1/2016				<0.0002		
11/2/2016			<0.0002			
11/4/2016	<0.0002				<0.0002	<0.0002
11/28/2016		<0.0002				
12/15/2016						<0.0002
1/10/2017			<0.0002			
1/11/2017				<0.0002		
1/12/2017	<0.0002					
1/16/2017					<0.0002	<0.0002
2/22/2017		<0.0002				
3/2/2017				<0.0002	<0.0002	
3/3/2017						<0.0002
3/7/2017	<0.0002					
3/8/2017			<0.0002			
4/26/2017			<0.0002			
4/27/2017				<0.0002	<0.0002	
4/28/2017						<0.0002
5/2/2017	<0.0002					
5/8/2017		<0.0002				
5/26/2017						<0.0002
6/27/2017	<0.0002			<0.0002	<0.0002	
6/28/2017						<0.0002
6/30/2017			<0.0002			
7/17/2017		<0.0002				
10/16/2017		<0.0002				

# Time Series

Constituent: Mercury (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.0002				
3/27/2018			<0.0002		<0.0002	
3/28/2018						<0.0002
3/29/2018	<0.0002			<0.0002		
8/6/2018		<0.0002				
9/26/2018	<0.0002					
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)	<0.0002
3/4/2019	<0.0002					
3/28/2019				4E-05 (J)	<0.0002	
3/29/2019			<0.0002			<0.0002
6/12/2019		<0.0002				
8/19/2019		<0.0002				
9/24/2019				<0.0002	<0.0002	<0.0002
9/25/2019			<0.0002			
10/8/2019		<0.0002				
2/10/2020				<0.0002	<0.0002	
2/11/2020						<0.0002
2/12/2020	<0.0002		<0.0002			
5/6/2020		<0.0002				
8/26/2020		<0.0002				
9/22/2020		<0.0002				
2/8/2021	<0.0002					
2/10/2021			<0.0002			<0.0002
2/12/2021				<0.0002	<0.0002	
3/2/2021	<0.0002	<0.0002				
8/20/2021		<0.0002				
8/26/2021	<0.0002					
2/8/2022		<0.0002				
2/9/2022				<0.0002	<0.0002	<0.0002
2/10/2022	<0.0002		<0.0002			

# Time Series

Constituent: Mercury (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.0002		
6/2/2016	<0.0002	<0.0002			
7/25/2016	<0.0002		<0.0002		
7/26/2016		<0.0002			
9/1/2016				<0.0002	
9/14/2016			<0.0002		
9/15/2016		<0.0002			
9/19/2016	<0.0002				
11/1/2016	<0.0002	<0.0002	<0.0002		
11/16/2016				<0.0002	
1/11/2017		<0.0002	<0.0002		
1/16/2017	<0.0002				
2/21/2017	<0.0002				
2/27/2017				<0.0002	
3/1/2017			<0.0002		
3/2/2017		<0.0002			
4/26/2017	<0.0002	<0.0002	<0.0002		
5/8/2017				<0.0002	
6/28/2017		<0.0002	<0.0002		
6/30/2017	<0.0002				
7/13/2017				<0.0002	
10/11/2017				<0.0002	
3/27/2018	<0.0002				
3/28/2018		<0.0002	<0.0002		
4/4/2018				<0.0002	
9/19/2018				7E-05 (J)	
2/26/2019	6.8E-05 (J)				
2/27/2019		6.2E-05 (J)	6.1E-05 (J)		
4/1/2019	8.2E-05 (J)	9.6E-05 (J)	8.4E-05 (J)		
8/21/2019				<0.0002	
9/25/2019	<0.0002	<0.0002	<0.0002		
2/11/2020			<0.0002		
2/12/2020	<0.0002	<0.0002			
7/6/2020				<0.0002	
8/27/2020					<0.0002
8/28/2020				<0.0002	
11/12/2020				<0.0002	<0.0002
2/10/2021		<0.0002	<0.0002		
2/11/2021	<0.0002				
8/20/2021					<0.0002
8/27/2021				<0.0002	
2/9/2022		<0.0002	<0.0002	<0.0002	<0.0002
2/11/2022	<0.0002				

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.01	<0.01
6/7/2016				<0.01		
7/27/2016				<0.01	<0.01	<0.01
8/30/2016	<0.01					
8/31/2016		<0.01	0.0024 (J)			
9/16/2016				<0.01		<0.01
9/19/2016					<0.01	
11/3/2016				<0.01	<0.01	<0.01
11/14/2016	<0.01		<0.01			
11/15/2016		<0.01				
1/11/2017				<0.01	<0.01	<0.01
2/24/2017	<0.01					
2/27/2017			0.0018 (J)			
2/28/2017		0.0005 (J)				
3/1/2017					<0.01	<0.01
3/2/2017				<0.01		
4/26/2017					<0.01	<0.01
5/2/2017				<0.01		
5/8/2017	<0.01	<0.01				
5/9/2017			0.0015 (J)			
6/28/2017					<0.01	<0.01
6/29/2017				<0.01		
7/11/2017	<0.01					
7/13/2017		<0.01	0.0015 (J)			
10/10/2017	<0.01	<0.01	0.0015 (J)			
3/28/2018				<0.01	<0.01	<0.01
4/2/2018	<0.01					
4/3/2018			<0.01			
4/4/2018		<0.01				
9/19/2018	<0.01	<0.01	<0.01			
3/5/2019				<0.01		<0.01
3/6/2019					<0.01	
8/20/2019	<0.01	<0.01	0.0011 (J)			
10/8/2019	<0.01	<0.01				
10/9/2019			0.0012 (J)			
2/11/2020				<0.01	<0.01	<0.01
3/17/2020	<0.01	<0.01	0.0016 (J)			
3/24/2020				<0.01	<0.01	<0.01
8/27/2020	<0.01	<0.01				
8/28/2020			0.0013 (J)			
9/22/2020	<0.01	<0.01				
9/23/2020			0.0011 (J)	<0.01	<0.01	<0.01
2/9/2021					<0.01	<0.01
3/1/2021	<0.01	<0.01	0.0012 (J)			
3/3/2021				<0.01	<0.01	<0.01
8/19/2021	<0.01	<0.01	0.0012 (J)			
8/26/2021						<0.01
8/27/2021				<0.01	<0.01	
2/8/2022	<0.01					
2/9/2022		<0.01	0.0012 (J)	<0.01	<0.01	<0.01

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.01	0.0035 (J)
6/7/2016	<0.01	<0.01				
7/26/2016					<0.01	0.0042 (J)
7/27/2016	<0.01					
7/28/2016		<0.01				
9/14/2016					<0.01	0.0041 (J)
9/19/2016	<0.01	<0.01				
11/2/2016	<0.01				<0.01	0.0039 (J)
11/3/2016		<0.01				
1/12/2017						0.0041 (J)
1/13/2017	<0.01	<0.01			<0.01	
3/6/2017	<0.01	0.0007 (J)			<0.01	
3/7/2017						0.0047 (J)
4/26/2017	<0.01	0.0008 (J)				
5/1/2017					<0.01	0.0045 (J)
6/27/2017						0.004 (J)
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			
3/29/2018	<0.01	<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	<0.01
3/5/2019	<0.01	<0.01				
8/21/2019			0.0021 (J)	<0.01		
10/9/2019			0.0018 (J)	<0.01		
2/12/2020	<0.01	<0.01	0.0025 (J)	<0.01	<0.01	0.0011 (J)
3/24/2020	<0.01	<0.01		<0.01		0.0011 (J)
3/25/2020			0.002 (J)		<0.01	
9/22/2020					<0.01	0.00099 (J)
9/24/2020	<0.01	<0.01	0.0016 (J)	<0.01		
2/8/2021						0.0011 (J)
2/9/2021	<0.01	<0.01			<0.01	
2/10/2021			0.0013 (J)	<0.01		
3/2/2021						<0.01
3/3/2021	<0.01				<0.01	
3/4/2021		<0.01	0.0014 (J)	<0.01		
8/26/2021			0.0027 (J)		<0.01	0.001 (J)
8/27/2021	<0.01					
9/1/2021		<0.01				
9/3/2021				<0.01		
2/8/2022			0.0035 (J)	<0.01		
2/9/2022	<0.01	<0.01				
2/10/2022						0.00096 (J)
2/11/2022					<0.01	

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				0.014 (J)	0.012 (J)	
6/2/2016	<0.01		<0.01			
7/25/2016					0.0098 (J)	
7/26/2016	<0.01		<0.01	0.0132		
8/31/2016		<0.01				
9/13/2016				0.0127	0.01 (J)	
9/14/2016	<0.01					0.0039 (J)
9/15/2016			<0.01			
11/1/2016				0.0092 (J)		
11/2/2016			<0.01			
11/4/2016	<0.01				0.01	0.0077 (J)
11/28/2016		<0.01				
12/15/2016						0.0066 (J)
1/10/2017			<0.01			
1/11/2017				0.0093 (J)		
1/12/2017	<0.01					
1/16/2017					0.0086 (J)	0.0056 (J)
2/22/2017		<0.01				
3/2/2017				0.0099 (J)	0.01	
3/3/2017						0.0049 (J)
3/7/2017	<0.01					
3/8/2017			<0.01			
4/26/2017			<0.01			
4/27/2017				0.0103	0.0101	
4/28/2017						0.004 (J)
5/2/2017	<0.01					
5/8/2017		<0.01				
5/26/2017						0.0029 (J)
6/27/2017	<0.01			0.0097 (J)	0.0093 (J)	
6/28/2017						0.0036 (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)	
3/28/2018						0.0038 (J)
3/29/2018	<0.01			0.0076 (J)		
6/5/2018				0.0092 (J)		
6/6/2018					0.0073 (J)	
6/7/2018						0.004 (J)
6/8/2018			<0.01			
8/6/2018		<0.01				
10/1/2018			<0.01	0.0085 (J)	0.0076 (J)	0.0042 (J)
2/26/2019			<0.01			
2/27/2019				0.0087 (J)	0.0078 (J)	0.0041 (J)
3/4/2019	<0.01					
3/28/2019				0.0092 (J)	0.0082 (J)	
3/29/2019			<0.01			0.0041 (J)
8/19/2019		<0.01				
9/24/2019				0.0072 (J)	0.0074 (J)	0.0054 (J)
9/25/2019			<0.01			
2/10/2020				0.0087 (J)	0.0062 (J)	

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/11/2020						0.0057 (J)
2/12/2020	<0.01		<0.01			
3/18/2020			<0.01		0.0056 (J)	
3/19/2020				0.0088 (J)		0.0046 (J)
3/24/2020	<0.01					
8/26/2020		<0.01				
9/22/2020	<0.01					
9/23/2020				0.008 (J)	0.0059 (J)	0.0071 (J)
9/25/2020			<0.01			
2/8/2021	<0.01					
2/10/2021			<0.01			0.0041 (J)
2/12/2021				0.008 (J)	0.0056 (J)	
3/2/2021	<0.01		<0.01			
3/3/2021				0.0088 (J)	0.0049 (J)	0.0074 (J)
8/19/2021			<0.01	0.0083 (J)	0.005 (J)	
8/20/2021		<0.01				
8/26/2021	<0.01					
8/27/2021						0.0048 (J)
2/8/2022		<0.01				
2/9/2022				0.0093 (J)	0.0055 (J)	0.0057 (J)
2/10/2022	<0.01		<0.01			



# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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			
9/1/2016				<0.01	
9/14/2016			0.0034 (J)		
9/15/2016		0.0112			
9/19/2016	<0.01				
11/1/2016	<0.01	0.0099 (J)	0.0025 (J)		
11/16/2016				<0.01	
1/11/2017		0.0093 (J)	0.0033 (J)		
1/16/2017	<0.01				
2/21/2017	<0.01				
2/27/2017				<0.01	
3/1/2017			0.0044 (J)		
3/2/2017		0.0103			
4/26/2017	<0.01	0.01	0.0075 (J)		
5/8/2017				0.0008 (J)	
6/28/2017		0.0102	0.008 (J)		
6/30/2017	<0.01				
7/13/2017				0.0015 (J)	
10/11/2017				0.002 (J)	
3/27/2018	<0.01				
3/28/2018		0.011	0.0025 (J)		
4/4/2018				0.0021 (J)	
6/7/2018		0.011			
6/8/2018			0.0041 (J)		
6/11/2018	<0.01				
9/19/2018				0.0039 (J)	
10/1/2018		0.012	0.0037 (J)		
10/2/2018	<0.01				
2/26/2019	<0.01				
2/27/2019		0.011	0.0027 (J)		
4/1/2019	<0.01	0.012	0.0021 (J)		
8/21/2019				0.0012 (J)	
9/25/2019	<0.01	0.012	0.0087 (J)		
10/9/2019				0.0013 (J)	
2/11/2020			0.003 (J)		
2/12/2020	<0.01	0.013			
3/17/2020				0.0015 (J)	
3/19/2020	<0.01	0.013	0.0043 (J)		
7/6/2020				0.0026 (J)	
8/27/2020					<0.01
8/28/2020				0.003 (J)	
9/22/2020					<0.01
9/23/2020		0.012	0.01	0.0025 (J)	
9/24/2020	<0.01				
10/7/2020				0.0024 (J)	<0.01
11/12/2020				0.0019 (J)	<0.01
2/10/2021		0.014	0.0038 (J)		
2/11/2021	<0.01				
3/1/2021	<0.01				<0.01

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.0023 (J)	
3/3/2021		0.013	0.0036 (J)		
8/19/2021	<0.01	0.013			
8/20/2021					<0.01
8/27/2021			0.0099 (J)	0.0022 (J)	
2/9/2022		0.013	0.0087 (J)	0.0021 (J)	<0.01
2/11/2022	<0.01				

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					6.17	5.71
6/7/2016				5.62		
7/27/2016				5.59	6.14	5.46
8/30/2016	5.75					
8/31/2016		6.01	7.15			
9/16/2016				5.58		
9/19/2016					6.04	5.59
11/3/2016				5.59	5.97	5.39
11/14/2016	5.59		6.96			
11/15/2016		5.91				
1/11/2017				5.59	6.05	5.48
2/24/2017	5.49					
2/27/2017			6.79			
2/28/2017		5.85				
3/1/2017					5.94	5.41
3/2/2017				5.54		
4/26/2017					5.99	5.4
5/2/2017				5.47		
5/8/2017	5.58	5.91				
5/9/2017			6.9			
6/28/2017					6	5.36
6/29/2017				5.56		
7/11/2017	5.58					
7/13/2017		5.8	6.77			
10/4/2017				5.57		5.32
10/5/2017					6.11	
10/10/2017	5.49	5.76	6.9			
3/28/2018				5.59	6.1	5.34
4/2/2018	6.3 (O)					
4/3/2018			6.44			
4/4/2018		5.77				
6/7/2018					5.98	
6/11/2018				5.58		5.28
9/19/2018	5.48	5.77	6.47			
9/25/2018				5.59	5.81	4.86
3/5/2019				5.48		5.26
3/6/2019					5.99	
3/27/2019	5.83	6.1	7.18			
4/2/2019				5.74		
4/3/2019					6.29	5.47
8/20/2019	5.58	5.78	6.48			
9/25/2019				5.49		
9/26/2019					6.04	5.2
10/8/2019	5.59	5.84				
10/9/2019			6.55			
2/11/2020				5.58	6.07	5.3
3/17/2020	5.57	5.9	6.69			
3/24/2020				5.57	5.98	5.33
8/27/2020	4.88	5.75				
8/28/2020			6.84			
9/22/2020	5.46	5.53				
9/23/2020			6.57	5.58	6.01	5.29

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
2/9/2021					6.12	5.43
3/1/2021	5.48	5.76	6.5			
3/3/2021				5.52	5.89	5.31
8/19/2021	5.5	5.73	6.13			
8/26/2021						4.4
8/27/2021				5.27	5.4	
2/8/2022	5.4					
2/9/2022		5.73	6.15	5.53	5.98	5.28

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					6.36	7.67
6/7/2016	5.77	6.1				
7/26/2016					6.22	7.66
7/27/2016	5.79					
7/28/2016		6.12				
9/14/2016					6.23	7.6
9/19/2016	5.73	6.12				
11/2/2016	5.67				6.08	7.35
11/3/2016		6.07				
1/12/2017						7.49
1/13/2017	5.79	6.41			6.19	
3/6/2017	5.63	6.34			6.2	
3/7/2017						7.43
4/26/2017	5.66	6.32				
5/1/2017					6.21	7.22
6/27/2017						7.32
6/29/2017	5.85	6.47			6.21	
10/3/2017		6.56				7.48
10/4/2017	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			
3/29/2018	5.93	6.75			6.09	7.02
4/3/2018			6.87	5.84		
6/5/2018		6.09				
6/6/2018	5.86					7.43
6/7/2018					6.12	
6/28/2018			6.18	5.24		
8/7/2018			6.08	5.18		
9/24/2018			5.81	5.14		
9/25/2018	5.84	6.67				
9/26/2018					5.84	7.13
3/4/2019					6.18	7.46
3/5/2019	6.07	7.22				
3/26/2019				5.3		
3/27/2019			5.84			
4/2/2019		6.94				
4/3/2019	5.71				6.43	7.11
8/21/2019			5.96	5.26		
9/24/2019		6.87				6.93
9/25/2019	5.86				6.2	
10/9/2019			5.81	5.22		
2/12/2020	6	7.13	5.97	5.3	6.15	7.52
3/24/2020	5.86	6.35		5.29		7.34
3/25/2020			5.78		6.26	
9/22/2020					5.8	7.19
9/24/2020	5.8	6.7	5.7	5.43		

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
2/9/2021	5.86	6.95			6.06	
2/10/2021			5.8	5.19		
3/2/2021						7.15
3/3/2021	5.89				6.21	
3/4/2021		6.8	5.54	5.23		
8/26/2021			6.91		5.82	7.16
8/27/2021	5.57					
9/1/2021		6.65				
9/3/2021				4.75		
2/8/2022			5.78	5.26		
2/9/2022	5.91	6.84				
2/10/2022						6.99
2/11/2022					5.95	

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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	5.75		5.46			
7/25/2016					6.21	
7/26/2016	5.72		5.45	7.43		
9/13/2016				7.44	6.16	7.41
9/14/2016	5.74					
9/15/2016			5.45			
11/1/2016				7.24		
11/2/2016			5.41			
11/4/2016	5.61				6.29	7.12
11/28/2016		6.23				
12/15/2016						7.24
1/10/2017			5.37			
1/11/2017				7.3		
1/12/2017	5.71					
1/16/2017					6.29	7.24
2/22/2017		6.21				
3/2/2017				7.23	6.28	
3/3/2017						7.22
3/7/2017	5.66					
3/8/2017			5.41			
4/26/2017			5.02			
4/27/2017				6.99	6.09	
4/28/2017						7.21
5/2/2017	5.65					
5/8/2017		6.12				
5/26/2017						7.13
6/27/2017	5.7			6.87	6.21	
6/28/2017						7.06
6/30/2017			5.39			
7/17/2017		6.03				
10/3/2017	5.79			6.81	5.98	6.99
10/5/2017			5.49			
10/16/2017		6.12				
2/19/2018		6.13				
3/27/2018			5.47		6.25	
3/28/2018						7.3
3/29/2018	5.63			7.38		
6/5/2018				7.16		

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/6/2018					6.17	
6/7/2018	5.63					7.29
6/8/2018			5.45			
8/6/2018		6.01				
9/26/2018	5.63					
10/1/2018			5.39	6.8	5.9	7.07
2/25/2019		6.51				
2/26/2019			5.46			
2/27/2019				6.84	5.8	7.27
3/4/2019	5.75					
3/28/2019				6.99	6.15	
3/29/2019			5.34			7.06
4/3/2019	5.63					
6/12/2019		6.3				
8/19/2019		6.23				
9/24/2019	5.6			7.07	6.23	7.01
9/25/2019			5.19			
10/8/2019		6.28				
2/10/2020				7.2	6.1	
2/11/2020						7.38
2/12/2020	5.83		5.48			
3/17/2020		6.14				
3/18/2020			5.38		6.19	
3/19/2020				7.03		7.22
3/24/2020	5.81					
5/6/2020		6.24				
8/26/2020		5.67				
9/22/2020	5.99	5.78				
9/23/2020				7.15	6.01	7.22
9/25/2020			5.44			
2/8/2021	5.67					
2/10/2021			5.35			7.29
2/12/2021				7.14	6.21	
3/2/2021	5.63	5.42	5.49			
3/3/2021				7.2	5.38	7.92
8/19/2021			7.32	6.32	6.38	
8/20/2021		5.86				
8/26/2021	5.51					
8/27/2021						7.14
2/8/2022		5.83				
2/9/2022				7.12	6.24	5.89
2/10/2022	5.14		4.5			



# Time Series

Constituent: pH, Field (S.U.) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			7.72		
6/2/2016	5.75	7.84			
7/25/2016	5.82		7.74		
7/26/2016		7.88			
9/1/2016				6.19	
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		
11/16/2016				6.05	
1/11/2017		7.66	7.53		
1/16/2017	5.72				
2/21/2017	5.67				
2/27/2017				6.01	
3/1/2017			7.42		
3/2/2017		7.68			
4/26/2017	5.56	7.45	7.4		
5/8/2017				6.1	
6/28/2017		7.65	7.5		
6/30/2017	5.72				
7/13/2017				6.07	
10/4/2017	5.87	7.49	7.45		
10/11/2017				5.93	
3/27/2018	5.83				
3/28/2018		7.91	7.74		
4/4/2018				6.01	
6/7/2018		7.69			
6/8/2018			7.64		
6/11/2018	5.69				
9/19/2018				6.09	
10/1/2018		7.39	7.47		
10/2/2018	5.39				
2/26/2019	5.77				
2/27/2019		7.55	7.54		
3/27/2019				6.2	
4/1/2019	5.62	7.87	7.74		
8/21/2019				5.82	
9/25/2019	5.69	7.64	7.47		
10/9/2019				5.96	
2/11/2020			7.09		
2/12/2020	5.8	7.83			
3/17/2020				5.99	
3/19/2020	6	7.65	7.31		
7/6/2020				6.89	
8/27/2020					5.8
8/28/2020				7.05	
9/22/2020					5.91
9/23/2020		7.57	7.37	6.81	
9/24/2020	5.67				
10/7/2020				7.06	5.87
2/10/2021		7.81	7.58		
2/11/2021	5.73				

# Time Series

Constituent: pH, Field (S.U.) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/1/2021	5.78				5.84
3/2/2021				6.72	
3/3/2021		8.39	8.23		
8/19/2021		5.34			
8/20/2021					6.71
8/27/2021			7.39	6.83	
2/9/2022		7.97	7.66	6.98	5.99
2/11/2022	5.59				

# Time Series

Constituent: Selenium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.005	<0.005
6/7/2016				0.001 (J)		
7/27/2016				0.0012 (J)	<0.005	<0.005
8/30/2016	0.0017 (J)					
8/31/2016		<0.005	<0.005			
9/16/2016				0.0015 (J)		<0.005
9/19/2016					<0.005	
11/3/2016				0.0015 (J)	<0.005	<0.005
11/14/2016	<0.005		<0.005			
11/15/2016		<0.005				
1/11/2017				0.0014 (J)	<0.005	<0.005
2/24/2017	0.0011 (J)					
2/27/2017			<0.005			
2/28/2017		<0.005				
3/1/2017					<0.005	<0.005
3/2/2017				0.0017 (J)		
4/26/2017					<0.005	<0.005
5/2/2017				<0.005		
5/8/2017	<0.005	<0.005				
5/9/2017			<0.005			
6/28/2017					<0.005	<0.005
6/29/2017				<0.005		
7/11/2017	<0.005					
7/13/2017		<0.005	<0.005			
10/10/2017	<0.005	<0.005	<0.005			
3/28/2018				<0.005	<0.005	<0.005
4/2/2018	<0.005					
4/3/2018			<0.005			
4/4/2018		<0.005				
6/7/2018					<0.005	
6/11/2018				<0.005		<0.005
9/19/2018	<0.005	<0.005	<0.005			
9/25/2018				<0.005	<0.005	<0.005
3/5/2019				<0.005		<0.005
3/6/2019					<0.005	
4/2/2019				<0.005		
4/3/2019					<0.005	<0.005
8/20/2019	<0.005	<0.005	<0.005			
9/25/2019				<0.005		
9/26/2019					<0.005	<0.005
2/11/2020				<0.005	<0.005	<0.005
3/24/2020				<0.005	<0.005	<0.005
8/27/2020	<0.005	<0.005				
8/28/2020			<0.005			
9/23/2020				<0.005	<0.005	<0.005
2/9/2021					<0.005	<0.005
3/3/2021				<0.005	<0.005	<0.005
8/19/2021	<0.005	<0.005	<0.005			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	
2/8/2022	<0.005					
2/9/2022		<0.005	<0.005	<0.005	<0.005	<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.005	<0.005
6/7/2016	<0.005	0.00048 (J)				
7/26/2016					0.0009 (J)	<0.005
7/27/2016	<0.005					
7/28/2016		<0.005				
9/14/2016					<0.005	<0.005
9/19/2016	<0.005	0.0014 (J)				
11/2/2016	<0.005				<0.005	<0.005
11/3/2016		<0.005				
1/12/2017						<0.005
1/13/2017	<0.005	<0.005			<0.005	
3/6/2017	<0.005	<0.005			<0.005	
3/7/2017						<0.005
4/26/2017	<0.005	<0.005				
5/1/2017					<0.005	<0.005
6/27/2017						<0.005
6/29/2017	<0.005	<0.005			<0.005	
10/11/2017			<0.005			
10/12/2017				<0.005		
11/20/2017			<0.005	0.0042 (J)		
1/10/2018				0.0043 (J)		
1/11/2018			<0.005			
2/19/2018				<0.005		
2/20/2018			<0.005			
3/29/2018	<0.005	<0.005			<0.005	<0.005
4/3/2018			<0.005	<0.005		
6/5/2018		<0.005				
6/6/2018	<0.005					<0.005
6/7/2018					<0.005	
6/28/2018			<0.005	0.0032 (J)		
8/7/2018			<0.005	0.0031 (J)		
9/24/2018			0.0015 (J)	0.0026 (J)		
9/25/2018	<0.005	<0.005				
9/26/2018					<0.005	<0.005
3/4/2019					<0.005	<0.005
3/5/2019	<0.005	<0.005				
4/2/2019		<0.005				
4/3/2019	<0.005				<0.005	<0.005
8/21/2019			<0.005	0.0024 (J)		
9/24/2019		<0.005				<0.005
9/25/2019	<0.005				<0.005	
10/9/2019			<0.005	0.0026 (J)		
2/12/2020	<0.005	<0.005	<0.005	0.002 (J)	<0.005	<0.005
3/24/2020	<0.005	<0.005		0.002 (J)		<0.005
3/25/2020			<0.005		<0.005	
9/22/2020					<0.005	<0.005
9/24/2020	<0.005	<0.005	<0.005	0.0016 (J)		
2/8/2021						<0.005
2/9/2021	<0.005	<0.005			<0.005	
2/10/2021			<0.005	<0.005		
3/2/2021						<0.005
3/3/2021	<0.005				0.0019 (J)	

# Time Series

Constituent: Selenium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		<0.005	<0.005	<0.005		
8/26/2021			<0.005		<0.005	<0.005
8/27/2021	<0.005					
9/1/2021		<0.005				
9/3/2021				<0.005		
2/8/2022			<0.005	0.0014 (J)		
2/9/2022	<0.005	<0.005				
2/10/2022						<0.005
2/11/2022					<0.005	

# Time Series

Constituent: Selenium (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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				<0.005	<0.005	
6/2/2016	<0.005		0.0011 (J)			
7/25/2016					<0.005	
7/26/2016	0.0009 (J)		0.0016 (J)	<0.005		
8/31/2016		<0.005				
9/13/2016				<0.005	<0.005	
9/14/2016	<0.005					<0.005
9/15/2016			0.0014 (J)			
11/1/2016				<0.005		
11/2/2016			<0.005			
11/4/2016	<0.005				<0.005	<0.005
11/28/2016		<0.005				
12/15/2016						<0.005
1/10/2017			0.0012 (J)			
1/11/2017				<0.005		
1/12/2017	<0.005					
1/16/2017					<0.005	<0.005
2/22/2017		<0.005				
3/2/2017				<0.005	<0.005	
3/3/2017						<0.005
3/7/2017	<0.005					
3/8/2017			<0.005			
4/26/2017			<0.005			
4/27/2017				<0.005	<0.005	
4/28/2017						<0.005
5/2/2017	<0.005					
5/8/2017		<0.005				
5/26/2017						<0.005
6/27/2017	<0.005			<0.005	<0.005	
6/28/2017						<0.005
6/30/2017			<0.005			
7/17/2017		<0.005				
10/16/2017		<0.005				

# Time Series

Constituent: Selenium (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						<0.005
3/29/2018	<0.005			<0.005		
6/7/2018	<0.005					
8/6/2018		<0.005				
9/26/2018	<0.005					
2/25/2019		<0.005				
2/26/2019			<0.005			
2/27/2019				<0.005	<0.005	<0.005
3/4/2019	<0.005					
3/28/2019				<0.005	<0.005	
3/29/2019			0.0019 (J)			<0.005
4/3/2019	<0.005					
6/12/2019		<0.005				
8/19/2019		<0.005				
9/24/2019	<0.005			<0.005	<0.005	<0.005
9/25/2019			<0.005			
10/8/2019		<0.005				
2/10/2020				<0.005	<0.005	
2/11/2020						<0.005
2/12/2020	<0.005		<0.005			
3/17/2020		<0.005				
3/18/2020			<0.005		<0.005	
3/19/2020				<0.005		<0.005
3/24/2020	<0.005					
8/26/2020		<0.005				
9/22/2020	<0.005	<0.005				
9/23/2020				<0.005	<0.005	<0.005
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				<0.005	<0.005	
3/2/2021	<0.005	<0.005	<0.005			
3/3/2021				<0.005	<0.005	<0.005
8/19/2021			<0.005	<0.005	<0.005	
8/20/2021		<0.005				
8/26/2021	<0.005					
8/27/2021						<0.005
2/8/2022		<0.005				
2/9/2022				<0.005	<0.005	<0.005
2/10/2022	<0.005		0.0014 (J)			

# Time Series

Constituent: Selenium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.005		
6/2/2016	<0.005	<0.005			
7/25/2016	<0.005		<0.005		
7/26/2016		<0.005			
9/1/2016				<0.005	
9/14/2016			<0.005		
9/15/2016		<0.005			
9/19/2016	<0.005				
11/1/2016	<0.005	<0.005	<0.005		
11/16/2016				<0.005	
1/11/2017		<0.005	<0.005		
1/16/2017	<0.005				
2/21/2017	<0.005				
2/27/2017				<0.005	
3/1/2017			<0.005		
3/2/2017		<0.005			
4/26/2017	<0.005	<0.005	<0.005		
5/8/2017				<0.005	
6/28/2017		<0.005	<0.005		
6/30/2017	<0.005				
7/13/2017				<0.005	
10/11/2017				<0.005	
3/27/2018	<0.005				
3/28/2018		<0.005	<0.005		
4/4/2018				<0.005	
9/19/2018				<0.005	
2/26/2019	<0.005				
2/27/2019		<0.005	<0.005		
4/1/2019	<0.005	<0.005	<0.005		
8/21/2019				<0.005	
9/25/2019	<0.005	<0.005	<0.005		
2/11/2020			<0.005		
2/12/2020	<0.005	<0.005			
3/19/2020	<0.005	<0.005	<0.005		
7/6/2020				<0.005	
8/27/2020					<0.005
8/28/2020				<0.005	
9/23/2020		<0.005	<0.005		
9/24/2020	<0.005				
11/12/2020				<0.005	<0.005
2/10/2021		<0.005	<0.005		
2/11/2021	<0.005				
3/1/2021	<0.005				
3/3/2021		<0.005	<0.005		
8/19/2021	<0.005	<0.005			
8/20/2021					<0.005
8/27/2021			<0.005	<0.005	
2/9/2022		<0.005	<0.005	<0.005	<0.005
2/11/2022	<0.005				



# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					1.2	1.8
6/7/2016				4.4		
7/27/2016				4.7	1.7	1.9
8/30/2016	160					
8/31/2016		150	190			
9/16/2016				4.8		1.7
9/19/2016					1.8	
11/3/2016				5.3	0.69 (J)	1.9
11/14/2016	150		200			
11/15/2016		150				
1/11/2017				5.2	<1	1.7
2/24/2017	120					
2/27/2017			190			
2/28/2017		130				
3/1/2017					1.8	<1
3/2/2017				5		
4/26/2017					1.6	1.9
5/2/2017				5		
5/8/2017	120	150				
5/9/2017			190			
6/28/2017					<1	<1
6/29/2017				5.2		
7/11/2017	110					
7/13/2017		150	180			
10/4/2017				5.3		1.7
10/5/2017					1.6	
10/10/2017	93	140	180			
4/2/2018	88.8					
4/3/2018			183			
4/4/2018		137				
6/7/2018					0.68 (J)	
6/11/2018				5.2		0.95 (J)
9/19/2018	75	137	192			
9/25/2018				6.1	1	1.5
3/27/2019	65.9	146	188			
4/2/2019				5.1		
4/3/2019					0.82 (J)	1.3
9/25/2019				5.5		
9/26/2019					0.64 (J)	1
10/8/2019	52.3	142				
10/9/2019			183			
3/17/2020	71.6	121	161			
3/24/2020				5.4	<1	0.99 (J)
9/22/2020	51.5	130				
9/23/2020			170	5.1	0.53 (J)	1.1
3/1/2021	51.6	119	159			
3/3/2021				5.2	<1	1
8/19/2021	52.6	115	149			
8/26/2021						1.2
8/27/2021				5.3	0.59 (J)	
2/8/2022	50.9					
2/9/2022		121	164	4.8	0.51 (J)	1.1

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					8	20
6/7/2016	<1	5.2				
7/26/2016					7.7	20
7/27/2016	0.08 (J)					
7/28/2016		5.1				
9/14/2016					7.5	19
9/19/2016	0.08 (J)	4.8				
11/2/2016	0.1 (J)				8.2	20
11/3/2016		5				
1/12/2017						19
1/13/2017	<1	4.3			8.1	
3/6/2017	<1	4.5			8	
3/7/2017						20
4/26/2017	<1	4.9				
5/1/2017					8.4	20
6/27/2017						18
6/29/2017	<1	5.5			9.2	
10/3/2017		5.8				16
10/4/2017	<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)					8.3
6/7/2018					8.5	
6/28/2018			22	43.8		
8/7/2018			20.7	40.5		
9/24/2018			21.2	39.7		
9/25/2018	0.13 (J)	7				
9/26/2018					10.2	7.9
3/26/2019				34.3		
3/27/2019			17.7			
4/2/2019		3.8				
4/3/2019	0.12 (J)				8.5	7
9/24/2019		1				5.5
9/25/2019	<1				8.5	
10/9/2019			15	27.9		
3/24/2020	<1	3		25.2		5.9
3/25/2020			14.3		8.8	
9/22/2020					8.2	5.5
9/24/2020	<1	3.6	11.7	22.9		
3/2/2021						2.6
3/3/2021	<1				7.8	
3/4/2021		4.5	12	21.5		
8/26/2021			19.2		8.5	6
8/27/2021	<1					

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		5				
9/3/2021				21.3		
2/8/2022			14.6	17.9		
2/9/2022	<1	3.9				
2/10/2022						4.9
2/11/2022				7.7		

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				5	4.2	
6/2/2016	1.9		6.6			
7/25/2016					3.7	
7/26/2016	1.8		6.1	5.4		
8/31/2016		29				
9/13/2016				2.9	5.2	
9/14/2016	1.8					9.4
9/15/2016			6.1			
11/1/2016				3.9		
11/2/2016			6.3			
11/4/2016	2				5	13
11/28/2016		36				
12/15/2016						1.8
1/10/2017			5.9			
1/11/2017				3.7		
1/12/2017	1.9					
1/16/2017					7.9	11
2/22/2017		43				
3/2/2017				4.6	7.4	
3/3/2017						8.8
3/7/2017	2.1					
3/8/2017			7			
4/26/2017			7			
4/27/2017				5.2	7.4	
4/28/2017						10
5/2/2017	2					
5/8/2017		60				
5/26/2017						12
6/27/2017	2.1			5.9	6.4	
6/28/2017						11
6/30/2017			6.5			
7/17/2017		63				
10/3/2017	2.3			6.6	5.9	7.9
10/5/2017			7.9			
10/16/2017		62				
2/19/2018		64.6				
6/5/2018				6.4		
6/6/2018					4.4	
6/7/2018	2					8.8
6/8/2018			6.4			
8/6/2018		42.1				
9/26/2018	2.3					
10/1/2018			6.8	5.6	4	9.1
2/25/2019		42.1				
3/28/2019				8	4.3	
3/29/2019			7.3			9
4/3/2019	2.1					
6/12/2019		83.4				
9/24/2019	2.4			5.3	4.3	9.1
9/25/2019			6.6			
10/8/2019		128				
3/17/2020		98.6				

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			8.1		5.3	
3/19/2020				10		12.4
3/24/2020	2.1					
9/22/2020	2.1	145				
9/23/2020				8.1	3.4	11.8
9/25/2020			6.1			
3/2/2021	2.3	156	6			
3/3/2021				9	4.4	10.6
8/19/2021			6.7	8.9	4.9	
8/20/2021		121				
8/26/2021	2.4					
8/27/2021						16.7
2/8/2022		107				
2/9/2022				9.3	5.1	18
2/10/2022	2.4		6.2			

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			12		
6/2/2016	1.3	5.8			
7/25/2016	1.2		8.4		
7/26/2016		6.7			
9/1/2016				770	
9/14/2016			8.6		
9/15/2016		6			
9/19/2016	1.2				
11/1/2016	1.3	4.9	8.9		
11/16/2016				780	
1/11/2017		4.5	8.6		
1/16/2017	<1				
2/21/2017	1.4				
2/27/2017				650	
3/1/2017			9.3		
3/2/2017		4.4			
4/26/2017	1.4	5.1	11		
5/8/2017				770	
6/28/2017		5.4	12		
6/30/2017	<1				
7/13/2017				630	
10/4/2017	1.4	6.2	12		
10/11/2017				540	
4/4/2018				430	
6/7/2018		6.7			
6/8/2018			9.6		
6/11/2018	1.1				
9/19/2018				395	
10/1/2018		7.1	9.1		
10/2/2018	1				
3/27/2019				437	
4/1/2019	0.96 (J)	7.2	8.5		
9/25/2019	0.81 (J)	7	13.8		
10/9/2019				<1	
3/17/2020				439	
3/19/2020	1.6	9	12.9		
7/6/2020				385	
8/27/2020					144
8/28/2020				394	
9/22/2020					156
9/23/2020		6.9	16.8	430	
9/24/2020	0.69 (J)				
10/7/2020				427	156
11/12/2020				385	147
3/1/2021	0.88 (J)				139
3/2/2021				387	
3/3/2021		7	9.6		
8/19/2021	1	7.5			
8/20/2021					122
8/27/2021			18.2	423	
2/9/2022		7.2	16	415	119
2/11/2022	2.8				

# Time Series

Constituent: Thallium (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.001	<0.001
6/7/2016				<0.001		
7/27/2016				<0.001	<0.001	<0.001
8/30/2016	<0.001					
8/31/2016		<0.001	<0.001			
9/16/2016				<0.001		<0.001
9/19/2016					<0.001	
11/3/2016				<0.001	<0.001	<0.001
11/14/2016	<0.001		<0.001			
11/15/2016		<0.001				
1/11/2017				<0.001	<0.001	<0.001
2/24/2017	<0.001					
2/27/2017			<0.001			
2/28/2017		<0.001				
3/1/2017					<0.001	<0.001
3/2/2017				<0.001		
4/26/2017					<0.001	<0.001
5/2/2017				<0.001		
5/8/2017	<0.001	<0.001				
5/9/2017			<0.001			
6/28/2017					<0.001	<0.001
6/29/2017				<0.001		
7/11/2017	<0.001					
7/13/2017		<0.001	<0.001			
10/10/2017	<0.001	<0.001	<0.001			
3/28/2018				<0.001	<0.001	<0.001
4/2/2018	<0.001					
4/3/2018			<0.001			
4/4/2018		<0.001				
9/19/2018	<0.001	<0.001	<0.001			
3/5/2019				<0.001		<0.001
3/6/2019					<0.001	
4/2/2019				<0.001		
4/3/2019					<0.001	<0.001
8/20/2019	5.8E-05 (J)	<0.001	<0.001			
9/25/2019				<0.001		
9/26/2019					<0.001	<0.001
10/8/2019	8.4E-05 (J)	<0.001				
10/9/2019			<0.001			
2/11/2020				<0.001	<0.001	<0.001
3/17/2020	<0.001	8E-05 (J)	<0.001			
3/24/2020				<0.001	<0.001	<0.001
8/27/2020	<0.001	<0.001				
8/28/2020			<0.001			
9/23/2020				<0.001	<0.001	<0.001
2/9/2021					<0.001	<0.001
8/19/2021	<0.001	<0.001	<0.001			
2/8/2022	<0.001					
2/9/2022		<0.001	<0.001	<0.001	<0.001	<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.001	<0.001
6/7/2016	<0.001	<0.001				
7/26/2016					<0.001	<0.001
7/27/2016	<0.001					
7/28/2016		<0.001				
9/14/2016					<0.001	<0.001
9/19/2016	<0.001	<0.001				
11/2/2016	<0.001				<0.001	<0.001
11/3/2016		<0.001				
1/12/2017						<0.001
1/13/2017	<0.001	<0.001			<0.001	
3/6/2017	<0.001	<0.001			<0.001	
3/7/2017						<0.001
4/26/2017	<0.001	<0.001				
5/1/2017					<0.001	<0.001
6/27/2017						<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			
3/29/2018	<0.001	<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	<0.001
3/5/2019	<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				<0.001
9/25/2019	<0.001				<0.001	
2/12/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
3/24/2020	<0.001	<0.001		<0.001		<0.001
3/25/2020			<0.001		<0.001	
9/22/2020					<0.001	<0.001
9/24/2020	<0.001	<0.001	<0.001	<0.001		
2/8/2021						<0.001
2/9/2021	<0.001	<0.001			<0.001	
2/10/2021			<0.001	<0.001		
2/8/2022			<0.001	<0.001		
2/9/2022	<0.001	<0.001				
2/10/2022						<0.001
2/11/2022					<0.001	



# Time Series

Constituent: Thallium (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (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			
7/25/2016					<0.001	
7/26/2016	<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			
11/4/2016	<0.001				<0.001	<0.001
11/28/2016		<0.001				
12/15/2016						<0.001
1/10/2017			<0.001			
1/11/2017				<0.001		
1/12/2017	<0.001					
1/16/2017					<0.001	<0.001
2/22/2017		<0.001				
3/2/2017				<0.001	<0.001	
3/3/2017						<0.001
3/7/2017	<0.001					
3/8/2017			<0.001			
4/26/2017			<0.001			
4/27/2017				<0.001	<0.001	
4/28/2017						<0.001
5/2/2017	<0.001					
5/8/2017		6E-05 (J)				
5/26/2017						<0.001
6/27/2017	<0.001			<0.001	<0.001	
6/28/2017						<0.001
6/30/2017			<0.001			
7/17/2017		6E-05 (J)				
10/16/2017		7E-05 (J)				
2/19/2018		<0.001				

# Time Series

Constituent: Thallium (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/27/2018			<0.001		<0.001	
3/28/2018						<0.001
3/29/2018	<0.001			<0.001		
8/6/2018		<0.001				
2/25/2019		<0.001				
2/26/2019			<0.001			
2/27/2019				<0.001	<0.001	<0.001
3/4/2019	<0.001					
4/3/2019	<0.001					
6/12/2019		<0.001				
8/19/2019		5.5E-05 (J)				
9/24/2019	<0.001					
10/8/2019		<0.001				
2/10/2020				<0.001	5.5E-05 (J)	
2/11/2020						<0.001
2/12/2020	<0.001		8.9E-05 (J)			
3/17/2020		<0.001				
3/18/2020			<0.001		<0.001	
3/19/2020				<0.001		<0.001
3/24/2020	<0.001					
8/26/2020		<0.001				
9/22/2020	<0.001	<0.001				
9/23/2020				<0.001	<0.001	<0.001
9/25/2020			<0.001			
2/8/2021	<0.001					
2/10/2021			<0.001			<0.001
2/12/2021				<0.001	<0.001	
3/2/2021		<0.001				
8/20/2021		<0.001				
2/8/2022		<0.001				
2/9/2022				<0.001	<0.001	<0.001
2/10/2022	<0.001		<0.001			

# Time Series

Constituent: Thallium (mg/L) Analysis Run 4/27/2022 12:13 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
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)			
9/1/2016				<0.001	
9/14/2016			<0.001		
9/15/2016		<0.001			
9/19/2016	<0.001				
11/1/2016	<0.001	<0.001	<0.001		
11/16/2016				<0.001	
1/11/2017		<0.001	<0.001		
1/16/2017	<0.001				
2/21/2017	<0.001				
2/27/2017				<0.001	
3/1/2017			<0.001		
3/2/2017		<0.001			
4/26/2017	<0.001	<0.001	<0.001		
5/8/2017				<0.001	
6/28/2017		<0.001	<0.001		
6/30/2017	<0.001				
7/13/2017				<0.001	
10/11/2017				<0.001	
3/27/2018	<0.001				
3/28/2018		<0.001	<0.001		
4/4/2018				<0.001	
9/19/2018				<0.001	
2/26/2019	<0.001				
2/27/2019		<0.001	<0.001		
8/21/2019				<0.001	
10/9/2019				<0.001	
2/11/2020			<0.001		
2/12/2020	<0.001	<0.001			
3/17/2020				<0.001	
3/19/2020	<0.001	<0.001	<0.001		
7/6/2020				7.3E-05 (J)	
8/27/2020					<0.001
8/28/2020				<0.001	
9/23/2020		<0.001	0.00016 (J)		
9/24/2020	<0.001				
11/12/2020				<0.001	<0.001
2/10/2021		<0.001	<0.001		
2/11/2021	<0.001				
8/20/2021					<0.001
8/27/2021				<0.001	
2/9/2022		<0.001	<0.001	<0.001	<0.001
2/11/2022	<0.001				

# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					120	58
6/7/2016				28		
7/27/2016				74	94	35
8/30/2016	319					
8/31/2016		332	402			
9/16/2016				67		35
9/19/2016					92	
11/3/2016				41	104	48
11/14/2016	280		445			
11/15/2016		356				
1/11/2017				104	133	95
2/24/2017	162					
2/27/2017			346			
2/28/2017		483				
3/1/2017					119	79
3/2/2017				77		
4/26/2017					162	36
5/2/2017				142		
5/8/2017	194	296				
5/9/2017			388			
6/28/2017					98	45
6/29/2017				53		
7/11/2017	193					
7/13/2017		345	433			
10/4/2017				61		45
10/5/2017					104	
10/10/2017	175	311	396			
4/2/2018	192					
4/3/2018			418			
4/4/2018		313				
6/7/2018					68	
6/11/2018				70		74
9/19/2018	186	326	413			
9/25/2018				86	109	63
3/27/2019	170	302	383			
4/2/2019				72		
4/3/2019					89	63
9/25/2019				81		
9/26/2019					126	72
10/8/2019	172	324				
10/9/2019			432			
3/17/2020	165	283	391			
3/24/2020				71	91	59
9/22/2020	141	294				
9/23/2020			404	99	103	81
3/1/2021	145	276	379			
3/3/2021				57	95	37
8/19/2021	134	333	391			
8/26/2021						31
8/27/2021				93	112	
2/8/2022	151					
2/9/2022		311	400	81	103	60

# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					96	160
6/7/2016	38	60				
7/26/2016					92	177
7/27/2016	74					
7/28/2016		81				
9/14/2016					102	187
9/19/2016	45	68				
11/2/2016	53				115	181
11/3/2016		61				
1/12/2017						202
1/13/2017	46	76			67	
3/6/2017	164	167			159	
3/7/2017						257
4/26/2017	34	50				
5/1/2017					107	165
6/27/2017						189
6/29/2017	68	94			79	
10/3/2017		149				170
10/4/2017	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					151
6/7/2018					90	
6/28/2018			88	112		
8/7/2018			89	103		
9/24/2018			82	107		
9/25/2018	73	122				
9/26/2018					116	144
3/26/2019				90		
3/27/2019			75			
4/2/2019		134				
4/3/2019	57				111	142
9/24/2019		157				129
9/25/2019	75				117	
10/9/2019			119	98		
3/24/2020	76	117		84		139
3/25/2020			158		146	
9/22/2020					83	104
9/24/2020	69	113	170	77		
3/2/2021						52
3/3/2021	53				80	
3/4/2021		110	168	57		
8/26/2021			249		93	123
8/27/2021	67					

# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		137				
9/3/2021				88		
2/8/2022			248	93		
2/9/2022	72	131				
2/10/2022						127
2/11/2022				102		

# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/1/2016				120	54	
6/2/2016	66		46			
7/25/2016					48	
7/26/2016	78		54	94		
8/31/2016		209				
9/13/2016				105	67	
9/14/2016	73					152
9/15/2016			54			
11/1/2016				44		
11/2/2016			71			
11/4/2016	75				60	148
11/28/2016		102				
12/15/2016						191
1/10/2017			45			
1/11/2017				107		
1/12/2017	86					
1/16/2017					65	180
2/22/2017		164				
3/2/2017				98	61	
3/3/2017						156
3/7/2017	108					
3/8/2017			178			
4/26/2017			52			
4/27/2017				116	31	
4/28/2017						130
5/2/2017	103					
5/8/2017		145				
5/26/2017						223
6/27/2017	73			89	42	
6/28/2017						166
6/30/2017			45			
7/17/2017		185				
10/3/2017	89			119	58	153
10/5/2017			40			
10/16/2017		218				
2/19/2018		173				
6/5/2018				127		
6/6/2018					96	
6/7/2018	142					146
6/8/2018			114			
8/6/2018		158				
9/26/2018	86					
10/1/2018			50	117	60	155
2/25/2019		92				
3/28/2019				87	87	
3/29/2019			63			150
4/3/2019	83					
6/12/2019		226				
9/24/2019	79			124	54	146
9/25/2019			64			
10/8/2019		276				
3/17/2020		185				

# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/27/2022 12:13 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			57		35	
3/19/2020				116		148
3/24/2020	68					
9/22/2020	75	281				
9/23/2020				108	15	161
9/25/2020			54			
3/2/2021	67	296	67			
3/3/2021				99	39	138
8/19/2021			54	105	44	
8/20/2021		254				
8/26/2021	86					
8/27/2021						150
2/8/2022		283				
2/9/2022				105	57	156
2/10/2022	77		56			



# Time Series

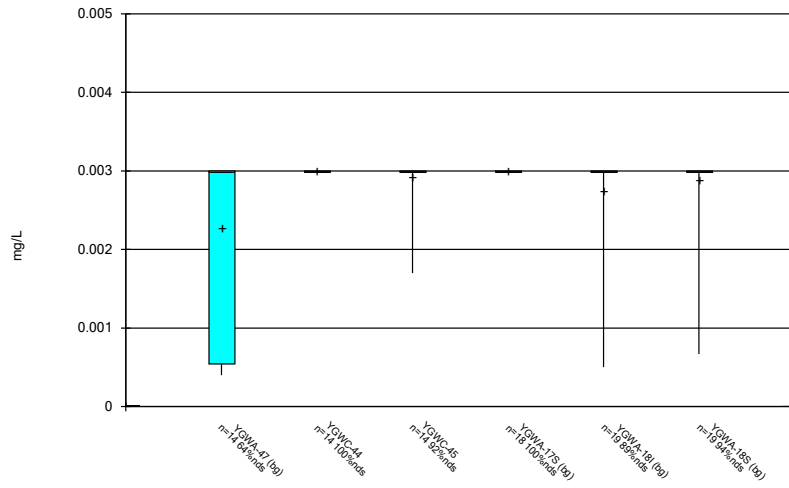
Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/27/2022 12:13 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			150		
6/2/2016	36	130			
7/25/2016	50		135		
7/26/2016		141			
9/1/2016				1240	
9/14/2016			127		
9/15/2016		153			
9/19/2016	35				
11/1/2016	<25	92	75		
11/16/2016				1220	
1/11/2017		159	148		
1/16/2017	47				
2/21/2017	<25				
2/27/2017				1060	
3/1/2017			182		
3/2/2017		117			
4/26/2017	55	181	92		
5/8/2017				1160	
6/28/2017		169	126		
6/30/2017	42				
7/13/2017				996	
10/4/2017	31	141	147		
10/11/2017				835	
4/4/2018				1470	
6/7/2018		95			
6/8/2018			158		
6/11/2018	59				
9/19/2018				702	
10/1/2018		165	138		
10/2/2018	57				
3/27/2019				641	
4/1/2019	54	149	19 (J)		
9/25/2019	51	157	159		
10/9/2019				809	
3/17/2020				733	
3/19/2020	47	146	148		
7/6/2020				793	
8/27/2020					349
8/28/2020				838	
9/22/2020					296
9/23/2020		157	155	832	
9/24/2020	51				
10/7/2020				842	336
11/12/2020				760	317
3/1/2021	23				265
3/2/2021				782	
3/3/2021		137	111		
8/19/2021	50	144			
8/20/2021					289
8/27/2021			155	810	
2/9/2022		154	145	846	278
2/11/2022	66				

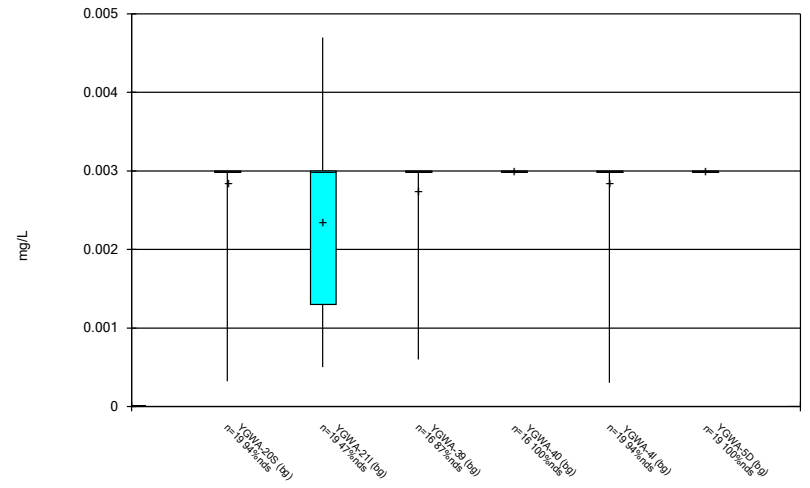
FIGURE B.

### Box & Whiskers Plot



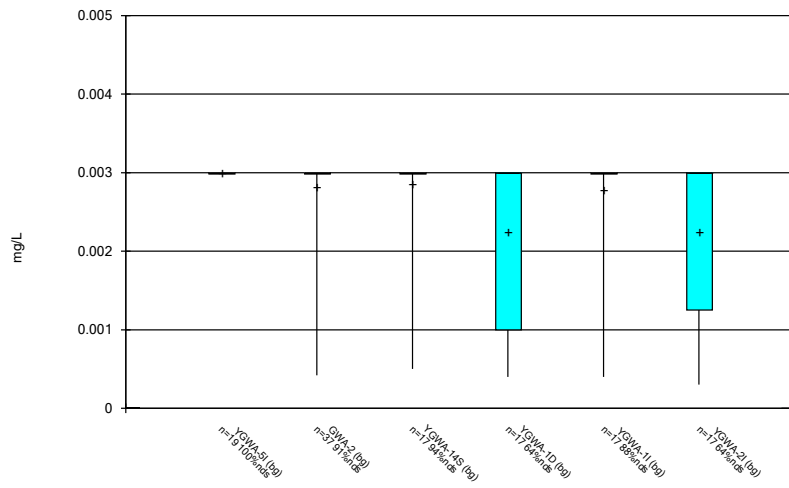
Constituent: Antimony Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



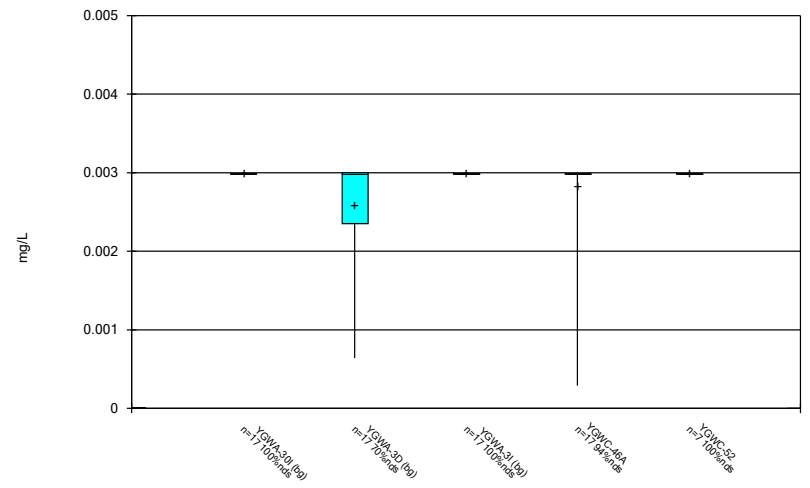
Constituent: Antimony Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



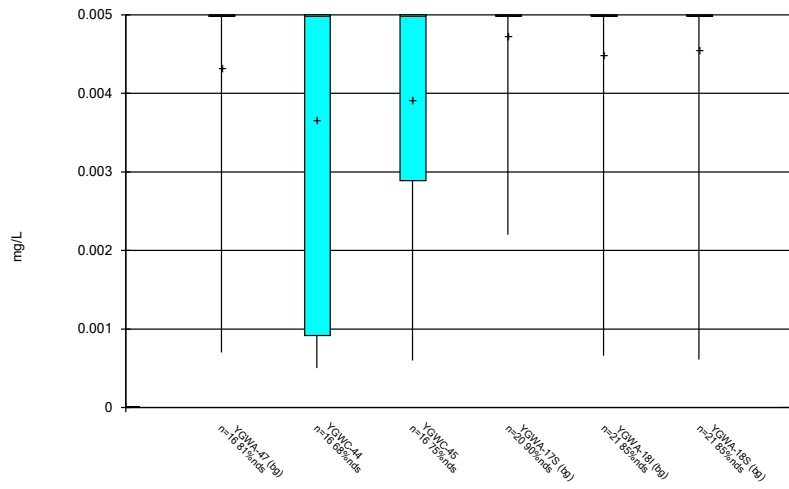
Constituent: Antimony Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



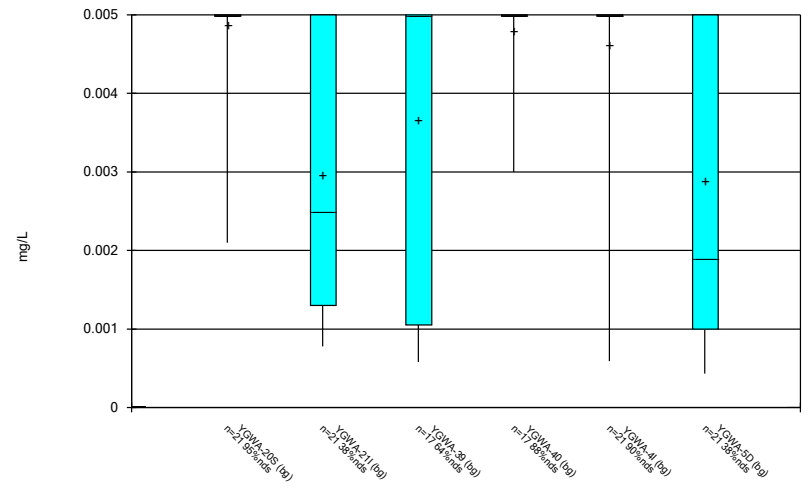
Constituent: Antimony Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



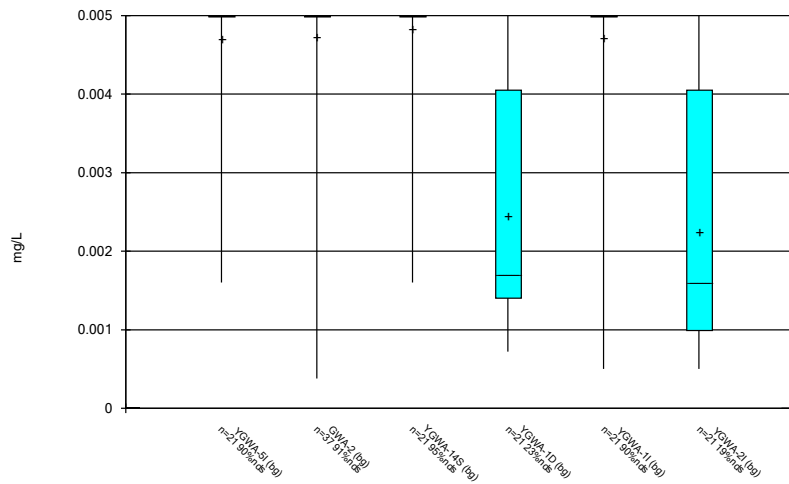
Constituent: Arsenic Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



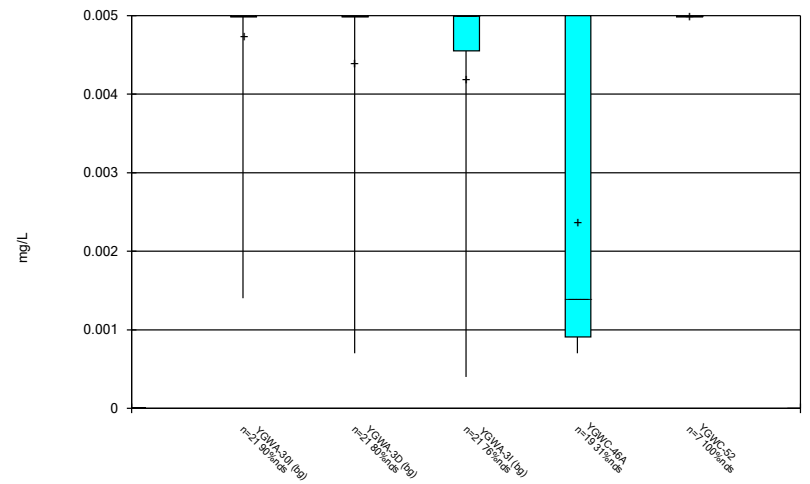
Constituent: Arsenic Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



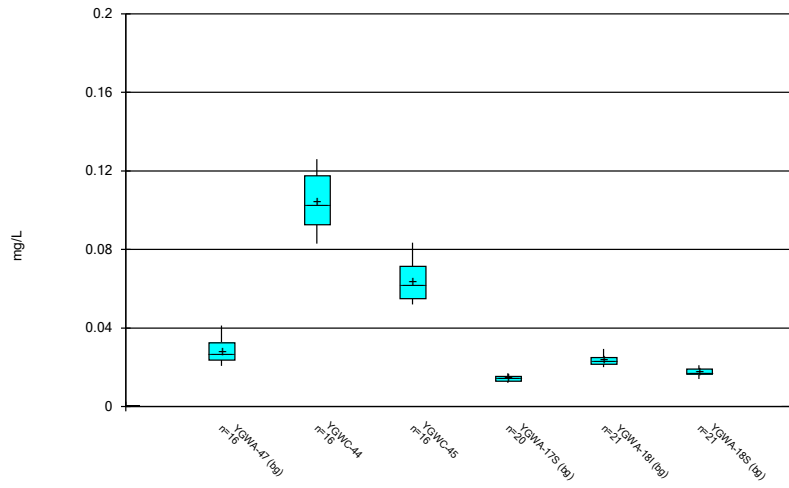
Constituent: Arsenic Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



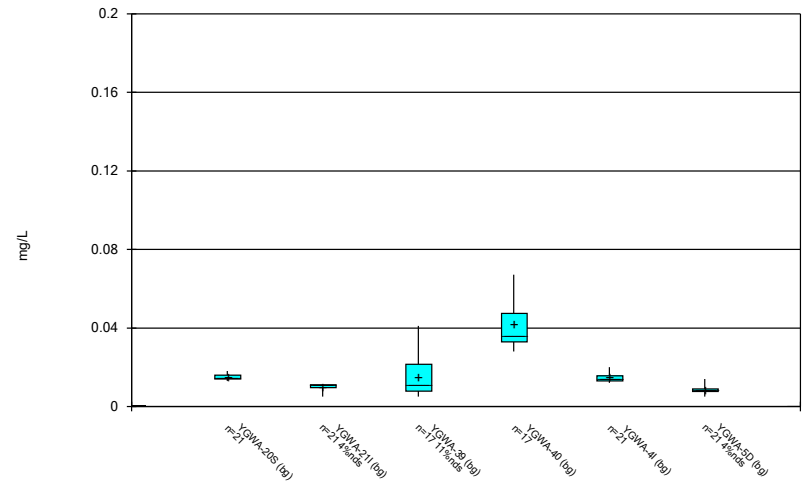
Constituent: Arsenic Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



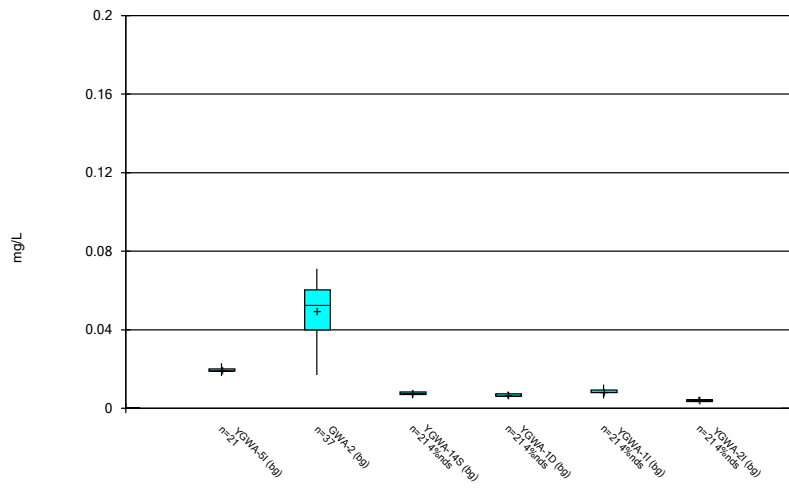
Constituent: Barium Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



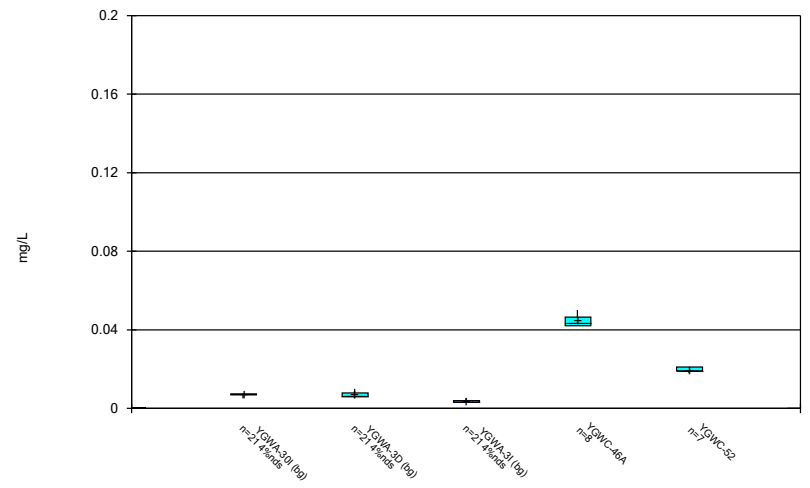
Constituent: Barium Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



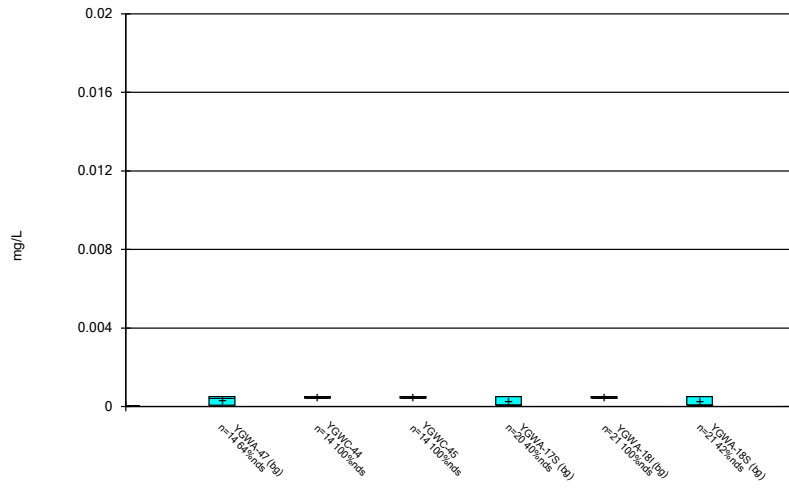
Constituent: Barium Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



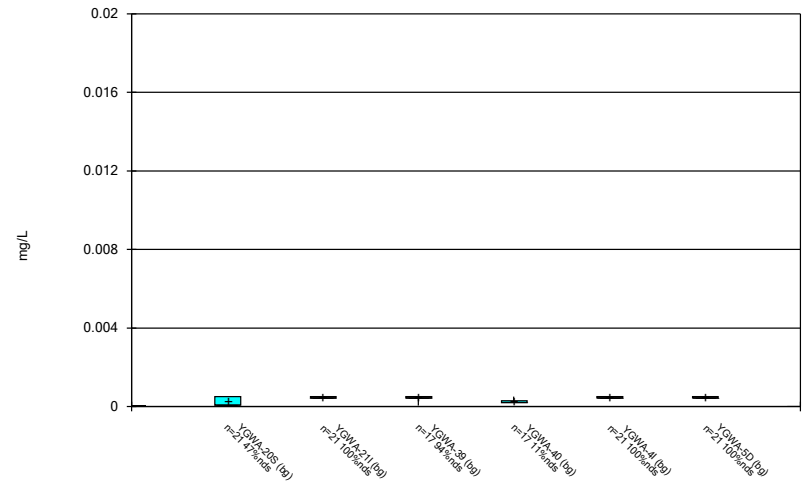
Constituent: Barium Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



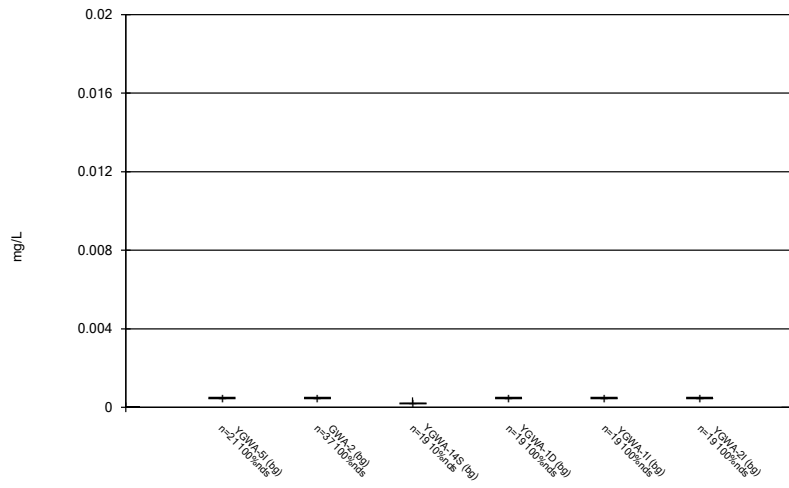
Constituent: Beryllium Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



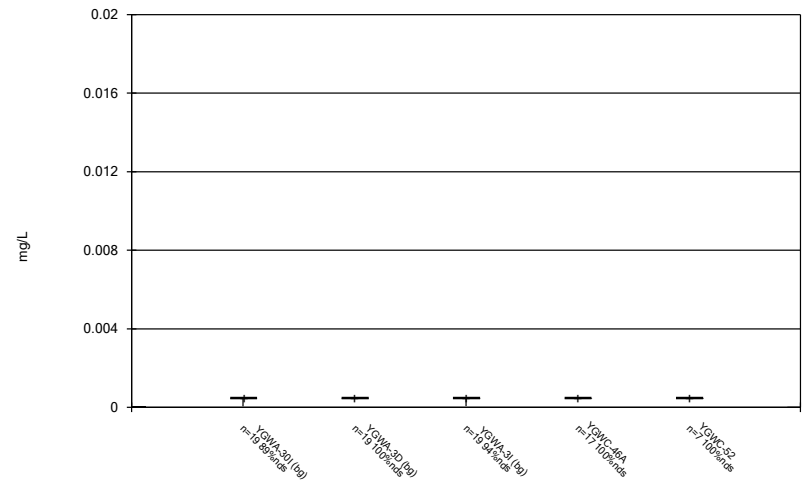
Constituent: Beryllium Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



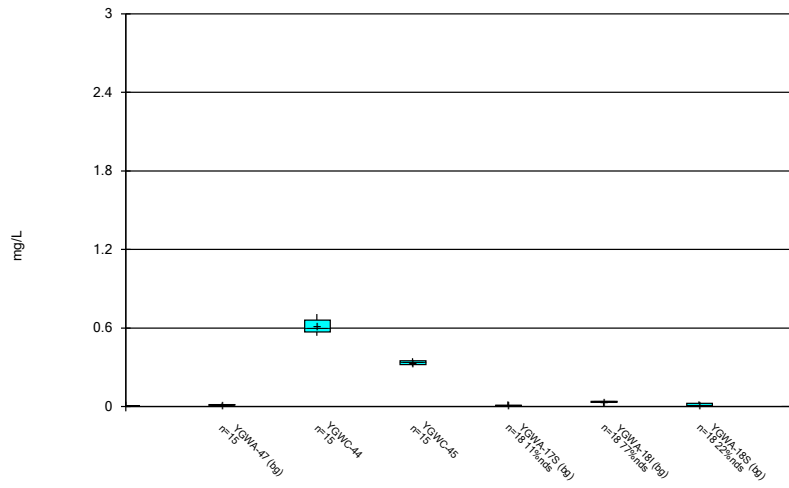
Constituent: Beryllium Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



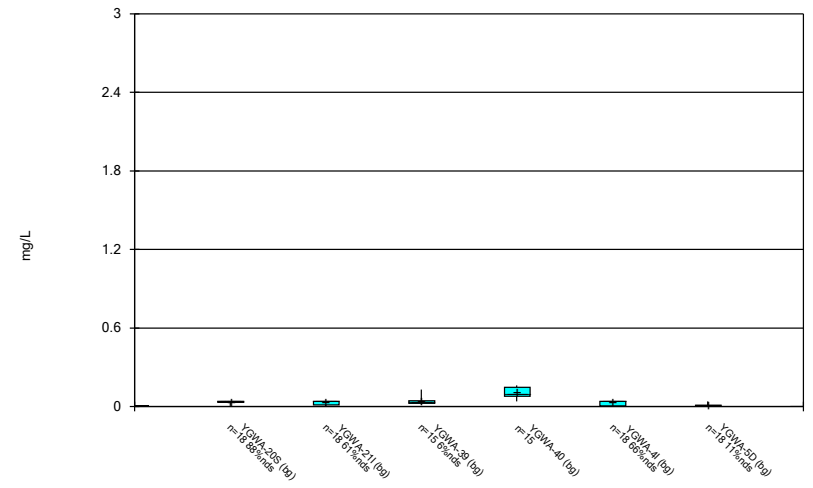
Constituent: Beryllium Analysis Run 4/27/2022 12:14 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



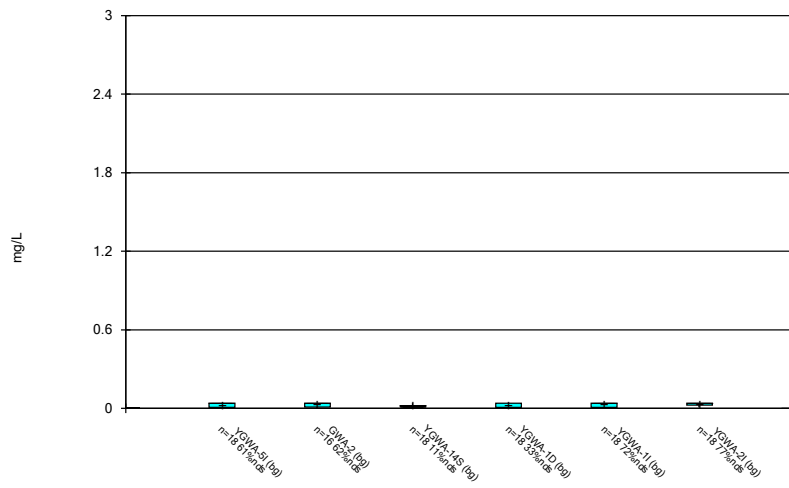
Constituent: Boron, total Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



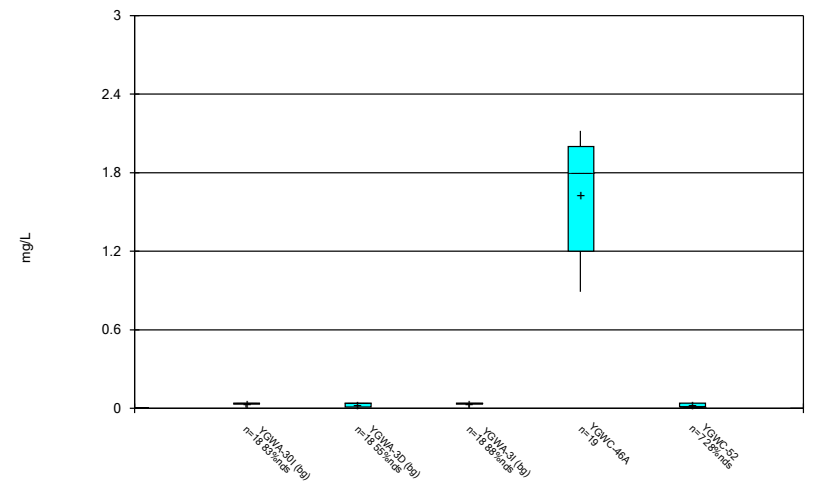
Constituent: Boron, total Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



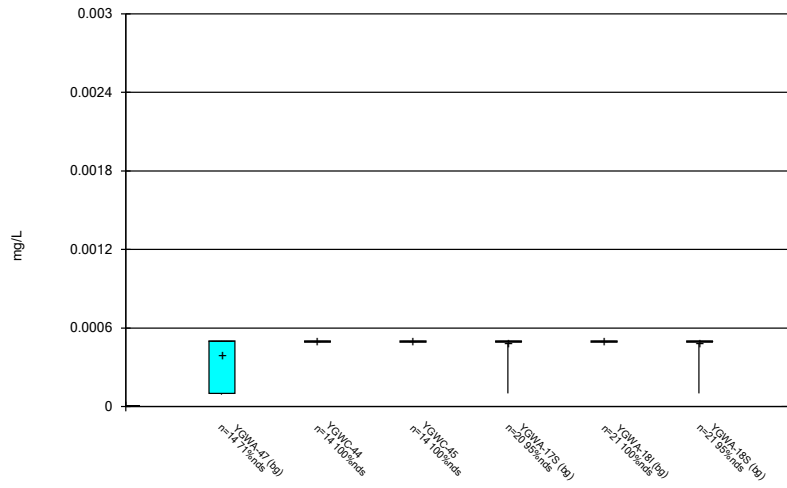
Constituent: Boron, total Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



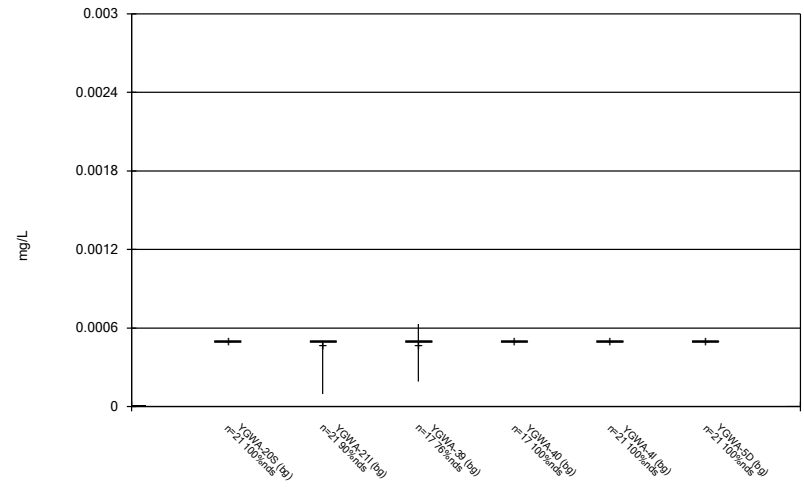
Constituent: Boron, total Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



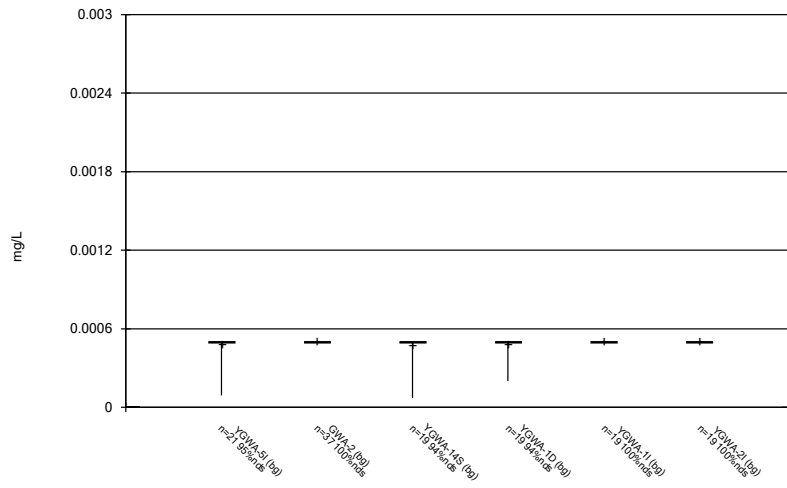
Constituent: Cadmium Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



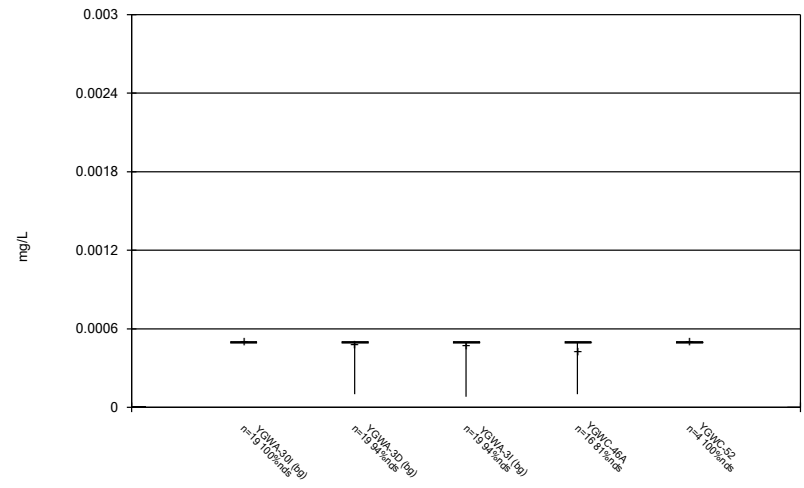
Constituent: Cadmium Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



Constituent: Cadmium Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

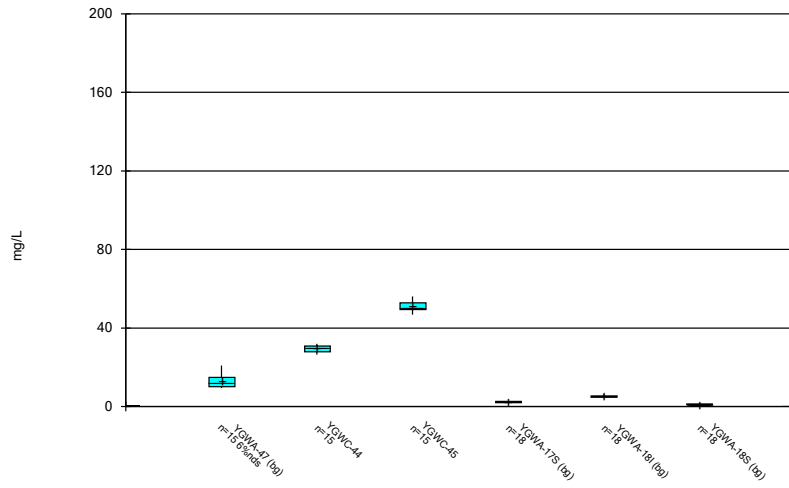
### Box & Whiskers Plot



Constituent: Cadmium Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

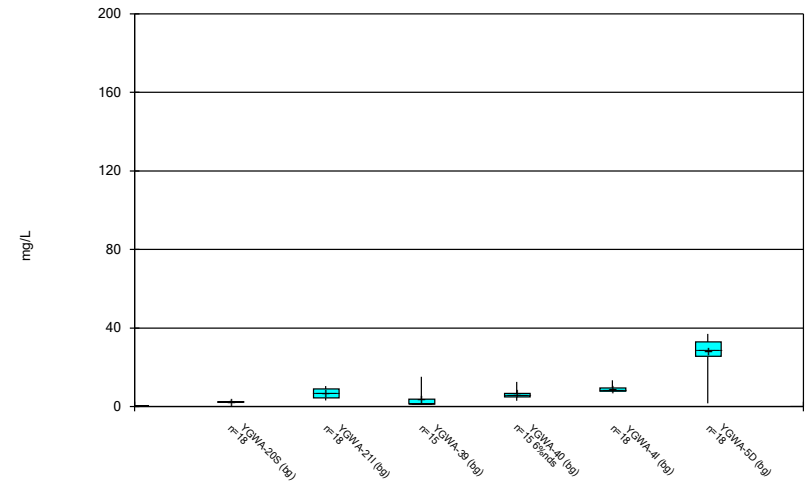


Box & Whiskers Plot



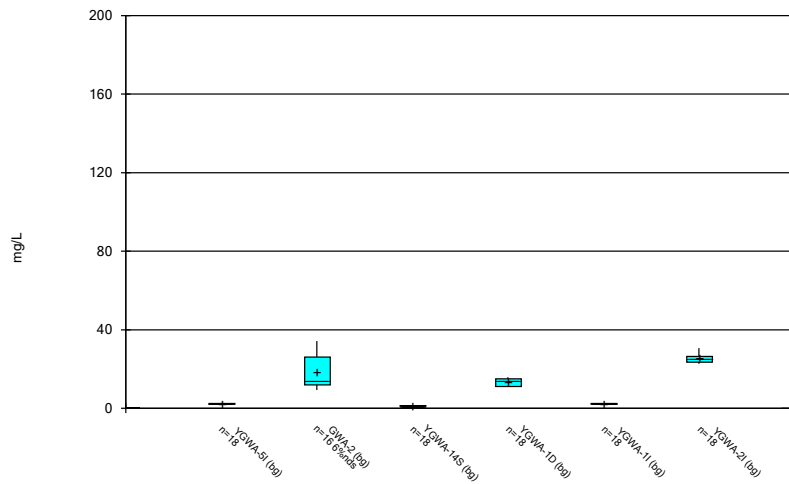
Constituent: Calcium, total Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



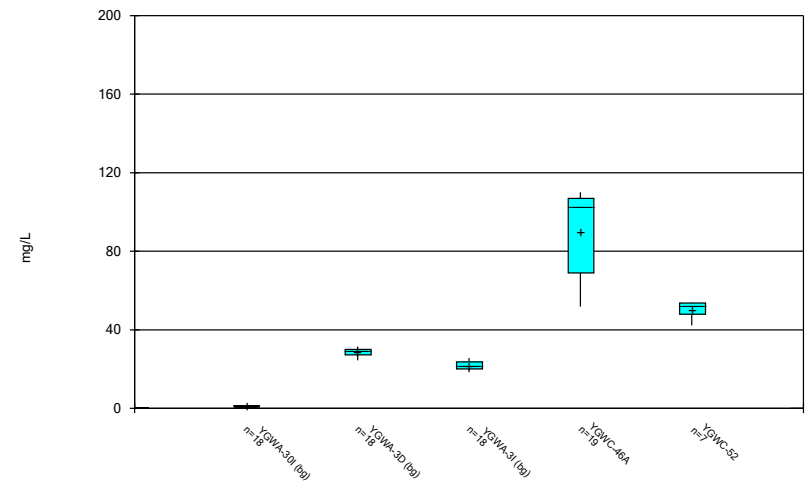
Constituent: Calcium, total Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



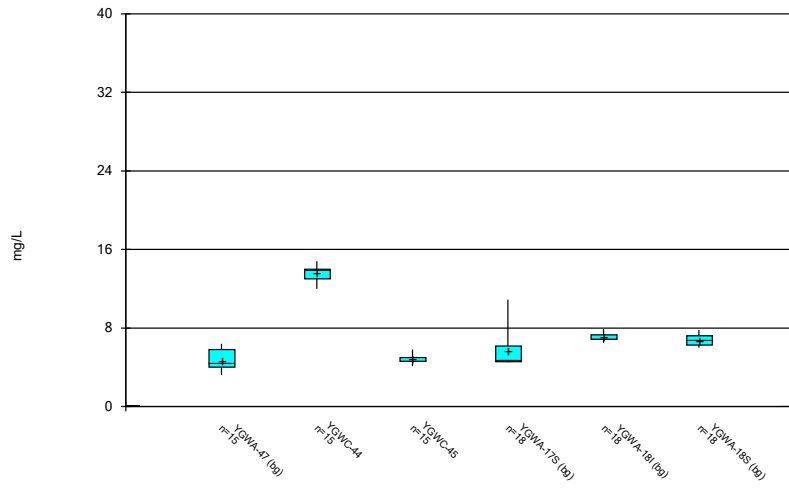
Constituent: Calcium, total Analysis Run 4/27/2022 12:14 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



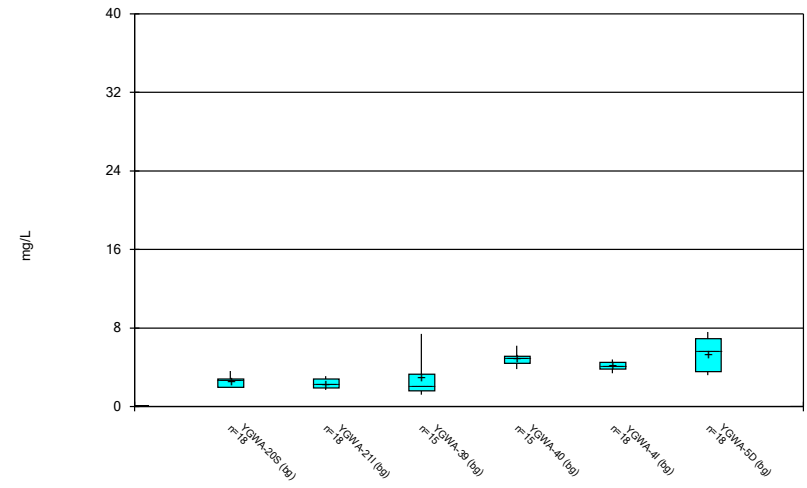
Constituent: Calcium, total Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



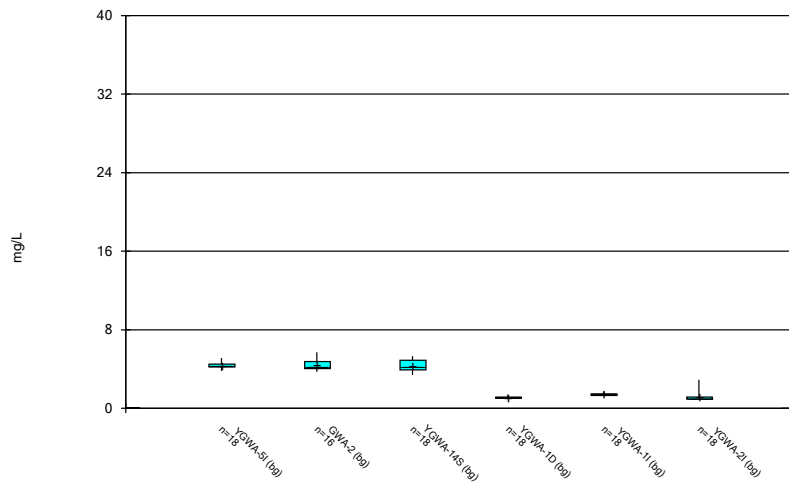
Constituent: Chloride, Total Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



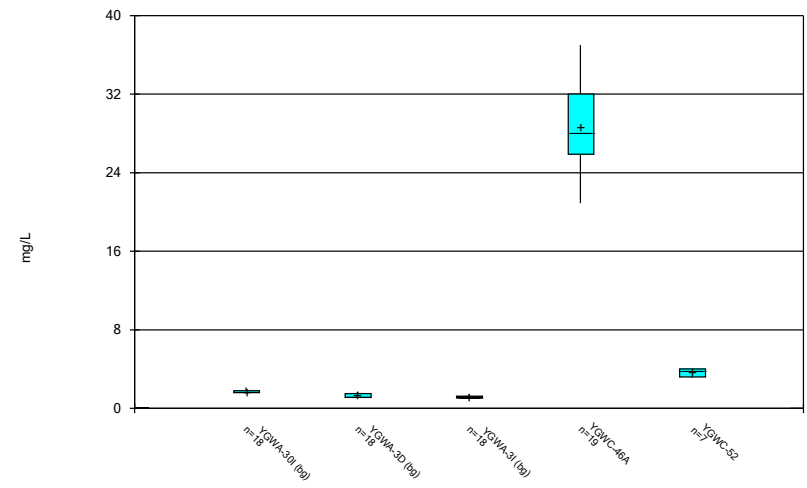
Constituent: Chloride, Total Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



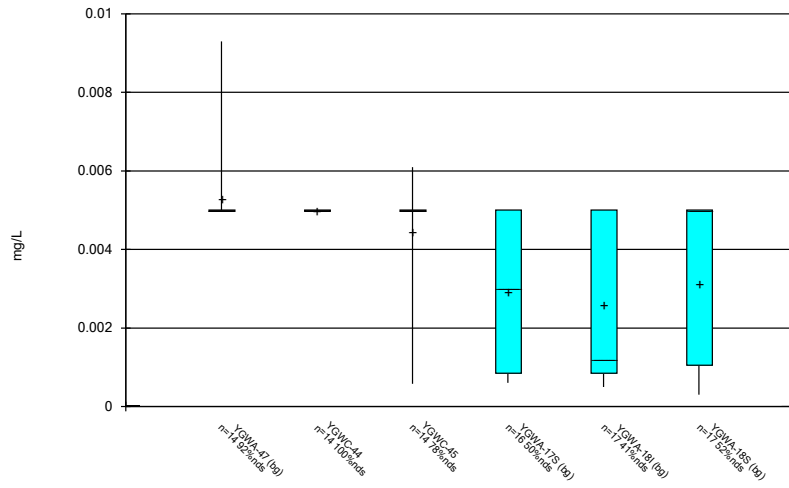
Constituent: Chloride, Total Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



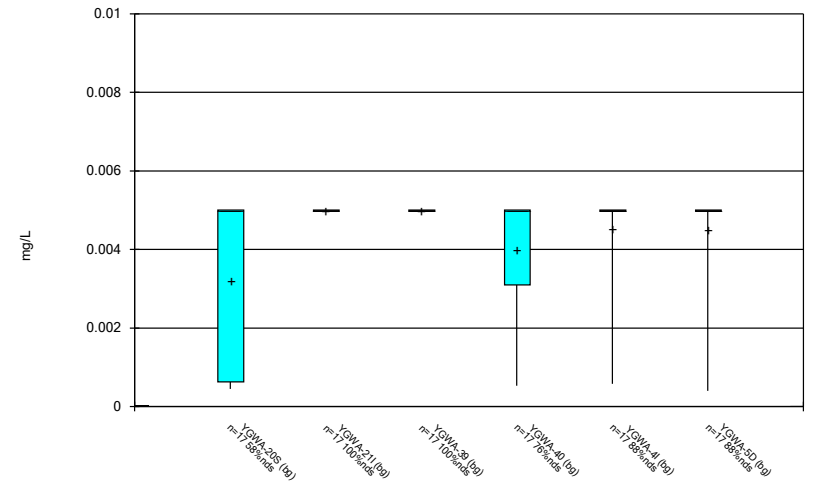
Constituent: Chloride, Total Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



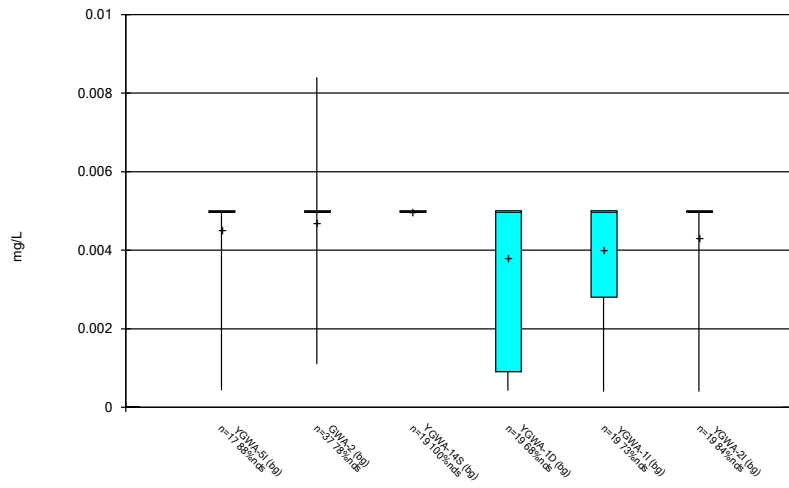
Constituent: Chromium Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



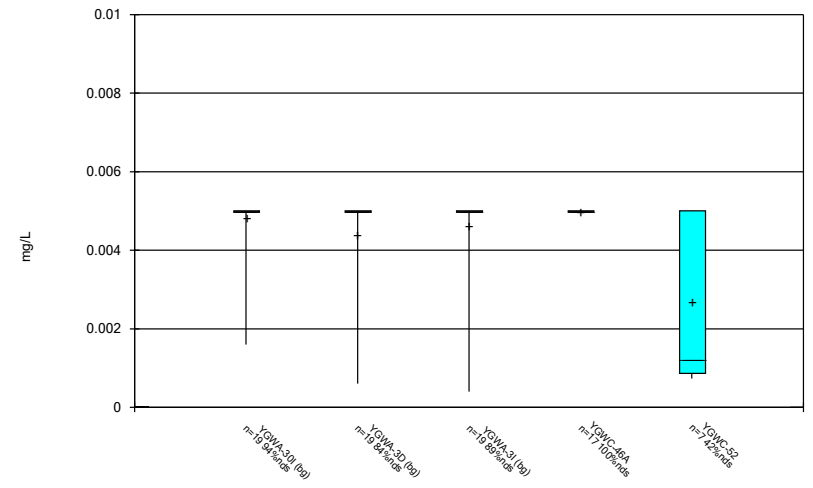
Constituent: Chromium Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



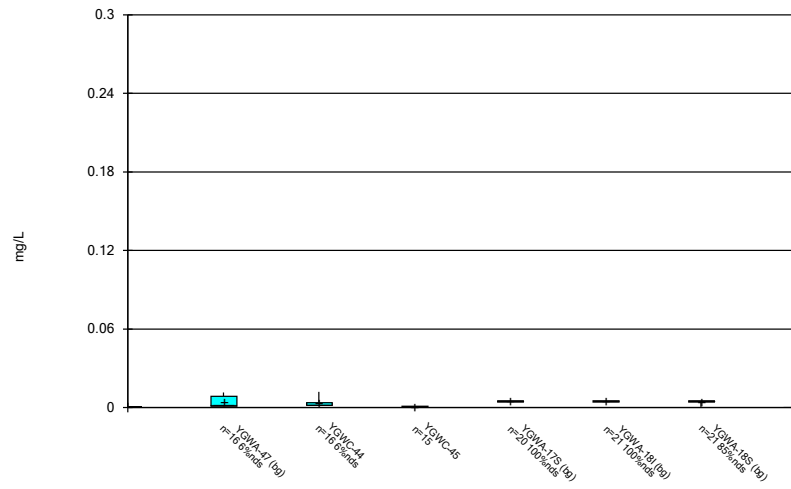
Constituent: Chromium Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



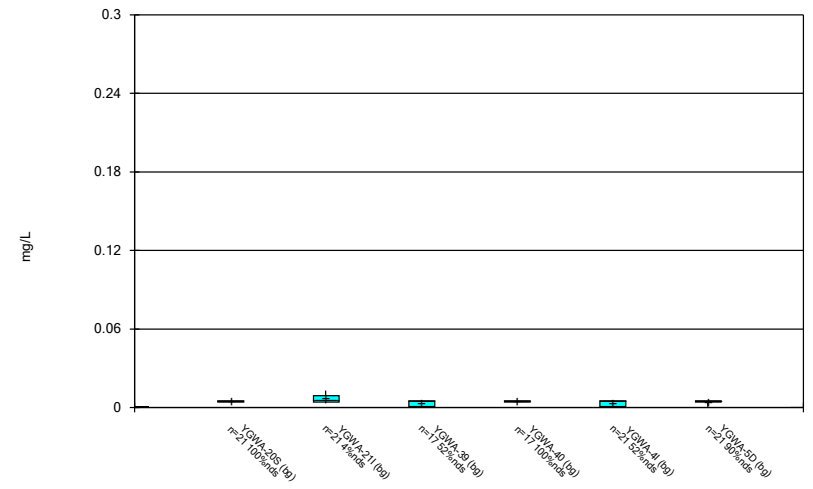
Constituent: Chromium Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



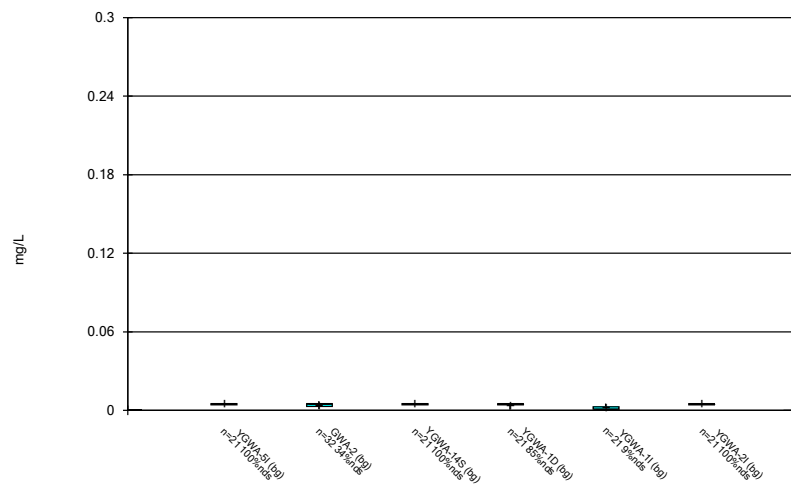
Constituent: Cobalt Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



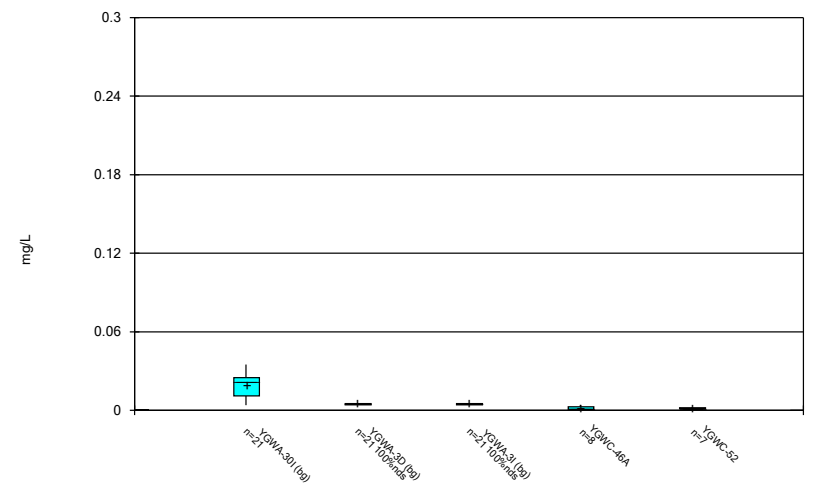
Constituent: Cobalt Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



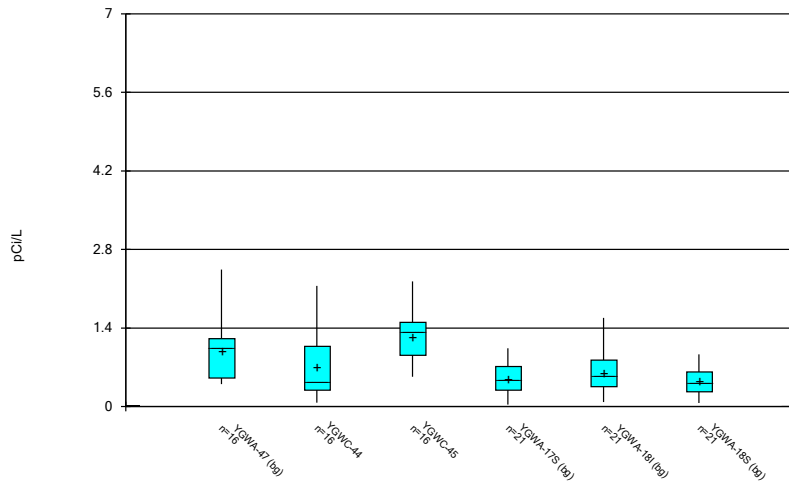
Constituent: Cobalt Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



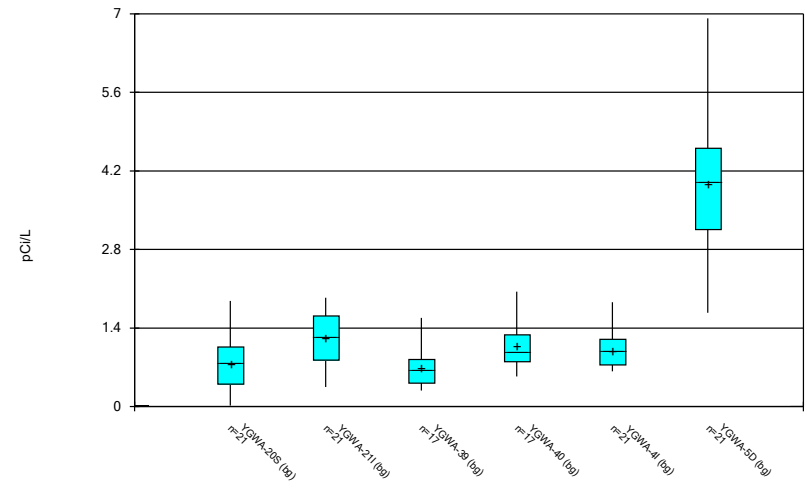
Constituent: Cobalt Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



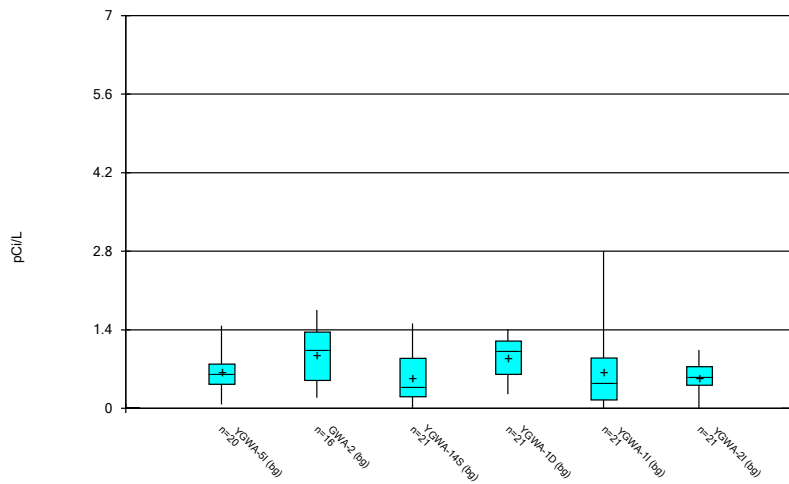
Constituent: Combined Radium 226 + 228 Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



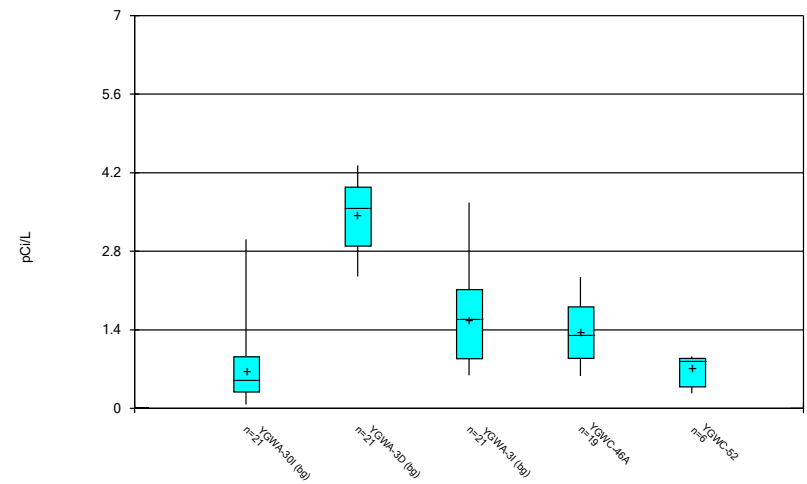
Constituent: Combined Radium 226 + 228 Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



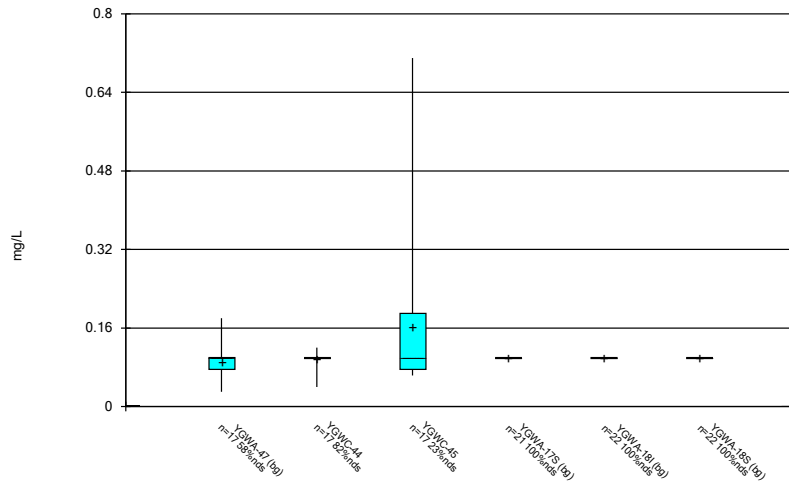
Constituent: Combined Radium 226 + 228 Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



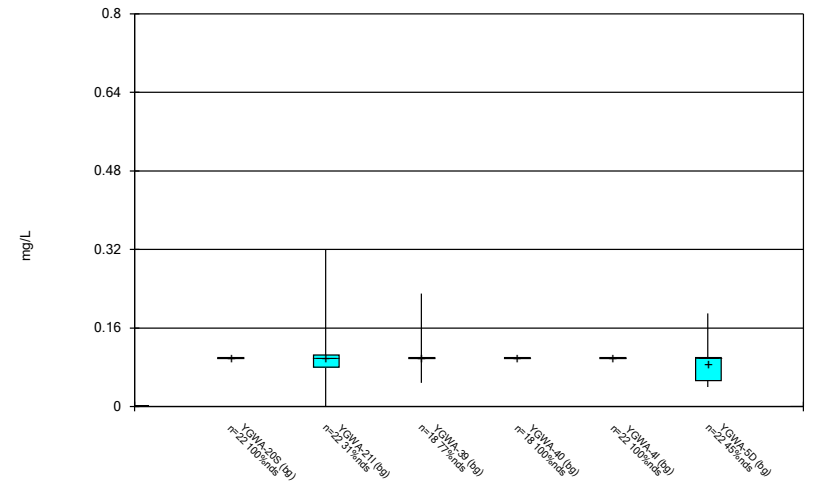
Constituent: Combined Radium 226 + 228 Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



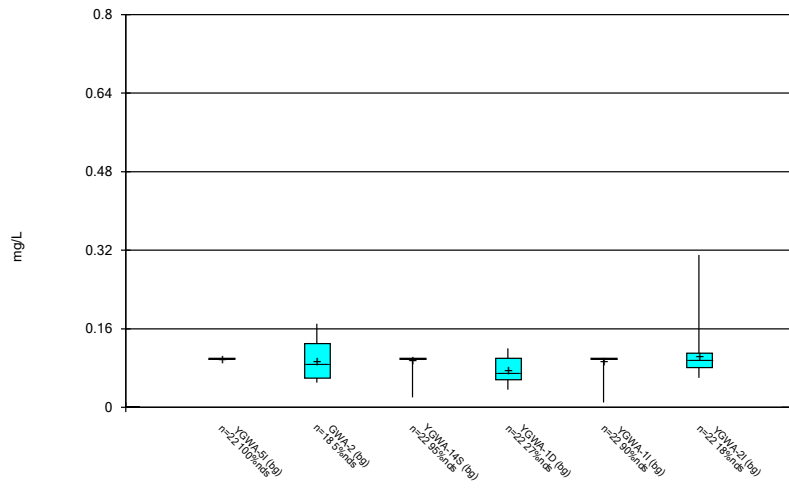
Constituent: Fluoride, total Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



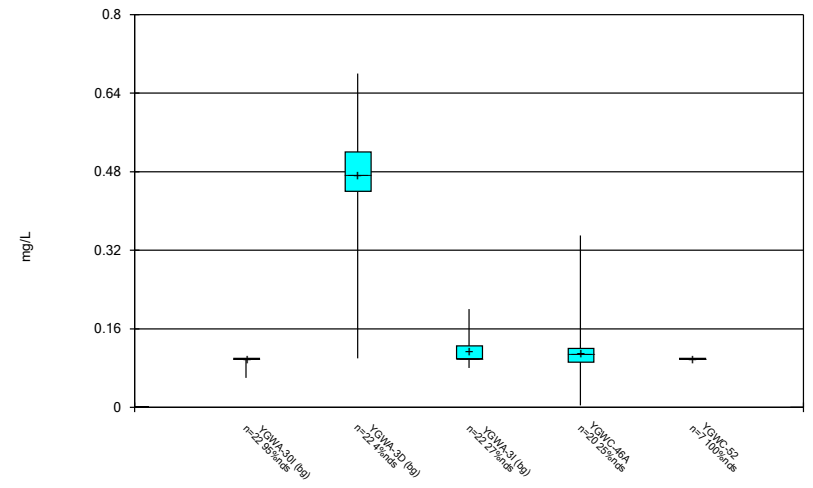
Constituent: Fluoride, total Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



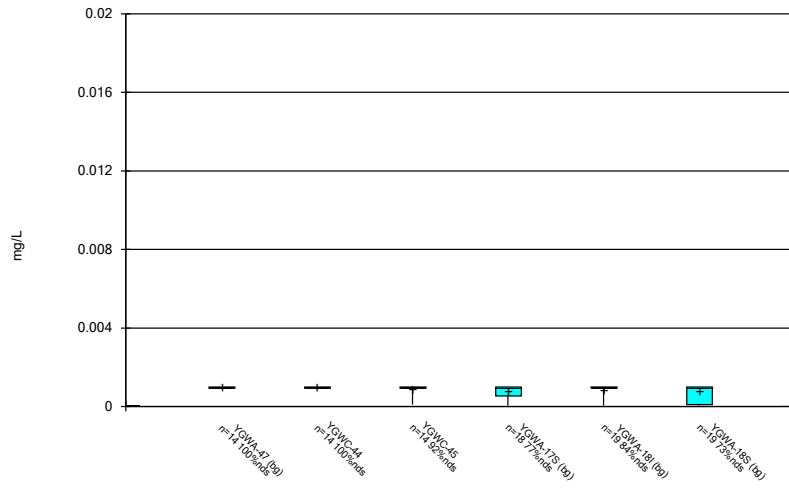
Constituent: Fluoride, total Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



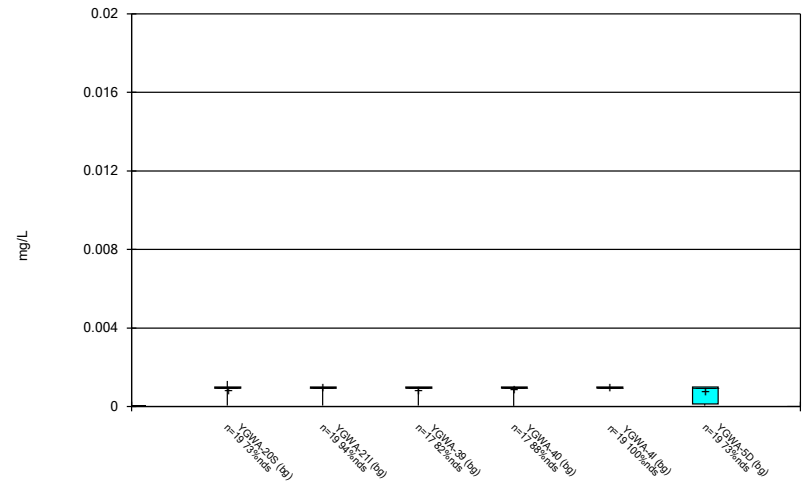
Constituent: Fluoride, total Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



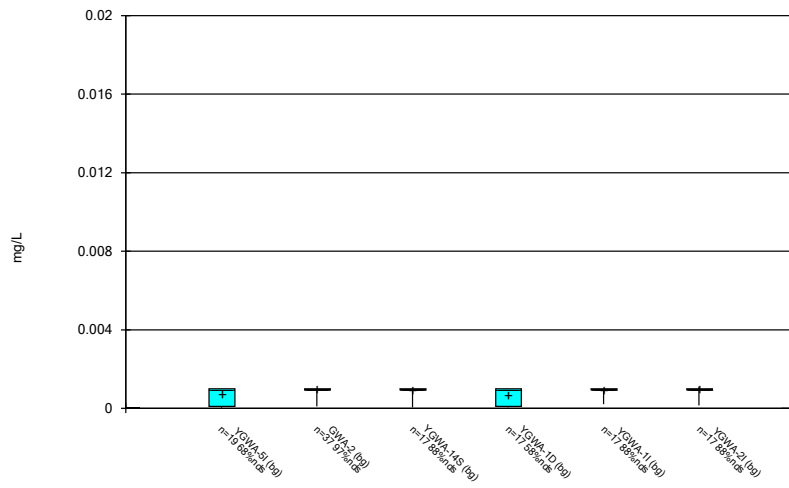
Constituent: Lead Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



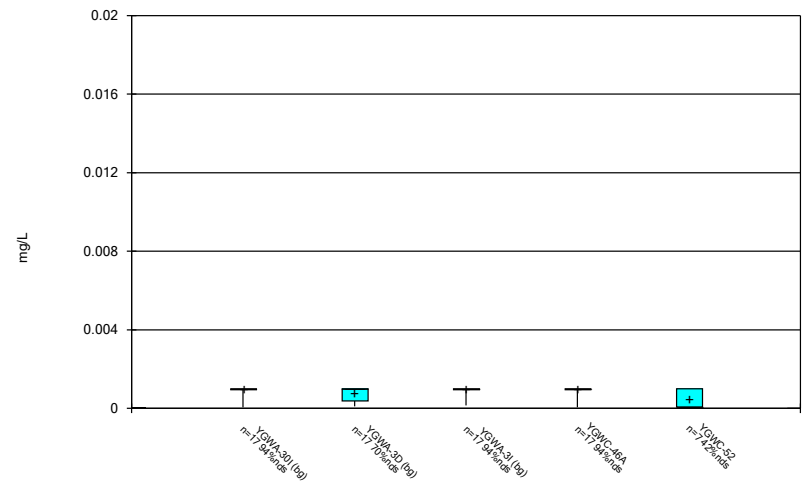
Constituent: Lead Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



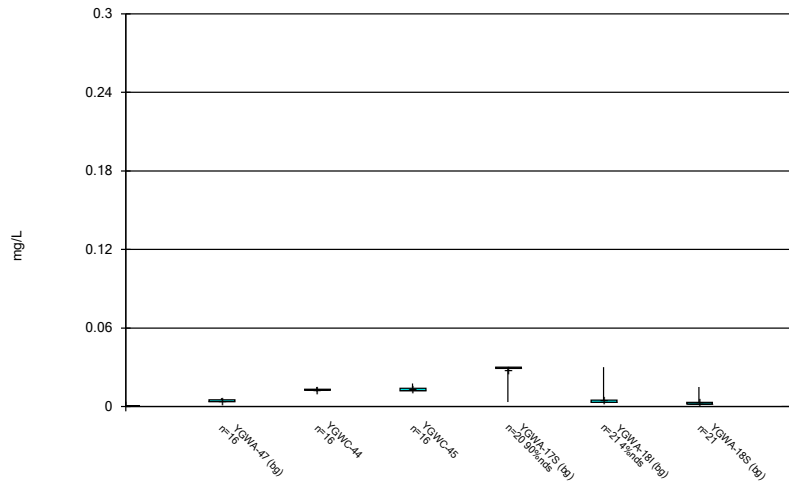
Constituent: Lead Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



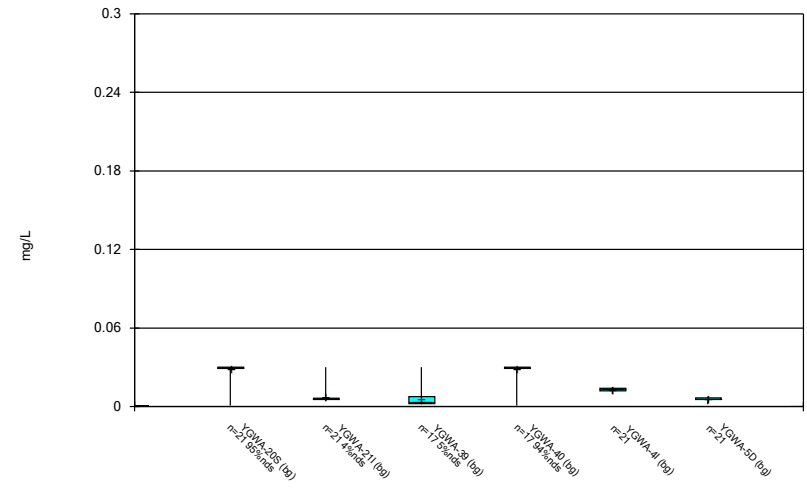
Constituent: Lead Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



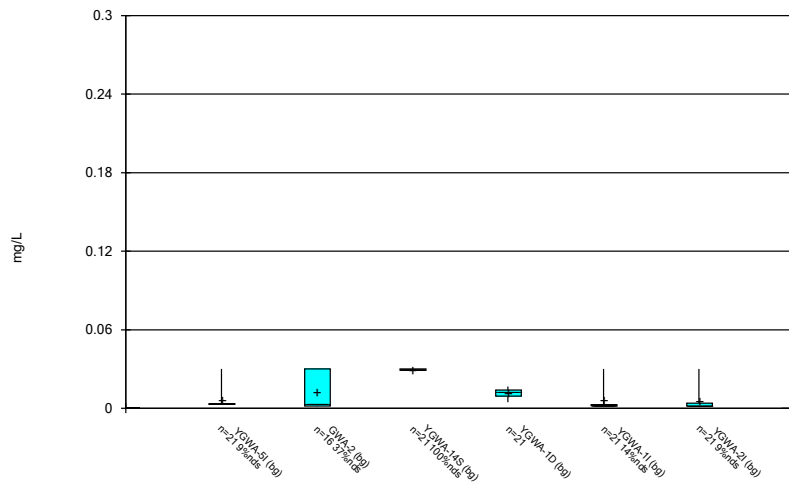
Constituent: Lithium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



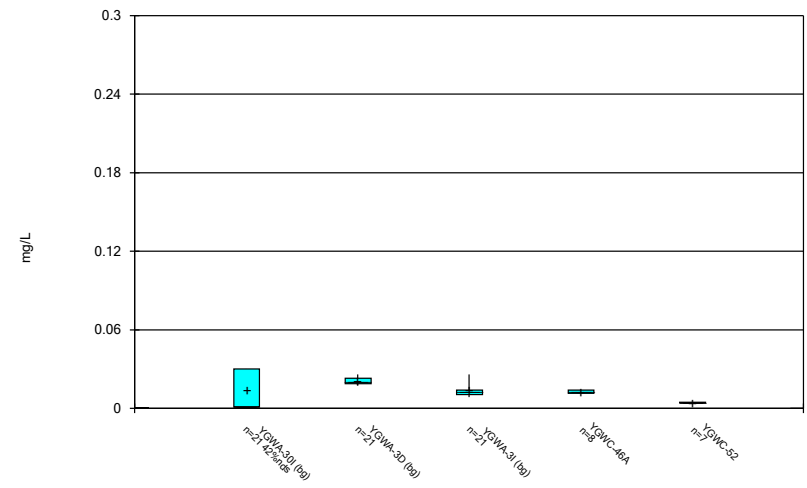
Constituent: Lithium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



Constituent: Lithium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

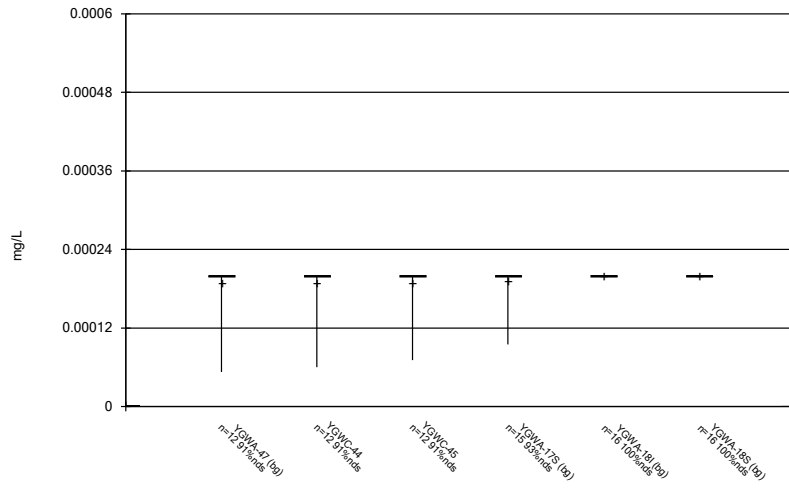
### Box & Whiskers Plot



Constituent: Lithium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

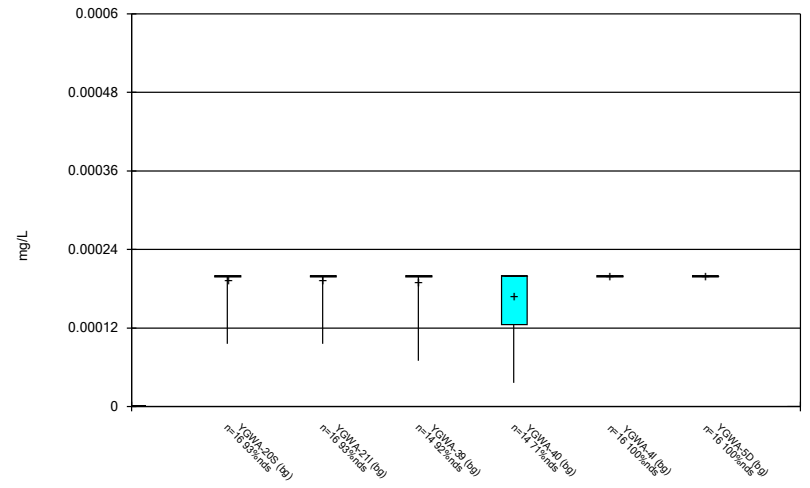


### Box & Whiskers Plot



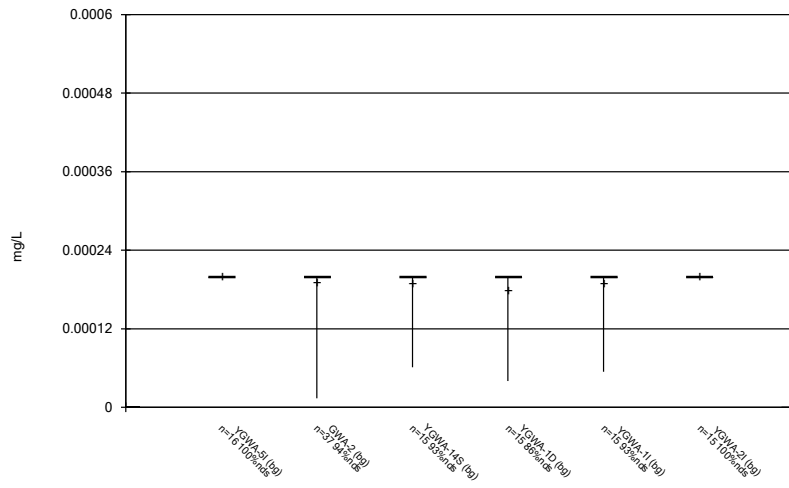
Constituent: Mercury Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



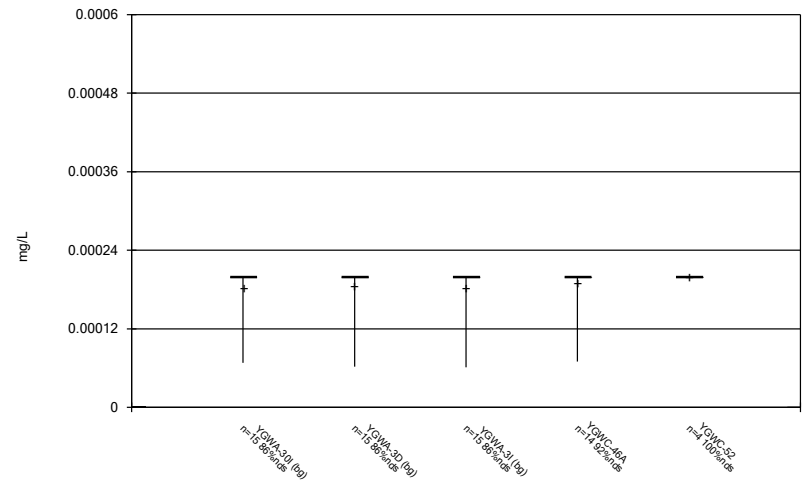
Constituent: Mercury Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



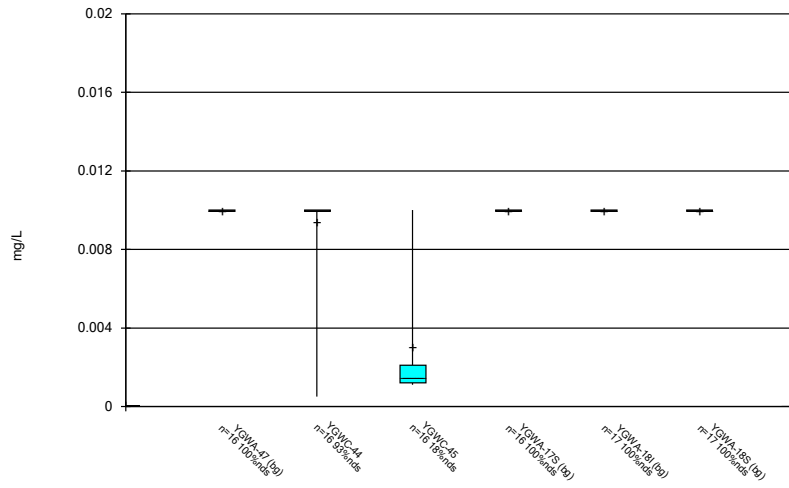
Constituent: Mercury Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



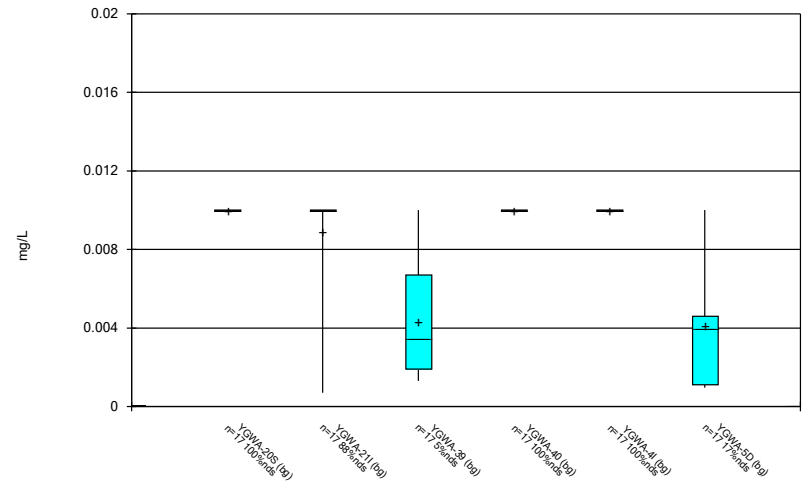
Constituent: Mercury Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



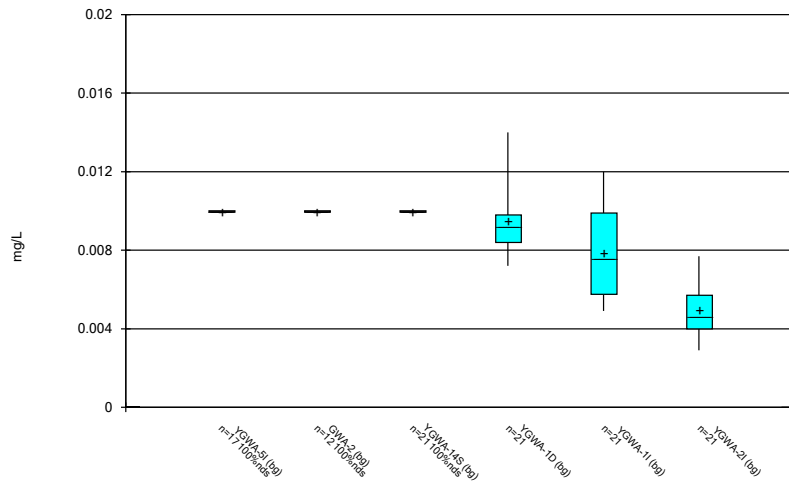
Constituent: Molybdenum Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



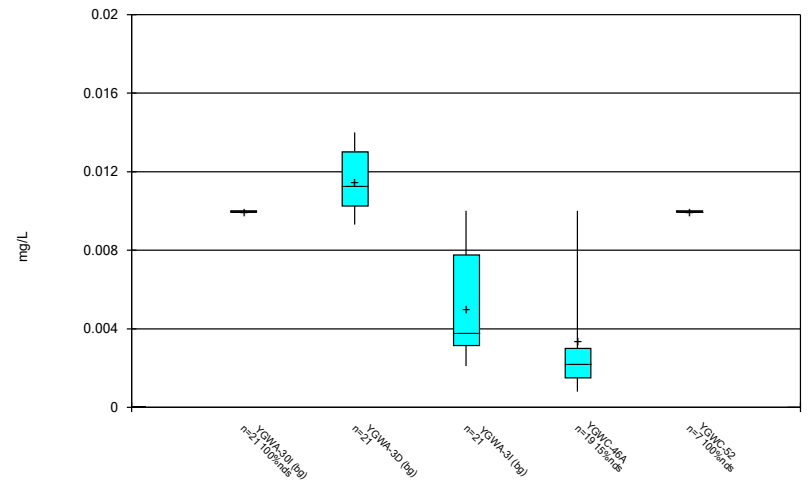
Constituent: Molybdenum Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



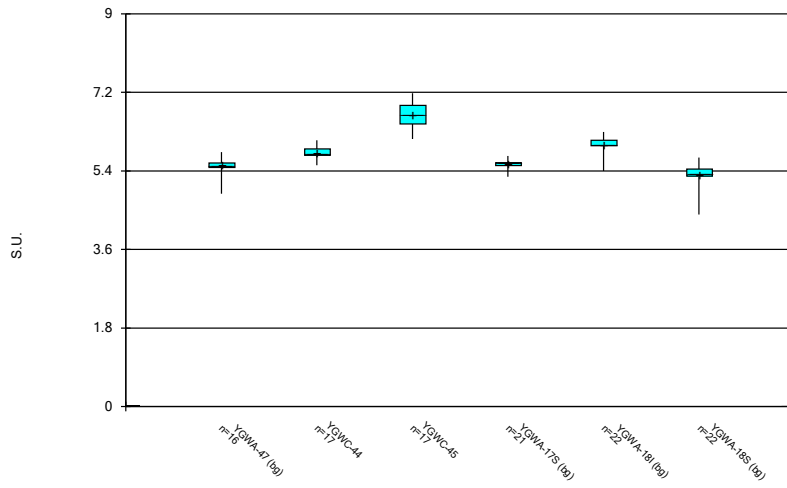
Constituent: Molybdenum Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



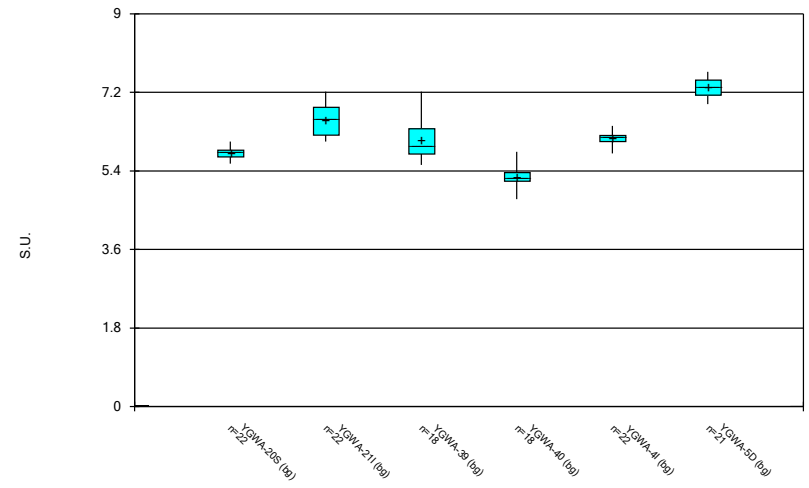
Constituent: Molybdenum Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



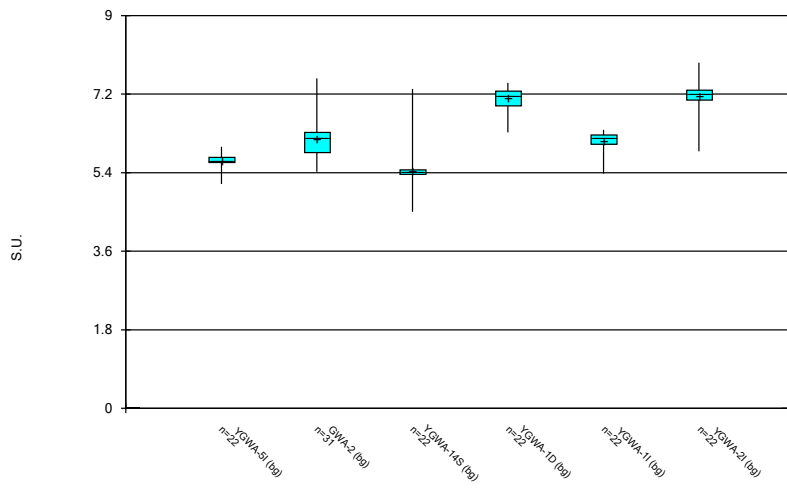
Constituent: pH, Field Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



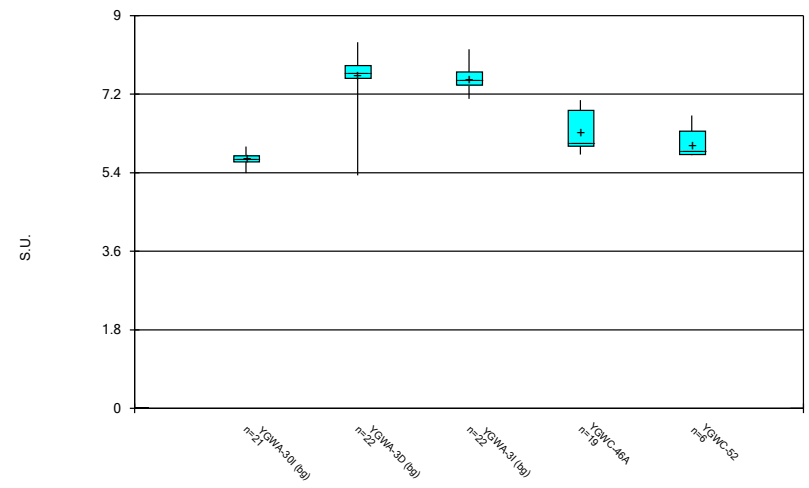
Constituent: pH, Field Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



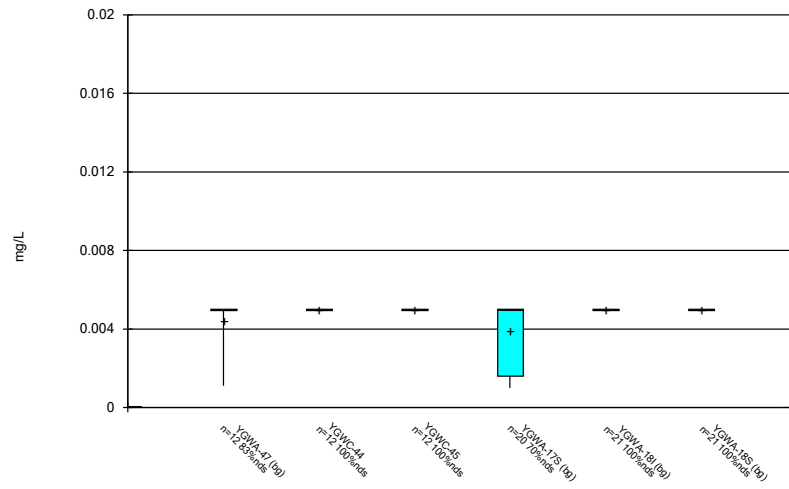
Constituent: pH, Field Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



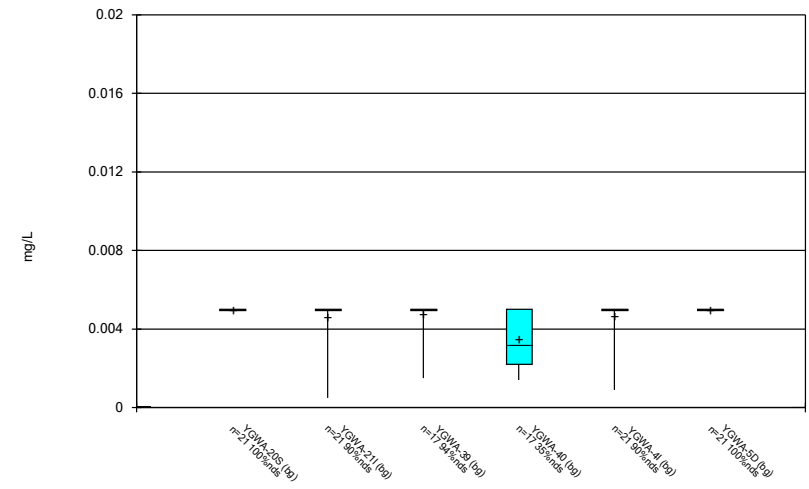
Constituent: pH, Field Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



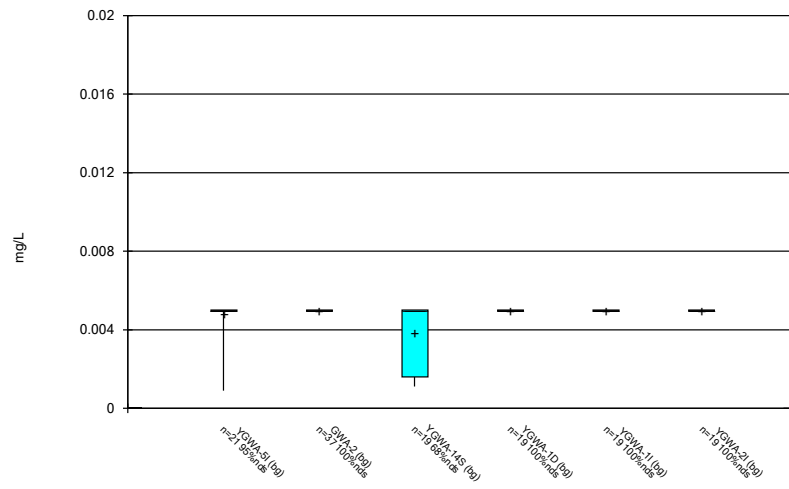
Constituent: Selenium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



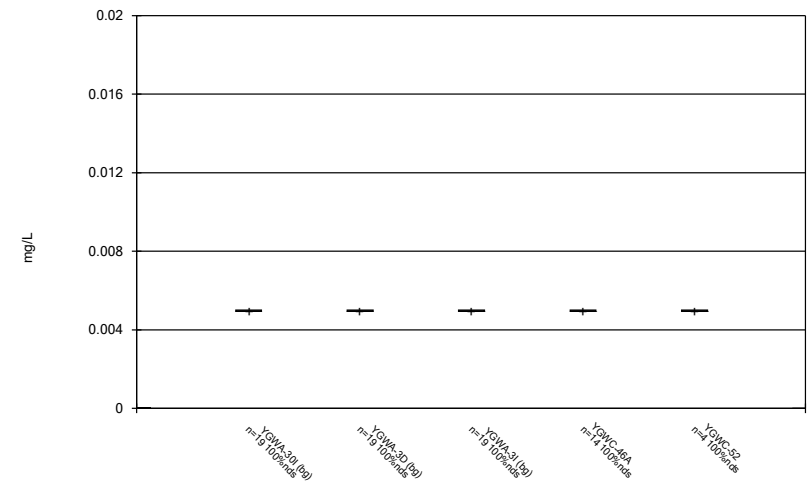
Constituent: Selenium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



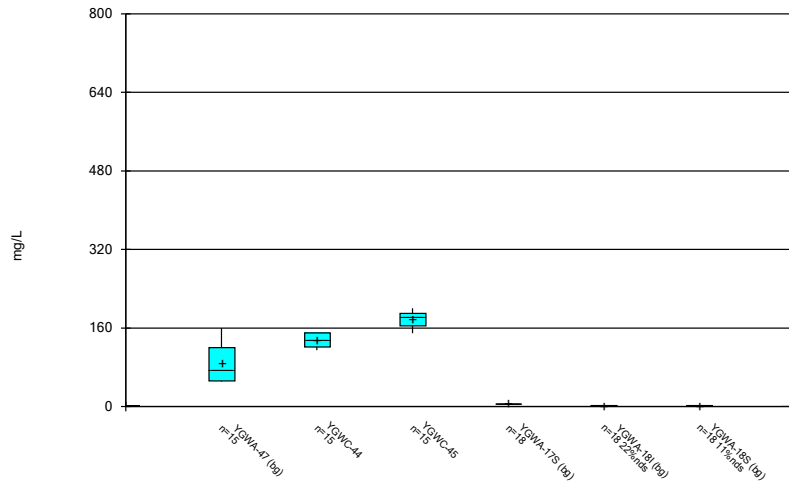
Constituent: Selenium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



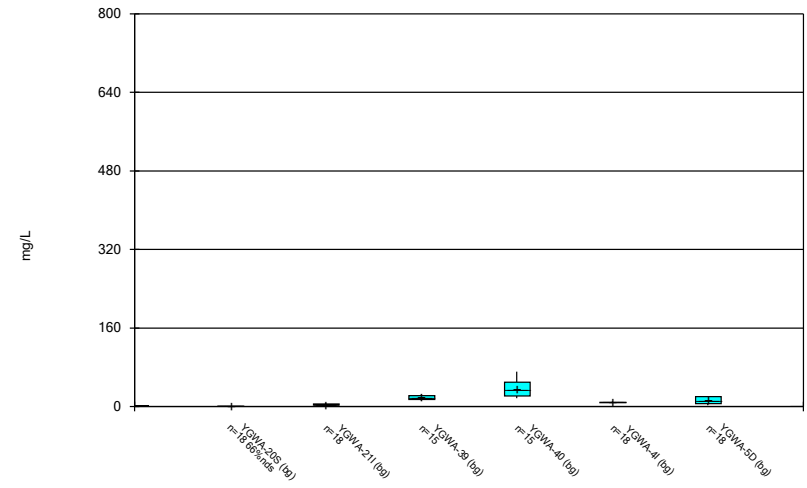
Constituent: Selenium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



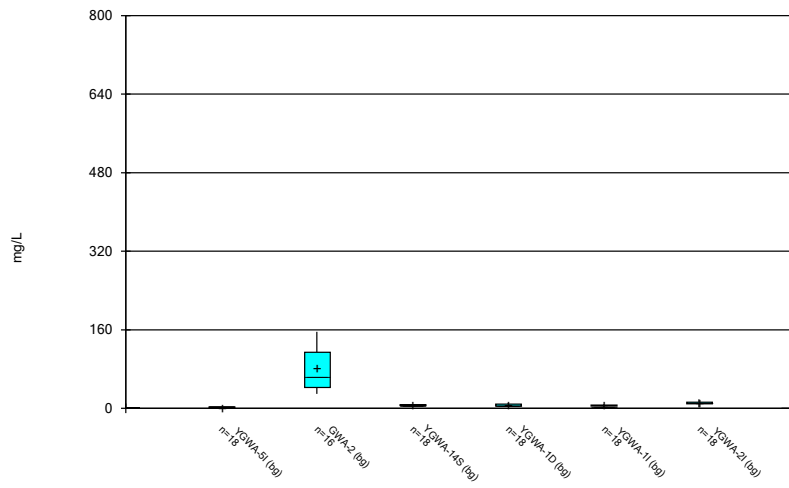
Constituent: Sulfate as SO4 Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



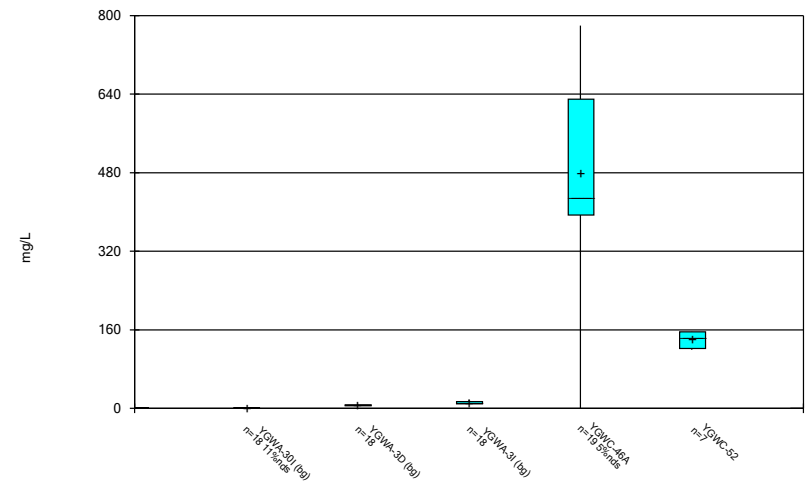
Constituent: Sulfate as SO4 Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



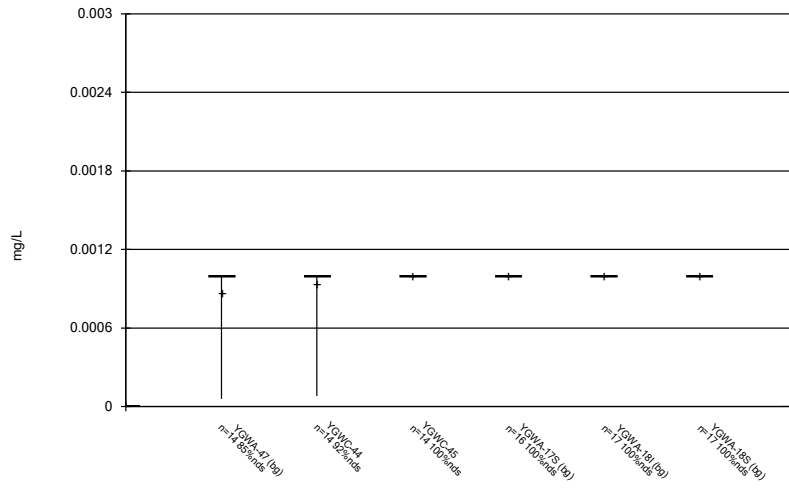
Constituent: Sulfate as SO4 Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



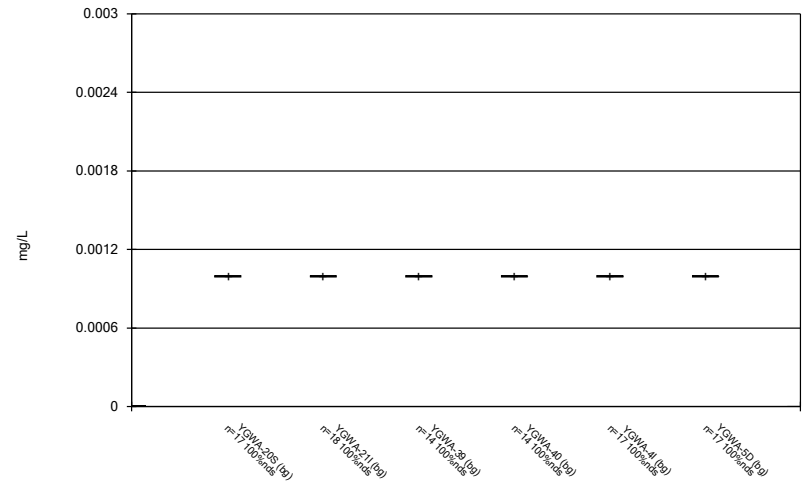
Constituent: Sulfate as SO4 Analysis Run 4/27/2022 12:15 PM  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



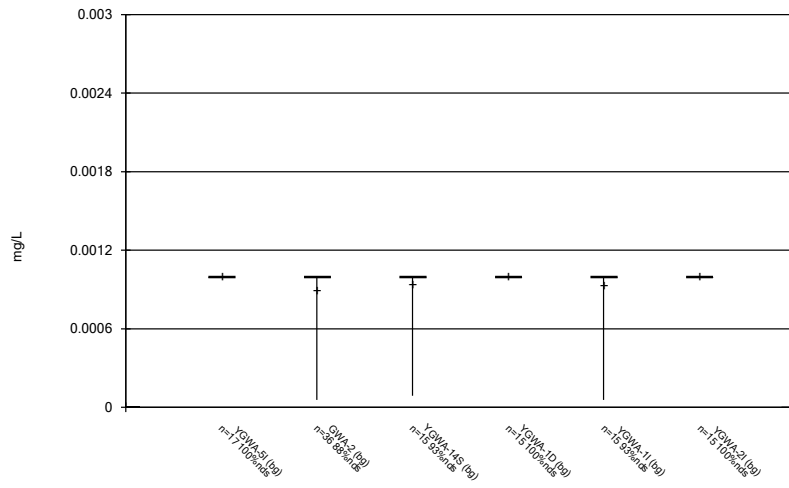
Constituent: Thallium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



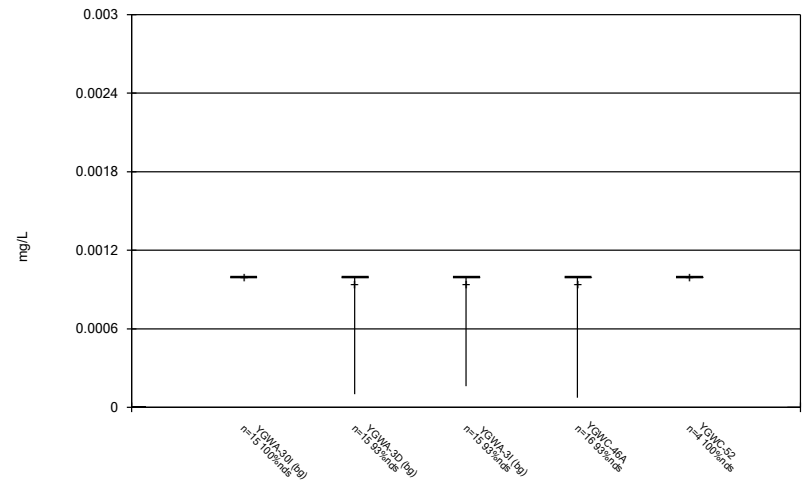
Constituent: Thallium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



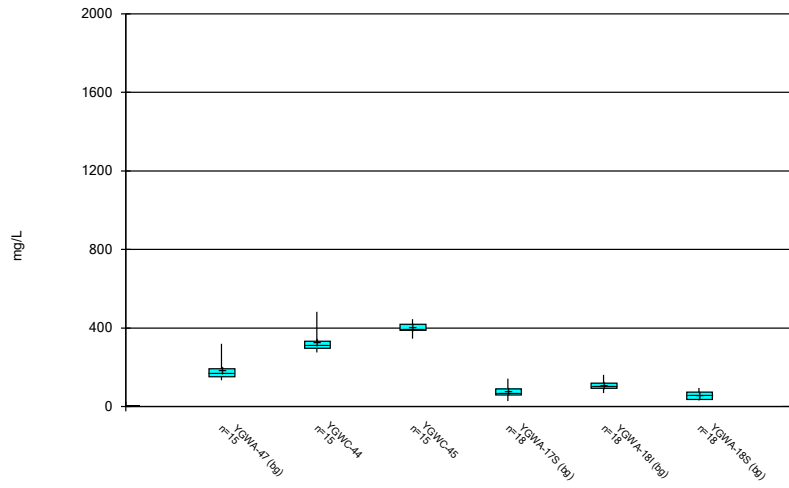
Constituent: Thallium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



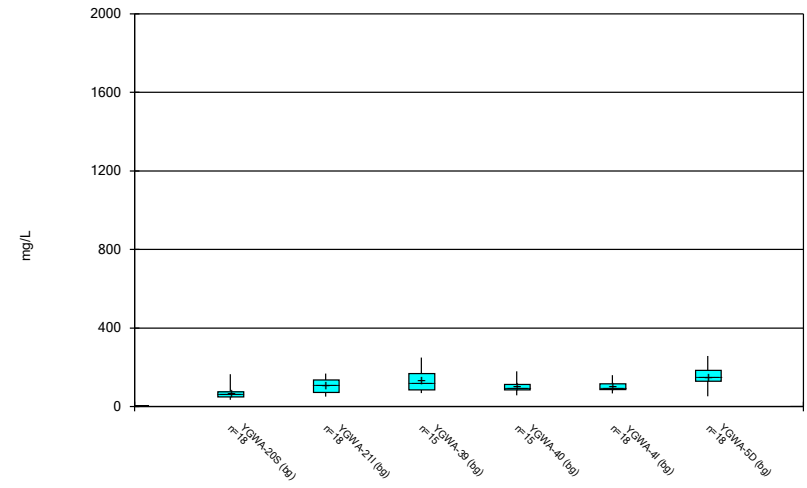
Constituent: Thallium Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



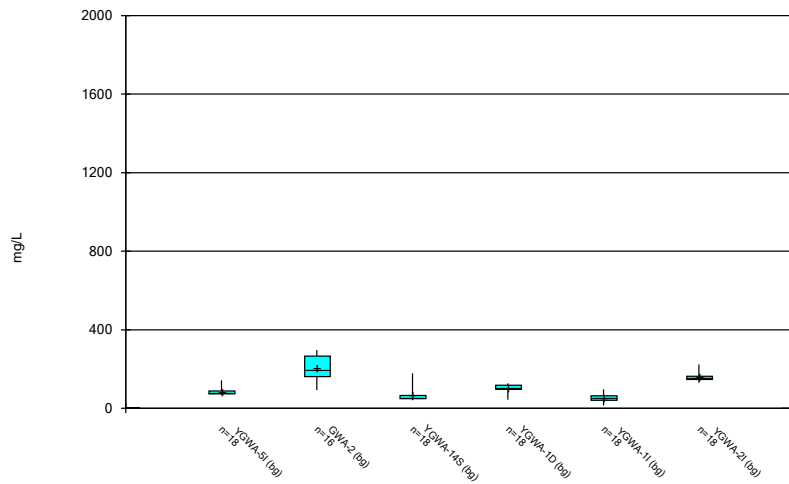
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



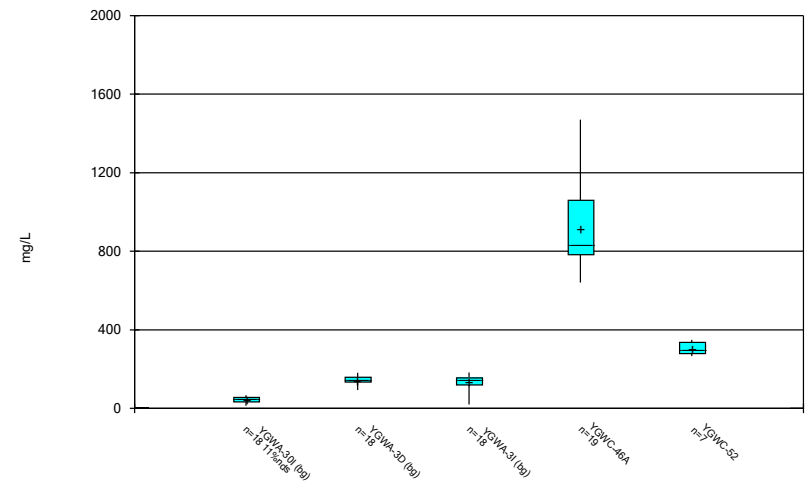
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/27/2022 12:15 PM  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

FIGURE C.



# Outlier Summary

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 4/27/2022, 12:16 PM

---

	YGWC-45 Cobalt (mg/L)	GWA-2 Cobalt (mg/L)	YGWA-47 pH, Field (S.U.)
4/2/2018			6.3 (O)
4/3/2018	<0.005 (O)		
8/26/2020	0.2 (O)		
9/22/2020	0.16 (O)		
3/2/2021	0.21 (O)		
8/20/2021	0.074 (O)		
2/8/2022	0.072 (O)		

FIGURE D.

# Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 3/17/2022, 2:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	N Bg	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	YGWC-44	0.16	n/a	2/9/2022	0.58	Yes	331	n/a	n/a	48.04	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Boron, total (mg/L)	YGWC-45	0.16	n/a	2/9/2022	0.34	Yes	331	n/a	n/a	48.04	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Boron, total (mg/L)	YGWC-46A	0.16	n/a	2/9/2022	2.1	Yes	331	n/a	n/a	48.04	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-45	37	n/a	2/9/2022	49.3	Yes	331	n/a	n/a	0.9063	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-46A	37	n/a	2/9/2022	109	Yes	331	n/a	n/a	0.9063	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-52	37	n/a	2/9/2022	42.2	Yes	331	n/a	n/a	0.9063	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	YGWC-44	10.9	n/a	2/9/2022	13.5	Yes	331	n/a	n/a	0	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	YGWC-46A	10.9	n/a	2/9/2022	28.2	Yes	331	n/a	n/a	0	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-45	160	n/a	2/9/2022	164	Yes	331	n/a	n/a	6.042	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-46A	160	n/a	2/9/2022	415	Yes	331	n/a	n/a	6.042	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	YGWC-44	211.1	n/a	2/9/2022	311	Yes	331	10.06	2.585	0.6042	None	sqrt(x)	0.00188	Param Inter 1 of 2	
Total Dissolved Solids [TDS] (mg/L)	YGWC-45	211.1	n/a	2/9/2022	400	Yes	331	10.06	2.585	0.6042	None	sqrt(x)	0.00188	Param Inter 1 of 2	
Total Dissolved Solids [TDS] (mg/L)	YGWC-46A	211.1	n/a	2/9/2022	846	Yes	331	10.06	2.585	0.6042	None	sqrt(x)	0.00188	Param Inter 1 of 2	
Total Dissolved Solids [TDS] (mg/L)	YGWC-52	211.1	n/a	2/9/2022	278	Yes	331	10.06	2.585	0.6042	None	sqrt(x)	0.00188	Param Inter 1 of 2	

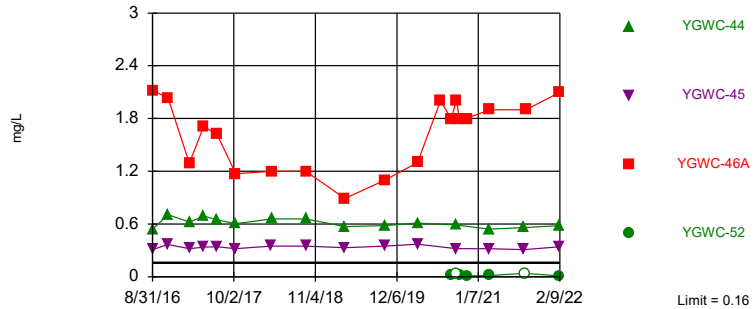
# Interwell Prediction Limits - All Results

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 3/17/2022, 2:50 PM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg	N	Bg	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
<b>Boron, total (mg/L)</b>	<b>YGWC-44</b>	<b>0.16</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>0.58</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>48.04</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Boron, total (mg/L)</b>	<b>YGWC-45</b>	<b>0.16</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>0.34</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>48.04</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Boron, total (mg/L)</b>	<b>YGWC-46A</b>	<b>0.16</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>2.1</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>48.04</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Boron, total (mg/L)	YGWC-52	0.16	n/a	2/9/2022	0.0089J	No	331	n/a	n/a	n/a	48.04	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	YGWC-44	37	n/a	2/9/2022	30.8	No	331	n/a	n/a	n/a	0.9063	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Calcium, total (mg/L)</b>	<b>YGWC-45</b>	<b>37</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>49.3</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9063</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium, total (mg/L)</b>	<b>YGWC-46A</b>	<b>37</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>109</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9063</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium, total (mg/L)</b>	<b>YGWC-52</b>	<b>37</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>42.2</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.9063</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Chloride, Total (mg/L)</b>	<b>YGWC-44</b>	<b>10.9</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>13.5</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride, Total (mg/L)	YGWC-45	10.9	n/a	2/9/2022	4.9	No	331	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Chloride, Total (mg/L)</b>	<b>YGWC-46A</b>	<b>10.9</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>28.2</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride, Total (mg/L)	YGWC-52	10.9	n/a	2/9/2022	3.2	No	331	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	YGWC-44	0.68	n/a	2/9/2022	0.1ND	No	400	n/a	n/a	n/a	67.5	n/a	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-45	0.68	n/a	2/9/2022	0.063J	No	400	n/a	n/a	n/a	67.5	n/a	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-46A	0.68	n/a	2/9/2022	0.12	No	400	n/a	n/a	n/a	67.5	n/a	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-52	0.68	n/a	2/9/2022	0.1ND	No	400	n/a	n/a	n/a	67.5	n/a	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	YGWC-44	8.39	4.4	2/9/2022	5.73	No	410	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-45	8.39	4.4	2/9/2022	6.15	No	410	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-46A	8.39	4.4	2/9/2022	6.98	No	410	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-52	8.39	4.4	2/9/2022	5.99	No	410	n/a	n/a	n/a	0	n/a	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-44	160	n/a	2/9/2022	121	No	331	n/a	n/a	n/a	6.042	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-45</b>	<b>160</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>164</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>6.042</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-46A</b>	<b>160</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>415</b>	<b>Yes</b>	<b>331</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>6.042</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0.00004922</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate as SO4 (mg/L)	YGWC-52	160	n/a	2/9/2022	119	No	331	n/a	n/a	n/a	6.042	n/a	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-44</b>	<b>211.1</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>311</b>	<b>Yes</b>	<b>331</b>	<b>10.06</b>	<b>2.585</b>	<b>0.6042</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter</b>	<b>1 of 2</b>	
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-45</b>	<b>211.1</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>400</b>	<b>Yes</b>	<b>331</b>	<b>10.06</b>	<b>2.585</b>	<b>0.6042</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter</b>	<b>1 of 2</b>	
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-46A</b>	<b>211.1</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>846</b>	<b>Yes</b>	<b>331</b>	<b>10.06</b>	<b>2.585</b>	<b>0.6042</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter</b>	<b>1 of 2</b>	
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWC-52</b>	<b>211.1</b>	<b>n/a</b>	<b>2/9/2022</b>	<b>278</b>	<b>Yes</b>	<b>331</b>	<b>10.06</b>	<b>2.585</b>	<b>0.6042</b>	<b>None</b>	<b>sqrt(x)</b>	<b>0.00188</b>	<b>Param Inter</b>	<b>1 of 2</b>	

Exceeds Limit: YGWC-44, YGWC-45,  
YGWC-46A

Prediction Limit  
Interwell Non-parametric

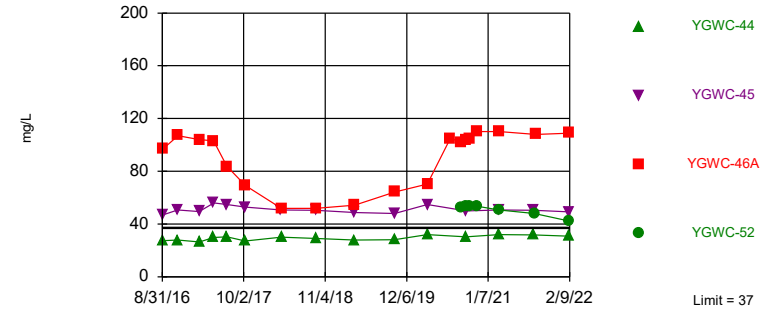


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 331 background values. 48.04% NDs. Annual per-constituent alpha = 0.0003937. Individual comparison alpha = 0.00004922 (1 of 2). Comparing 4 points to limit.

Constituent: Boron, total Analysis Run 3/17/2022 2:44 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Exceeds Limit: YGWC-45, YGWC-46A,  
YGWC-52

Prediction Limit  
Interwell Non-parametric

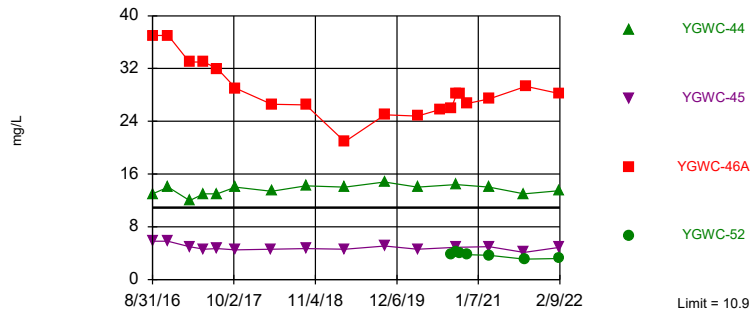


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 331 background values. 0.9063% NDs. Annual per-constituent alpha = 0.0003937. Individual comparison alpha = 0.00004922 (1 of 2). Comparing 4 points to limit.

Constituent: Calcium, total Analysis Run 3/17/2022 2:44 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Exceeds Limit: YGWC-44, YGWC-46A

Prediction Limit  
Interwell Non-parametric

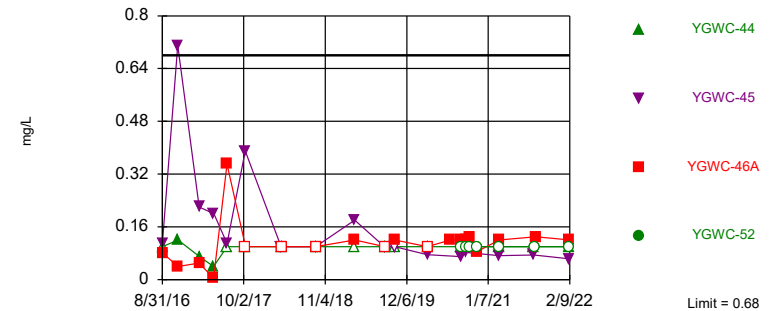


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 331 background values. Annual per-constituent alpha = 0.0003937. Individual comparison alpha = 0.00004922 (1 of 2). Comparing 4 points to limit.

Constituent: Chloride, Total Analysis Run 3/17/2022 2:44 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Within Limit

Prediction Limit  
Interwell Non-parametric

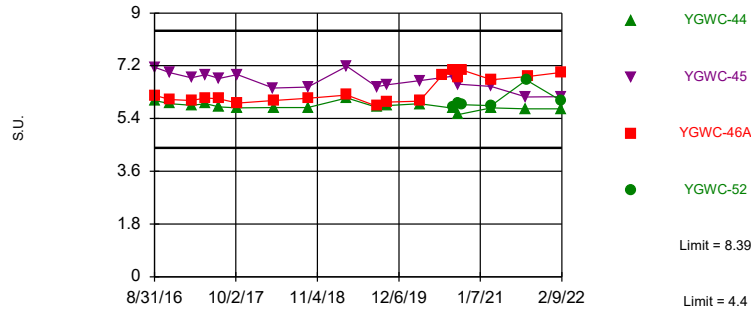


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 400 background values. 67.5% NDs. Annual per-constituent alpha = 0.0003937. Individual comparison alpha = 0.00004922 (1 of 2). Comparing 4 points to limit.

Constituent: Fluoride, total Analysis Run 3/17/2022 2:44 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Within Limits

Prediction Limit  
Interwell Non-parametric

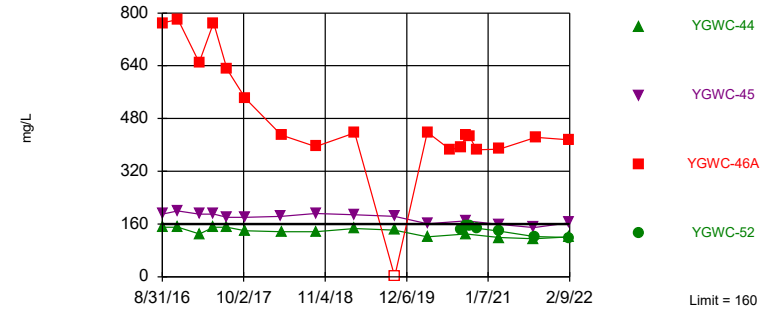


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 410 background values. Annual per-constituent alpha = 0.0007874. Individual comparison alpha = 0.00009844 (1 of 2). Comparing 4 points to limit.

Constituent: pH, Field Analysis Run 3/17/2022 2:45 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Hollow symbols indicate censored values.  
Exceeds Limit: YGWC-45, YGWC-46A

Prediction Limit  
Interwell Non-parametric

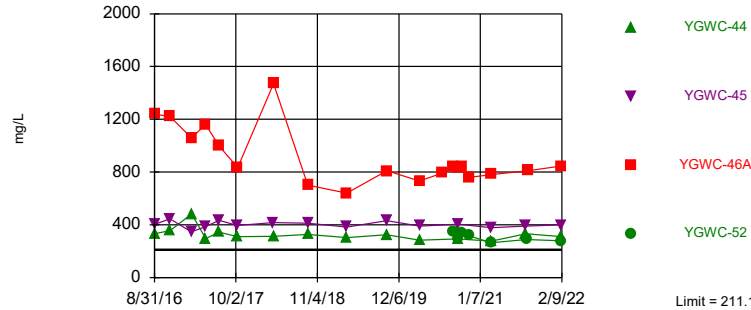


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 331 background values. 6.042% NDs. Annual per-constituent alpha = 0.0003937. Individual comparison alpha = 0.00004922 (1 of 2). Comparing 4 points to limit.

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:45 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Exceeds Limit: YGWC-44, YGWC-45, YGWC-46A, YGWC-52

Prediction Limit  
Interwell Parametric



Background Data Summary (based on square root transformation): Mean=10.06, Std. Dev.=2.585, n=331, 0.6042% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 13.86, critical = 14.07. Kappa = 1.728 (c=7, w=4, 1 of 2, event alpha = 0.05132). N exceeds UG tables; Kappa based on n=150. Report alpha = 0.007498. Individual comparison alpha = 0.00188. Comparing 4 points to limit.

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:45 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

# Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
6/1/2016	<0.04	<0.04	<0.04						
6/2/2016				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
6/6/2016									
6/7/2016									
7/25/2016		<0.04	<0.04		<0.04				
7/26/2016	0.0055 (J)			0.0177 (J)		0.0052 (J)	0.0047 (J)	<0.04	0.0097 (J)
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	<0.04	<0.04							
9/14/2016			<0.04			0.0071 (J)	<0.04	0.01 (J)	
9/15/2016				0.0214 (J)					0.0102 (J)
9/16/2016									
9/19/2016					<0.04				
11/1/2016	0.0086 (J)		<0.04		<0.04				<0.04
11/2/2016				<0.04		<0.04	<0.04		
11/3/2016									
11/4/2016		<0.04						<0.04	
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017				0.0198 (J)					
1/11/2017	0.0074 (J)		<0.04						<0.04
1/12/2017						0.0076 (J)		<0.04	
1/13/2017							<0.04		
1/16/2017		<0.04			<0.04				
2/21/2017					<0.04				
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017			<0.04						
3/2/2017	0.008 (J)	<0.04							0.0084 (J)
3/3/2017									
3/6/2017							<0.04		
3/7/2017						0.0089 (J)		<0.04	
3/8/2017				0.0189 (J)					
4/26/2017			<0.04	0.0161 (J)	<0.04				<0.04
4/27/2017	0.0066 (J)	<0.04							
4/28/2017									
5/1/2017						0.0061 (J)	<0.04		
5/2/2017								<0.04	
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	0.0087 (J)	0.006 (J)				0.0079 (J)		<0.04	
6/28/2017			<0.04						<0.04
6/29/2017							<0.04		

# Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
6/30/2017				0.0173 (J)	<0.04				
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	0.0072 (J)	0.0071 (J)				0.0094 (J)		<0.04	
10/4/2017			<0.04		<0.04				<0.04
10/5/2017				0.0173 (J)			<0.04		
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		<0.04				0.0098 (J)			
6/7/2018							0.0045 (J)	<0.04	0.004 (J)
6/8/2018			<0.04	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						0.01 (J)	0.005 (J)	0.0057 (J)	
10/1/2018	0.021 (J)	0.0049 (J)	<0.04	0.015 (J)					<0.04
10/2/2018					<0.04				
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	0.005 (J)	<0.04							
3/29/2019				0.014 (J)					
4/1/2019			<0.04		<0.04				<0.04
4/2/2019									
4/3/2019						0.0076 (J)	0.0055 (J)	0.0044 (J)	
6/12/2019									
9/24/2019	0.0064 (J)	0.0055 (J)				0.01 (J)		0.0049 (J)	
9/25/2019			<0.04	0.018 (J)	<0.04		<0.04		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	0.0085 (J)		0.0053 (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, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020						0.0079 (J)	<0.04	0.0053 (J)	
9/23/2020	<0.04	<0.04	0.0073 (J)						0.012 (J)
9/24/2020					0.0075 (J)				
9/25/2020				0.02 (J)					
10/7/2020									
11/12/2020									
3/1/2021					<0.04				
3/2/2021				0.017 (J)		0.0068 (J)		0.011 (J)	
3/3/2021	<0.04	<0.04	<0.04				0.0056 (J)		<0.04
3/4/2021									
8/19/2021	<0.04	<0.04		0.018 (J)	<0.04				<0.04
8/20/2021									
8/26/2021						0.009 (J)	<0.04	<0.04	
8/27/2021			<0.04						
9/1/2021									
9/3/2021									
2/8/2022									
2/9/2022	<0.04	<0.04	<0.04						0.01 (J)
2/10/2022				0.02 (J)		0.011 (J)		<0.04	
2/11/2022					<0.04		<0.04		

# Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-45	GWA-2 (bg)	YGWC-44
6/1/2016									
6/2/2016									
6/6/2016	<0.04	<0.04							
6/7/2016			<0.04	<0.04	<0.04				
7/25/2016									
7/26/2016									
7/27/2016	0.0059 (J)	<0.04	<0.04		0.008 (J)				
7/28/2016				<0.04					
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		<0.04	<0.04	<0.04					
11/1/2016									
11/2/2016			<0.04						
11/3/2016	0.0082 (J)	<0.04		<0.04	0.0077 (J)				
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	0.0096 (J)	<0.04			0.0092 (J)				
1/12/2017									
1/13/2017			<0.04	<0.04					
1/16/2017									
2/21/2017									
2/22/2017								<0.04	
2/24/2017						0.0145 (J)			
2/27/2017							0.321		
2/28/2017									0.623
3/1/2017	<0.04	<0.04							
3/2/2017					0.0095 (J)				
3/3/2017									
3/6/2017			<0.04	<0.04					
3/7/2017									
3/8/2017									
4/26/2017	0.0091 (J)	<0.04	<0.04	<0.04					
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017					<0.04				
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	0.0079 (J)	<0.04							
6/29/2017			<0.04	<0.04	0.0074 (J)				





# Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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		<0.04			
9/15/2016					
9/16/2016					
9/19/2016					
11/1/2016					
11/2/2016					
11/3/2016					
11/4/2016		<0.04			
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		<0.04			
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		<0.04			
3/6/2017					
3/7/2017					
3/8/2017					
4/26/2017					
4/27/2017					
4/28/2017		<0.04			
5/1/2017					
5/2/2017					
5/8/2017	1.71				
5/9/2017					
5/26/2017		<0.04			
6/27/2017					
6/28/2017		<0.04			
6/29/2017					

# Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
6/30/2017					
7/11/2017					
7/13/2017	1.62				
7/17/2017					
10/3/2017		<0.04			
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			<0.04		
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		<0.04			
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		<0.04			
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: Boron, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
7/6/2020	2				
8/27/2020					0.014 (J)
8/28/2020	1.8				
9/22/2020					<0.04
9/23/2020	2	<0.04			
9/24/2020			0.037 (J)	0.087 (J)	
9/25/2020					
10/7/2020	1.8				0.018 (J)
11/12/2020	1.8				0.012 (J)
3/1/2021					0.015 (J)
3/2/2021	1.9				
3/3/2021		<0.04			
3/4/2021			0.033 (J)	0.078	
8/19/2021					
8/20/2021					<0.04
8/26/2021			0.095		
8/27/2021	1.9	<0.04			
9/1/2021					
9/3/2021				0.077	
2/8/2022			0.13	0.074	
2/9/2022	2.1	<0.04			0.0089 (J)
2/10/2022					
2/11/2022					

# Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
6/1/2016	12	2.5	21						
6/2/2016				1.3	1.3	33	8.8	2.4	28
6/6/2016									
6/7/2016									
7/25/2016		2.16	20.3		1.17				
7/26/2016	11			1.24		32.3	7.69	2.12	24.5
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	11.8	2.21							
9/14/2016			19.7			31	8.49	2.18	
9/15/2016				1.17					27
9/16/2016									
9/19/2016					1.05				
11/1/2016	11		18.4		1.14				25.6
11/2/2016				1.23		30.9	7.83		
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	11.2		20.3						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	11	2.57							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	1.14	1.03				30.4
4/27/2017	11.1	2.38							
4/28/2017									
5/1/2017						37	13.4		
5/2/2017								2.17	
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	13.8	2.36				36.5		2.13	
6/28/2017			23.9						29.8
6/29/2017							8.81		



# Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
6/30/2017				1.24	1.13				
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	14	2.21				30.9		2.15	
10/4/2017			22.1		1.09				29.7
10/5/2017				1.11			9.29		
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	2.3	29.1
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						25.8	9.5 (J)	2.3	
10/1/2018	15.1	1.8	19.7	0.99					26.9
10/2/2018					1.1				
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	13.3 (J)	2.2							
3/29/2019				1.1					
4/1/2019			20.4 (J)		1.3				30.1
4/2/2019									
4/3/2019						24.7 (J)	8.4	2.8	
6/12/2019									
9/24/2019	15.8	2.3				25.8		2.5	
9/25/2019			22.4	1.1	1.1		9.5		29.5
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020		2.1		1.1					
3/19/2020	15		21.9		1.2				31.5
3/24/2020						26.1		2.5	
3/25/2020							10.5		

# Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020						27.2	9.6	2.6	
9/23/2020	14.1	1.8	23.6						28.6
9/24/2020					1.1				
9/25/2020				1.3					
10/7/2020									
11/12/2020									
3/1/2021					1.2				
3/2/2021				1.2		1.6		2.6	
3/3/2021	14.1	1.8	20.6				7.7		29.8
3/4/2021									
8/19/2021	14.2	2		1.2	1.2				28.1
8/20/2021									
8/26/2021						25.2	7.6	2.5	
8/27/2021			24.7						
9/1/2021									
9/3/2021									
2/8/2022									
2/9/2022	14.9	2.1	23.7						30.3
2/10/2022				1.3		24.8		2.5	
2/11/2022					1.5		7.5		

# Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-45	GWA-2 (bg)	YGWC-44
6/1/2016									
6/2/2016									
6/6/2016	1.4	6.2							
6/7/2016			2.3	3.7	2.2				
7/25/2016									
7/26/2016									
7/27/2016	1.19	4.73	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	1.31	5.25		3.4	1.99				
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	1.25	4.74			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	1.26	5.37							
3/2/2017					2.15				
3/3/2017									
3/6/2017			2.48	6.28					
3/7/2017									
3/8/2017									
4/26/2017	1.05	4.28	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	1.06	4.95							
6/29/2017			2.54	6.04	2.02				





# Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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: Calcium, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
7/6/2020	105				
8/27/2020					52.3
8/28/2020	102				
9/22/2020					53.5
9/23/2020	104	26.3			
9/24/2020			3.7	4.4	
9/25/2020					
10/7/2020	105				53.8
11/12/2020	110				53.6
3/1/2021					50.6
3/2/2021	110				
3/3/2021		25.6			
3/4/2021			8.2	4.6	
8/19/2021					
8/20/2021					47.9
8/26/2021			14.1		
8/27/2021	108	22.6			
9/1/2021					
9/3/2021				5.6	
2/8/2022			15.2	6	
2/9/2022	109	23.4			42.2
2/10/2022					
2/11/2022					



# Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
6/1/2016	1.3	1.6	1.3						
6/2/2016				4.1	1.9	7.2	3.7	4.3	1.4
6/6/2016									
6/7/2016									
7/25/2016		1.4	1.3		1.7				
7/26/2016	1.2			4		6.6	3.6	4.4	1.6
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	1.1	1.3							
9/14/2016			1.3			6.6	3.4	3.8	
9/15/2016				4.2					1.5
9/16/2016									
9/19/2016					1.6				
11/1/2016	1.3		1.4		1.8				1.7
11/2/2016				4.9		7.6	4.5		
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	1.3							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	4.1	1.7				1.2
4/27/2017	1	1.3							
4/28/2017									
5/1/2017						7.2	4.3		
5/2/2017								4.6	
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	1.1	1.4				7		4.3	
6/28/2017			1.2						1.3
6/29/2017							4.2		

# Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
6/30/2017				3.7	1.8				
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	1.1	1.7				6.5		4.2	
10/4/2017			1.2		1.8				1.5
10/5/2017				3.8			4.7		
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	4.5	1.2
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	1.1	1.4	1.2	3.8					1.5
10/2/2018					1.8				
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	1.4	1.5							
3/29/2019				4.2					
4/1/2019			1.1		1.7				1.2
4/2/2019									
4/3/2019						4	4.3	4.2	
6/12/2019									
9/24/2019	1.1	1.3				3.7		4.5	
9/25/2019			1.1	4.8	1.6		4.5		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, Total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020						3.6	4.5	4.2	
9/23/2020	0.99 (J)	1.2	1						1.1
9/24/2020					1.5				
9/25/2020				5.3					
10/7/2020									
11/12/2020									
3/1/2021					1.6				
3/2/2021				4.9		3.2		4.3	
3/3/2021	0.96 (J)	1.2	0.99 (J)				4.1		1.1
3/4/2021									
8/19/2021	1.1	1.3		5	1.6				1.1
8/20/2021									
8/26/2021						3.4	4.4	4.3	
8/27/2021			1.1						
9/1/2021									
9/3/2021									
2/8/2022									
2/9/2022	1	1.3	1.1						1.1
2/10/2022				4.7		3.2		4.4	
2/11/2022					2.1		4.1		

# Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-45	GWA-2 (bg)	YGWC-44
6/1/2016									
6/2/2016									
6/6/2016	6.4	6.8							
6/7/2016			1.9	2.8	4.5				
7/25/2016									
7/26/2016									
7/27/2016	6.2	6.7	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	7.4	7.5		2.9	5.4				
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	6.1	6.5			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	6.9							
3/2/2017					4.8				
3/3/2017									
3/6/2017			1.9	2.1					
3/7/2017									
3/8/2017									
4/26/2017	6.5	7	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	6.4	7							
6/29/2017			2.6	2.8	4.5				





# Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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, Total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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: Chloride, Total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
7/6/2020	25.8				
8/27/2020					3.9
8/28/2020	25.9				
9/22/2020					4.1
9/23/2020	28.1	0.88 (J)			
9/24/2020			2.7	5	
9/25/2020					
10/7/2020	28.2				4
11/12/2020	26.7				3.8
3/1/2021					3.7
3/2/2021	27.4				
3/3/2021		0.86 (J)			
3/4/2021			4.9	4.9	
8/19/2021					
8/20/2021					3.1
8/26/2021			7.2		
8/27/2021	29.3	0.99 (J)			
9/1/2021					
9/3/2021				5.5	
2/8/2022			7.4	6.2	
2/9/2022	28.2	1 (J)			3.2
2/10/2022					
2/11/2022					

# Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-5D (bg)
6/1/2016	0.15 (J)	0.12 (J)	<0.1						
6/2/2016				<0.1	0.62	<0.1	<0.1	<0.1	0.11 (J)
6/6/2016									
6/7/2016									
7/25/2016	0.14 (J)		0.06 (J)	0.06 (J)					
7/26/2016		0.08 (J)			0.49	<0.1	<0.1	0.02 (J)	0.05 (J)
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016		0.11 (J)	<0.1						
9/14/2016	0.18 (J)					<0.1	<0.1		0.04 (J)
9/15/2016					0.54			<0.1	
9/16/2016									
9/19/2016				<0.1					
11/1/2016	<0.1	<0.1		<0.1	0.68				
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								<0.1	
1/11/2017	0.09 (J)	0.05 (J)			0.49				
1/12/2017						<0.1			0.04 (J)
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	<0.1		0.48				
3/3/2017									
3/6/2017							<0.1		
3/7/2017						<0.1			<0.1
3/8/2017								<0.1	
4/26/2017	0.08 (J)			<0.1	0.48			<0.1	
4/27/2017		0.04 (J)	0.01 (J)						
4/28/2017									
5/1/2017							<0.1		<0.1
5/2/2017						<0.1			
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017		<0.1	<0.1			<0.1			<0.1
6/28/2017	0.12 (J)				0.47				
6/29/2017							<0.1		



# Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-14S (bg)	YGWA-5D (bg)
8/21/2019									
9/24/2019		0.063 (J)	<0.1			<0.1			0.05 (J)
9/25/2019	0.1 (J)			<0.1	0.46		<0.1	<0.1	
9/26/2019									
10/8/2019									
10/9/2019									
2/10/2020		0.061 (J)	<0.1						
2/11/2020	0.094 (J)								
2/12/2020				<0.1	0.4	<0.1	<0.1	<0.1	<0.1
3/17/2020									
3/18/2020			<0.1					<0.1	
3/19/2020	0.11 (J)	0.064 (J)		<0.1	0.51				
3/24/2020						<0.1			<0.1
3/25/2020							<0.1		
7/6/2020									
8/26/2020									
8/27/2020									
8/28/2020									
9/22/2020						<0.1	<0.1		0.056 (J)
9/23/2020	0.098 (J)	0.058 (J)	<0.1		0.47				
9/24/2020				<0.1					
9/25/2020								<0.1	
10/7/2020									
11/12/2020									
2/8/2021						<0.1			0.055 (J)
2/9/2021							<0.1		
2/10/2021	<0.1				0.43			<0.1	
2/11/2021				<0.1					
2/12/2021		0.068 (J)	<0.1						
3/1/2021				<0.1					
3/2/2021						<0.1		<0.1	<0.1
3/3/2021	0.1	0.078 (J)	<0.1		0.44		<0.1		
3/4/2021									
8/19/2021		0.074 (J)	<0.1	<0.1	0.47			<0.1	
8/20/2021									
8/26/2021						<0.1	<0.1		0.061 (J)
8/27/2021	0.12								
9/1/2021									
9/3/2021									
2/8/2022									
2/9/2022	0.097 (J)	0.057 (J)	<0.1		0.43				
2/10/2022						<0.1		<0.1	0.055 (J)
2/11/2022				<0.1			<0.1		

# Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-44	GWA-2 (bg)	YGWC-45
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	<0.1		<0.1	<0.1				
7/28/2016			0.02 (J)						
8/30/2016						0.09 (J)			
8/31/2016							<0.1	0.14 (J)	0.11 (J)
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		<0.1			<0.1				
9/19/2016	<0.1		0.02 (J)	<0.1					
11/1/2016									
11/2/2016				<0.1					
11/3/2016	<0.1	<0.1	<0.1		<0.1				
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	<0.1	<0.1			<0.1				
1/12/2017									
1/13/2017			<0.1	<0.1					
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	<0.1	<0.1							
3/2/2017					<0.1				
3/3/2017									
3/6/2017			<0.1	<0.1					
3/7/2017									
3/8/2017									
4/26/2017	<0.1	<0.1	0.04 (J)	<0.1					
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017					<0.1				
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	<0.1	<0.1							
6/29/2017			<0.1	<0.1	<0.1				

# Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-44	GWA-2 (bg)	YGWC-45
6/30/2017									
7/11/2017						0.07 (J)			
7/13/2017							<0.1		0.11 (J)
7/17/2017								0.14 (J)	
10/3/2017			<0.1						
10/4/2017		<0.1		<0.1	<0.1				
10/5/2017	<0.1								
10/10/2017						<0.1	<0.1		0.39
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	<0.1	<0.1			<0.1				
3/29/2018			<0.1	<0.1					
4/2/2018						<0.1			
4/3/2018									<0.1
4/4/2018							<0.1		
6/5/2018			0.13 (J)						
6/6/2018				<0.1					
6/7/2018	<0.1								
6/8/2018									
6/11/2018		<0.1			<0.1				
6/28/2018									
8/6/2018								0.087 (J)	
8/7/2018									
9/19/2018						<0.1	<0.1		<0.1
9/24/2018									
9/25/2018	<0.1	<0.1	0 (J)	<0.1	<0.1				
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		<0.1	0.32	<0.1	<0.1				
3/6/2019	<0.1								
3/26/2019									
3/27/2019						0.081 (J)	<0.1		0.18 (J)
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			0.12 (J)		<0.1				
4/3/2019	<0.1	<0.1		<0.1					
6/12/2019								0.12 (J)	
8/19/2019								<0.1	
8/20/2019						<0.1	<0.1		<0.1



# Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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		<0.1			
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		<0.1			
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, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
6/30/2017					
7/11/2017					
7/13/2017	0.35				
7/17/2017					
10/3/2017		<0.1			
10/4/2017					
10/5/2017					
10/10/2017					
10/11/2017	<0.1		<0.1		
10/12/2017				<0.1	
10/16/2017					
11/20/2017			<0.1	<0.1	
1/10/2018				<0.1	
1/11/2018			<0.1		
2/19/2018				<0.1	
2/20/2018			0.23		
3/27/2018					
3/28/2018		0.31			
3/29/2018					
4/2/2018					
4/3/2018			<0.1	<0.1	
4/4/2018	<0.1				
6/5/2018					
6/6/2018					
6/7/2018		0.11 (J)			
6/8/2018					
6/11/2018					
6/28/2018			<0.1	<0.1	
8/6/2018					
8/7/2018			0.048 (J)	<0.1	
9/19/2018	<0.1				
9/24/2018			<0.1	<0.1	
9/25/2018					
9/26/2018					
10/1/2018		<0.1			
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				<0.1	
3/27/2019	0.12 (J)		<0.1		
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, total (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
8/21/2019	<0.1		<0.1	<0.1	
9/24/2019		0.081 (J)			
9/25/2019					
9/26/2019					
10/8/2019					
10/9/2019	0.12 (J)		<0.1	<0.1	
2/10/2020					
2/11/2020		0.075 (J)			
2/12/2020			<0.1	<0.1	
3/17/2020	<0.1				
3/18/2020					
3/19/2020		0.093 (J)			
3/24/2020				<0.1	
3/25/2020			<0.1		
7/6/2020	0.12				
8/26/2020					
8/27/2020					<0.1
8/28/2020	0.12				
9/22/2020					<0.1
9/23/2020	0.12	0.08 (J)			
9/24/2020			<0.1	<0.1	
9/25/2020					
10/7/2020	0.13				<0.1
11/12/2020	0.084 (J)				<0.1
2/8/2021					
2/9/2021					
2/10/2021		0.094 (J)	<0.1	<0.1	
2/11/2021					
2/12/2021					
3/1/2021					<0.1
3/2/2021	0.12				
3/3/2021		0.085 (J)			
3/4/2021			<0.1	<0.1	
8/19/2021					
8/20/2021					<0.1
8/26/2021			0.063 (J)		
8/27/2021	0.13	0.12			
9/1/2021					
9/3/2021				<0.1	
2/8/2022			0.052 (J)	<0.1	
2/9/2022	0.12	0.094 (J)			<0.1
2/10/2022					
2/11/2022					



# Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	GWA-2 (bg)	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-30I (bg)	YGWA-4I (bg)
3/7/2017						7.43	5.66		
3/8/2017									
4/26/2017			7.4		7.45			5.56	
4/27/2017		6.99		6.09					
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		6.87		6.21		7.32	5.7		
6/28/2017			7.5		7.65				
6/29/2017									6.21
6/30/2017								5.72	
7/11/2017									
7/13/2017									
7/17/2017	6.03								
10/3/2017		6.81		5.98		7.48	5.79		
10/4/2017			7.45		7.49			5.87	
10/5/2017									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				5.83	
3/28/2018			7.74		7.91				
3/29/2018		7.38				7.02	5.63		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					7.69		5.63		6.12
6/8/2018			7.64						
6/11/2018								5.69	
6/28/2018									
8/6/2018	6.01								
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018						7.13	5.63		5.84
10/1/2018		6.8	7.47	5.9	7.39				
10/2/2018								5.39	
2/25/2019	6.51								
2/26/2019								5.77	
2/27/2019		6.84	7.54	5.8	7.55				





# Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-14S (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-211 (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44
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	5.46								
6/6/2016		5.71	6.17						
6/7/2016				6.1	5.77	5.62			
7/25/2016									
7/26/2016	5.45								
7/27/2016		5.46	6.14		5.79	5.59			
7/28/2016				6.12					
8/30/2016						5.75			
8/31/2016							7.15	6.01	
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016	5.45								
9/16/2016						5.58			
9/19/2016		5.59	6.04	6.12	5.73				
11/1/2016									
11/2/2016	5.41				5.67				
11/3/2016		5.39	5.97	6.07		5.59			
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	5.37								
1/11/2017		5.48	6.05			5.59			
1/12/2017									
1/13/2017				6.41	5.79				
1/16/2017									
2/21/2017									
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, Field (S.U.) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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, Field (S.U.) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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, Field (S.U.) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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			5.97	5.3	
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					
7/6/2020	6.89				
8/26/2020					
8/27/2020					5.8
8/28/2020	7.05				
9/22/2020					5.91
9/23/2020	6.81	7.22			
9/24/2020			5.7	5.43	
9/25/2020					
10/7/2020	7.06				5.87
2/8/2021					
2/9/2021					
2/10/2021		7.29	5.8	5.19	
2/11/2021					
2/12/2021					
3/1/2021					5.84
3/2/2021	6.72				
3/3/2021		7.92			
3/4/2021			5.54	5.23	
8/19/2021					
8/20/2021					6.71
8/26/2021			6.91		
8/27/2021	6.83	7.14			
9/1/2021					
9/3/2021				4.75	

# Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
2/8/2022			5.78	5.26	
2/9/2022	6.98	5.89			5.99
2/10/2022					
2/11/2022					

# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
6/1/2016	5	4.2	12						
6/2/2016				6.6	1.3	20	8	1.9	5.8
6/6/2016									
6/7/2016									
7/25/2016		3.7	8.4		1.2				
7/26/2016	5.4			6.1		20	7.7	1.8	6.7
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	2.9	5.2							
9/14/2016			8.6			19	7.5	1.8	
9/15/2016				6.1					6
9/16/2016									
9/19/2016					1.2				
11/1/2016	3.9		8.9		1.3				4.9
11/2/2016				6.3		20	8.2		
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	3.7		8.6						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	4.6	7.4							4.4
3/3/2017									
3/6/2017							8		
3/7/2017						20		2.1	
3/8/2017				7					
4/26/2017			11	7	1.4				5.1
4/27/2017	5.2	7.4							
4/28/2017									
5/1/2017						20	8.4		
5/2/2017								2	
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	5.9	6.4				18		2.1	
6/28/2017			12						5.4
6/29/2017							9.2		

# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
6/30/2017				6.5	<1				
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	6.6	5.9				16		2.3	
10/4/2017			12		1.4				6.2
10/5/2017				7.9			9.6		
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	2	6.7
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						7.9	10.2	2.3	
10/1/2018	5.6	4	9.1	6.8					7.1
10/2/2018					1				
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019	8	4.3							
3/29/2019				7.3					
4/1/2019			8.5		0.96 (J)				7.2
4/2/2019									
4/3/2019						7	8.5	2.1	
6/12/2019									
9/24/2019	5.3	4.3				5.5		2.4	
9/25/2019			13.8	6.6	0.81 (J)		8.5		7
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020		5.3		8.1					
3/19/2020	10		12.9		1.6				9
3/24/2020						5.9		2.1	
3/25/2020							8.8		



# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020						5.5	8.2	2.1	
9/23/2020	8.1	3.4	16.8						6.9
9/24/2020					0.69 (J)				
9/25/2020				6.1					
10/7/2020									
11/12/2020									
3/1/2021					0.88 (J)				
3/2/2021				6		2.6		2.3	
3/3/2021	9	4.4	9.6				7.8		7
3/4/2021									
8/19/2021	8.9	4.9		6.7	1				7.5
8/20/2021									
8/26/2021						6	8.5	2.4	
8/27/2021			18.2						
9/1/2021									
9/3/2021									
2/8/2022									
2/9/2022	9.3	5.1	16						7.2
2/10/2022				6.2		4.9		2.4	
2/11/2022					2.8		7.7		

# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-45	GWA-2 (bg)	YGWC-44
6/1/2016									
6/2/2016									
6/6/2016	1.8	1.2							
6/7/2016			<1	5.2	4.4				
7/25/2016									
7/26/2016									
7/27/2016	1.9	1.7	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	1.9	0.69 (J)		5	5.3				
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	1.7	<1			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	1.8							
3/2/2017					5				
3/3/2017									
3/6/2017			<1	4.5					
3/7/2017									
3/8/2017									
4/26/2017	1.9	1.6	<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	5.5	5.2				





# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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 as SO4 (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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: Sulfate as SO4 (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
7/6/2020	385				
8/27/2020					144
8/28/2020	394				
9/22/2020					156
9/23/2020	430	11.8			
9/24/2020			11.7	22.9	
9/25/2020					
10/7/2020	427				156
11/12/2020	385				147
3/1/2021					139
3/2/2021	387				
3/3/2021		10.6			
3/4/2021			12	21.5	
8/19/2021					
8/20/2021					122
8/26/2021			19.2		
8/27/2021	423	16.7			
9/1/2021					
9/3/2021				21.3	
2/8/2022			14.6	17.9	
2/9/2022	415	18			119
2/10/2022					
2/11/2022					

# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
6/1/2016	120	54	150						
6/2/2016				46	36	160	96	66	130
6/6/2016									
6/7/2016									
7/25/2016		48	135		50				
7/26/2016	94			54		177	92	78	141
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	105	67							
9/14/2016			127			187	102	73	
9/15/2016				54					153
9/16/2016									
9/19/2016					35				
11/1/2016	44		75		<25				92
11/2/2016				71		181	115		
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	107		148						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	98	61							117
3/3/2017									
3/6/2017							159		
3/7/2017						257		108	
3/8/2017				178					
4/26/2017			92	52	55				181
4/27/2017	116	31							
4/28/2017									
5/1/2017						165	107		
5/2/2017								103	
5/8/2017									
5/9/2017									
5/26/2017									
6/27/2017	89	42				189		73	
6/28/2017			126						169
6/29/2017							79		



# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
6/30/2017				45	42				
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	119	58				170		89	
10/4/2017			147		31				141
10/5/2017				40			95		
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	142	95
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						144	116	86	
10/1/2018	117	60	138	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						142	111	83	
6/12/2019									
9/24/2019	124	54				129		79	
9/25/2019			159	64	51		117		157
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020		35		57					
3/19/2020	116		148		47				146
3/24/2020						139		68	
3/25/2020							146		

# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-3D (bg)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020						104	83	75	
9/23/2020	108	15	155						157
9/24/2020					51				
9/25/2020				54					
10/7/2020									
11/12/2020									
3/1/2021					23				
3/2/2021				67		52		67	
3/3/2021	99	39	111				80		137
3/4/2021									
8/19/2021	105	44		54	50				144
8/20/2021									
8/26/2021						123	93	86	
8/27/2021			155						
9/1/2021									
9/3/2021									
2/8/2022									
2/9/2022	105	57	145						154
2/10/2022				56		127		77	
2/11/2022					66		102		

# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-45	GWA-2 (bg)	YGWC-44
6/1/2016									
6/2/2016									
6/6/2016	58	120							
6/7/2016			38	60	28				
7/25/2016									
7/26/2016									
7/27/2016	35	94	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	48	104		61	41				
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	95	133			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	79	119							
3/2/2017					77				
3/3/2017									
3/6/2017			164	167					
3/7/2017									
3/8/2017									
4/26/2017	36	162	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	45	98							
6/29/2017			68	94	53				





# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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 [TDS] (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
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		

# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 3/17/2022 2:50 PM View: Appendix III  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWA-21 (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-52
7/6/2020	793				
8/27/2020					349
8/28/2020	838				
9/22/2020					296
9/23/2020	832	161			
9/24/2020			170	77	
9/25/2020					
10/7/2020	842				336
11/12/2020	760				317
3/1/2021					265
3/2/2021	782				
3/3/2021		138			
3/4/2021			168	57	
8/19/2021					
8/20/2021					289
8/26/2021			249		
8/27/2021	810	150			
9/1/2021					
9/3/2021				88	
2/8/2022			248	93	
2/9/2022	846	156			278
2/10/2022					
2/11/2022					



FIGURE E.

# Appendix III Trend Test Summary - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 3/17/2022, 2:54 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	YGWA-40 (bg)	-0.01631	-64	-53	Yes	15	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-47 (bg)	-1.677	-83	-53	Yes	15	6.667	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-17S (bg)	0.1305	91	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-18S (bg)	-0.07569	-96	-68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-211 (bg)	1.174	97	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-5D (bg)	-1.819	-87	-68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	GWA-2 (bg)	3.816	78	58	Yes	16	6.25	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-1D (bg)	0.7001	77	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-1I (bg)	-0.0958	-81	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-47 (bg)	-0.4996	-72	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-17S (bg)	0.5046	109	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-20S (bg)	0.1624	93	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-5D (bg)	-0.8339	-113	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-3D (bg)	-0.05275	-85	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-3I (bg)	-0.03927	-78	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-47 (bg)	-19.14	-92	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWC-45	-7.091	-64	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-18I (bg)	-0.1558	-69	-68	Yes	18	22.22	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-39 (bg)	-2.833	-59	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-40 (bg)	-9.797	-77	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5D (bg)	-3.238	-119	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5I (bg)	0.0955	100	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	GWA-2 (bg)	18.82	81	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-1D (bg)	0.9733	103	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-3D (bg)	0.4345	86	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-3I (bg)	1.183	74	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWC-46A	-61.76	-98	-74	Yes	19	5.263	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-47 (bg)	-13.78	-75	-53	Yes	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-40 (bg)	-13.89	-55	-53	Yes	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-5D (bg)	-15.08	-97	-68	Yes	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	GWA-2 (bg)	24.56	61	58	Yes	16	0	n/a	n/a	0.01	NP

# Appendix III Trend Test Summary - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 3/17/2022, 2:54 PM

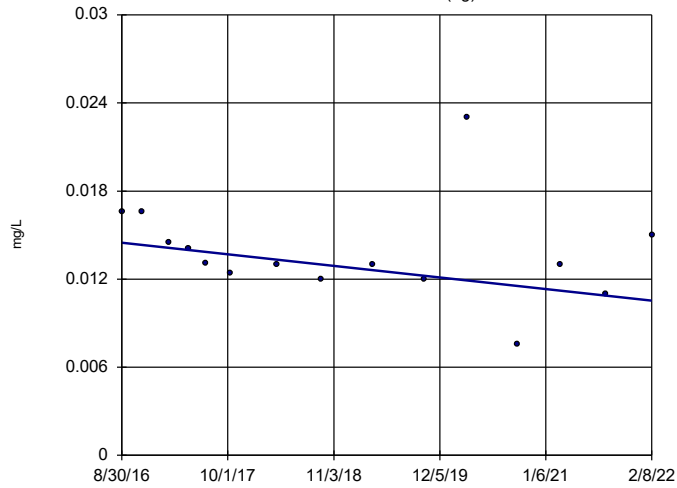
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	YGWA-47 (bg)	-0.0007235	-42	-53	No	15	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWC-44	-0.02072	-41	-53	No	15	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWC-45	0	0	53	No	15	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-17S (bg)	0.00005921	8	68	No	18	11.11	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18I (bg)	0	-26	-68	No	18	77.78	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18S (bg)	0.0001172	14	68	No	18	22.22	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-20S (bg)	0	-11	-68	No	18	88.89	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-21I (bg)	0	-46	-68	No	18	61.11	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-39 (bg)	0.007949	41	53	No	15	6.667	n/a	n/a	0.01	NP
<b>Boron, total (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-0.01631</b>	<b>-64</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron, total (mg/L)	YGWA-4I (bg)	0	-5	-68	No	18	66.67	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5D (bg)	0.0003037	26	68	No	18	11.11	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5I (bg)	0	-32	-68	No	18	61.11	n/a	n/a	0.01	NP
Boron, total (mg/L)	GWA-2 (bg)	0	17	58	No	16	62.5	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-14S (bg)	-0.0004307	-27	-68	No	18	11.11	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1D (bg)	0.0003452	22	68	No	18	33.33	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1I (bg)	0	-13	-68	No	18	72.22	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-2I (bg)	0	-10	-68	No	18	77.78	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-30I (bg)	0	-22	-68	No	18	83.33	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3D (bg)	0	-8	-68	No	18	55.56	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3I (bg)	0	-19	-68	No	18	88.89	n/a	n/a	0.01	NP
Boron, total (mg/L)	YGWC-46A	0.05753	31	74	No	19	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-1.677</b>	<b>-83</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>6.667</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWC-45	-0.1554	-13	-53	No	15	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-17S (bg)</b>	<b>0.1305</b>	<b>91</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-18I (bg)	0.02072	10	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-18S (bg)</b>	<b>-0.07569</b>	<b>-96</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-20S (bg)	0.04138	51	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-21I (bg)</b>	<b>1.174</b>	<b>97</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-39 (bg)	0.9186	40	53	No	15	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-40 (bg)	-0.7684	-45	-53	No	15	6.667	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-4I (bg)	0.009311	4	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-1.819</b>	<b>-87</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-5I (bg)	0.06854	66	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>GWA-2 (bg)</b>	<b>3.816</b>	<b>78</b>	<b>58</b>	<b>Yes</b>	<b>16</b>	<b>6.25</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-14S (bg)	-0.00868	-30	-68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium, total (mg/L)</b>	<b>YGWA-1D (bg)</b>	<b>0.7001</b>	<b>77</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium, total (mg/L)</b>	<b>YGWA-1I (bg)</b>	<b>-0.0958</b>	<b>-81</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium, total (mg/L)	YGWA-2I (bg)	0.08578	11	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-30I (bg)	0.006518	17	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3D (bg)	0.5552	59	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3I (bg)	0.6025	52	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWC-46A	2.932	61	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	YGWC-52	-6.616	-11	-18	No	7	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-0.4996</b>	<b>-72</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWC-44	0.1092	29	53	No	15	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-17S (bg)</b>	<b>0.5046</b>	<b>109</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWA-18I (bg)	0.0841	61	68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-18S (bg)	0.1771	67	68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-20S (bg)</b>	<b>0.1624</b>	<b>93</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWA-21I (bg)	-0.1442	-57	-68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-39 (bg)	0.6239	40	53	No	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-40 (bg)	0.2865	51	53	No	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-4I (bg)	0.08324	35	68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-0.8339</b>	<b>-113</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

# Appendix III Trend Test Summary - All Results

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 3/17/2022, 2:54 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride, Total (mg/L)	YGWA-5I (bg)	0	1	68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	GWA-2 (bg)	0.2307	58	58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-14S (bg)	0.1623	47	68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-1D (bg)	-0.01968	-51	-68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-1I (bg)	-0.02497	-49	-68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-2I (bg)	-0.03702	-46	-68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-30I (bg)	0	-15	-68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>YGWA-3D (bg)</b>	<b>-0.05275</b>	<b>-85</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride, Total (mg/L)</b>	<b>YGWA-3I (bg)</b>	<b>-0.03927</b>	<b>-78</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	YGWC-46A	-1.169	-46	-74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-19.14</b>	<b>-92</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-45</b>	<b>-7.091</b>	<b>-64</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-17S (bg)	0.07043	47	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-18I (bg)</b>	<b>-0.1558</b>	<b>-69</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>22.22</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-18S (bg)	-0.1518	-54	-68	No	18	11.11	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-20S (bg)	0	36	68	No	18	66.67	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-21I (bg)	-0.2086	-31	-68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-39 (bg)</b>	<b>-2.833</b>	<b>-59</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-9.797</b>	<b>-77</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-4I (bg)	0.0866	30	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-3.238</b>	<b>-119</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-5I (bg)</b>	<b>0.0955</b>	<b>100</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>GWA-2 (bg)</b>	<b>18.82</b>	<b>81</b>	<b>58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-14S (bg)	0.04468	14	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-1D (bg)</b>	<b>0.9733</b>	<b>103</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	YGWA-1I (bg)	-0.1386	-20	-68	No	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-2I (bg)	0.7686	44	68	No	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-30I (bg)	-0.03944	-14	-68	No	18	11.11	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-3D (bg)</b>	<b>0.4345</b>	<b>86</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWA-3I (bg)</b>	<b>1.183</b>	<b>74</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate as SO4 (mg/L)</b>	<b>YGWC-46A</b>	<b>-61.76</b>	<b>-98</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>5.263</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-47 (bg)</b>	<b>-13.78</b>	<b>-75</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWC-44	-9.353	-40	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-45	-2.656	-16	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-17S (bg)	4.594	38	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18I (bg)	-0.8196	-15	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18S (bg)	0.4481	12	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-20S (bg)	3.147	36	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-21I (bg)	12.83	63	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-39 (bg)	28.42	53	53	No	15	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-40 (bg)</b>	<b>-13.89</b>	<b>-55</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWA-4I (bg)	0.5267	6	68	No	18	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>YGWA-5D (bg)</b>	<b>-15.08</b>	<b>-97</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWA-5I (bg)	0	-4	-68	No	18	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>GWA-2 (bg)</b>	<b>24.56</b>	<b>61</b>	<b>58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	YGWA-14S (bg)	0.8555	20	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-1D (bg)	0.2702	7	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-1I (bg)	-2.568	-31	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-2I (bg)	-2.032	-29	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-30I (bg)	2.779	37	68	No	18	11.11	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3D (bg)	1.473	15	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3I (bg)	1.513	13	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-46A	-68.04	-53	-74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-52	-48.8	-13	-18	No	7	0	n/a	n/a	0.01	NP

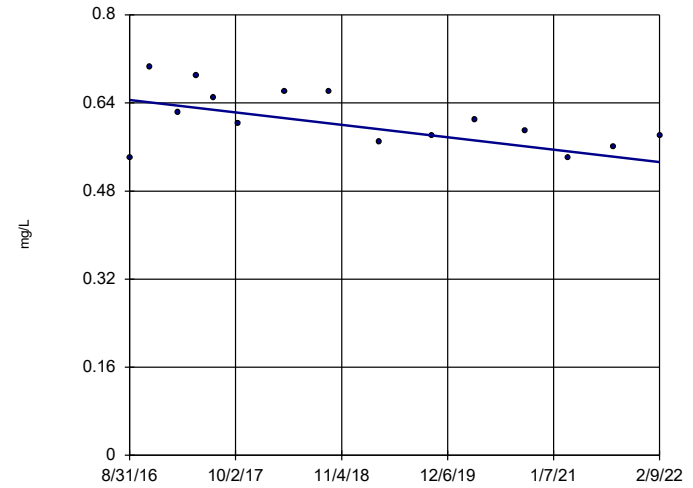
Sen's Slope Estimator  
YGWA-47 (bg)



n = 15  
Slope = -0.0007235 units per year.  
Mann-Kendall statistic = -42  
critical = -53  
Trend not significant at 99% confidence level (alpha = 0.005 per tail).

Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

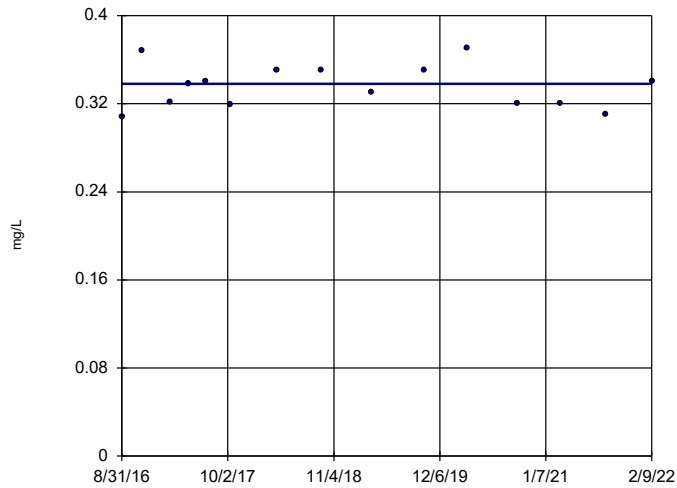
Sen's Slope Estimator  
YGWC-44



n = 15  
Slope = -0.02072 units per year.  
Mann-Kendall statistic = -41  
critical = -53  
Trend not significant at 99% confidence level (alpha = 0.005 per tail).

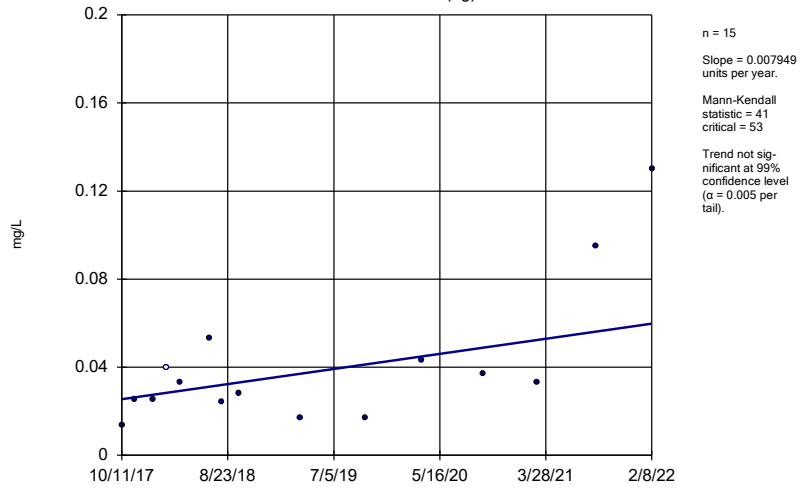
Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWC-45



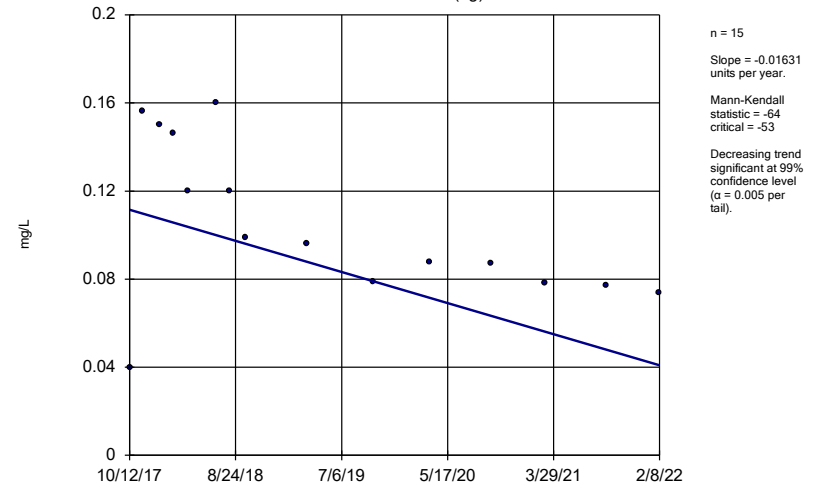


Sen's Slope Estimator  
YGWA-39 (bg)



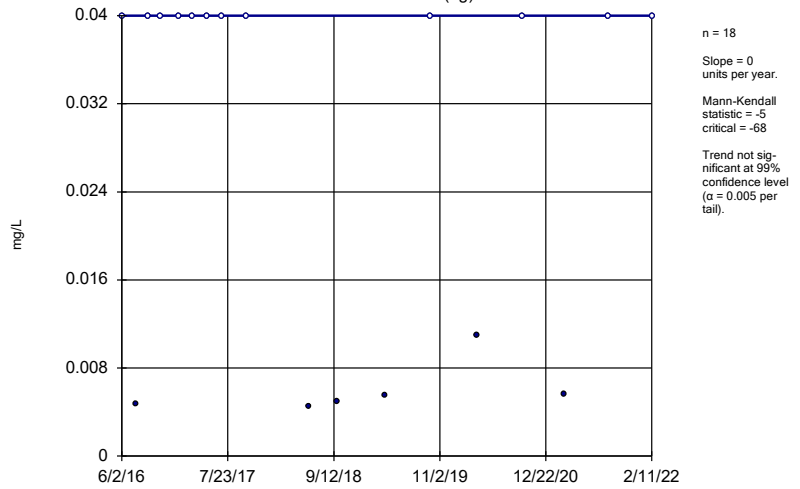
Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-40 (bg)



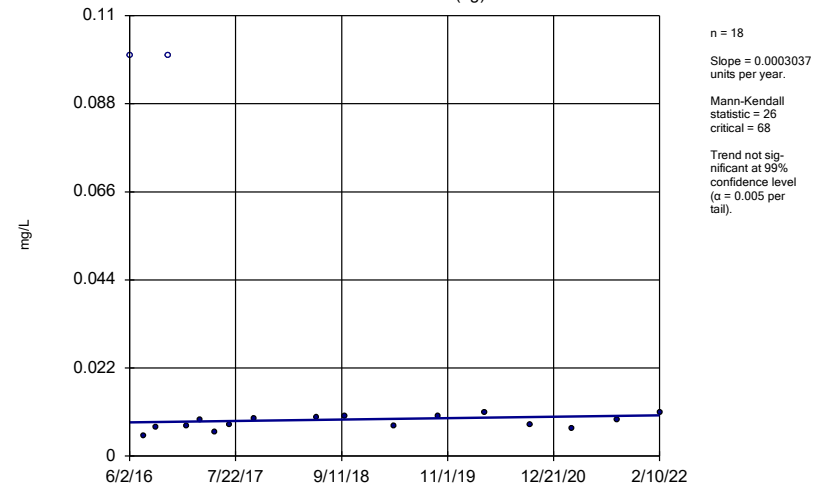
Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-41 (bg)



Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

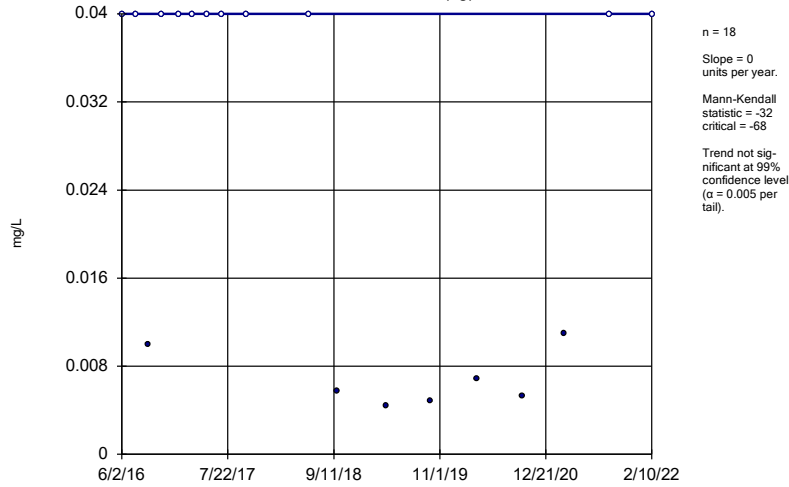
Sen's Slope Estimator  
YGWA-5D (bg)



Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

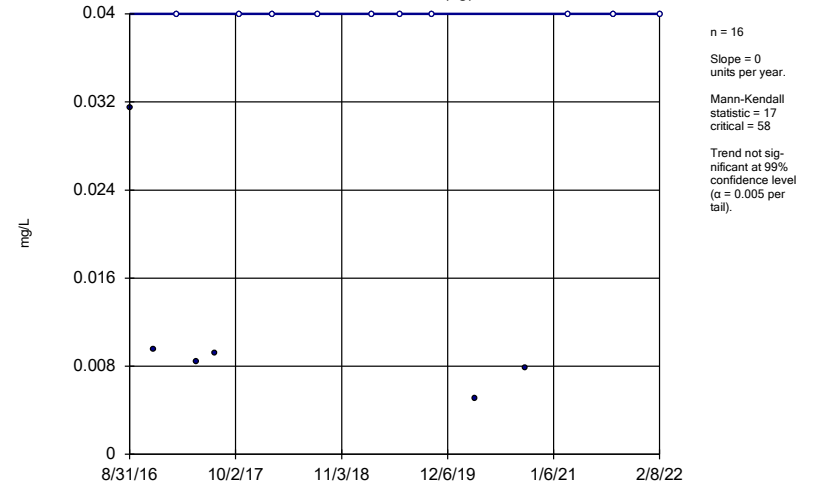
YGWA-5I (bg)



Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

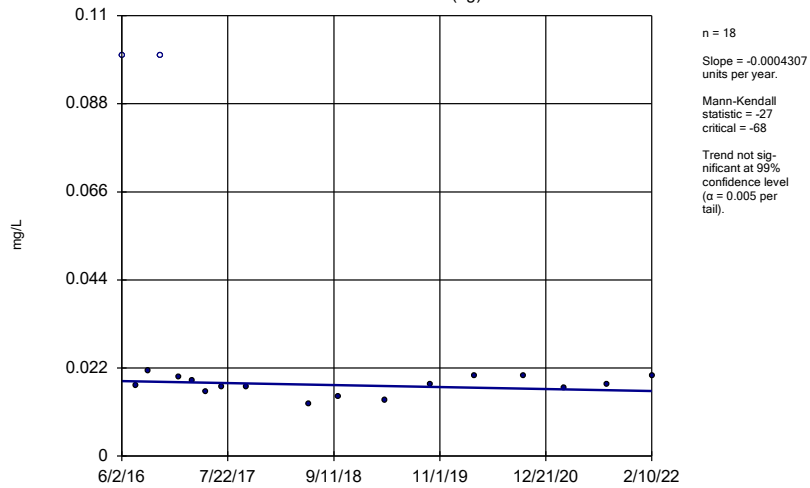
GWA-2 (bg)



Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

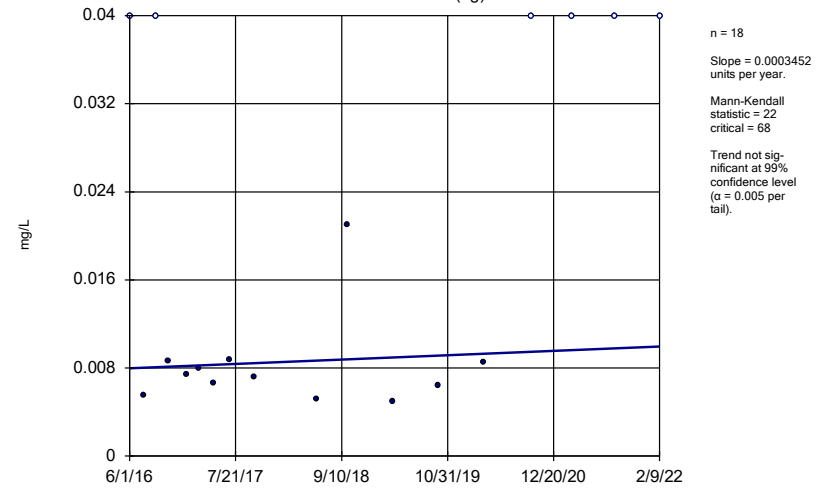
YGWA-14S (bg)



Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-1D (bg)

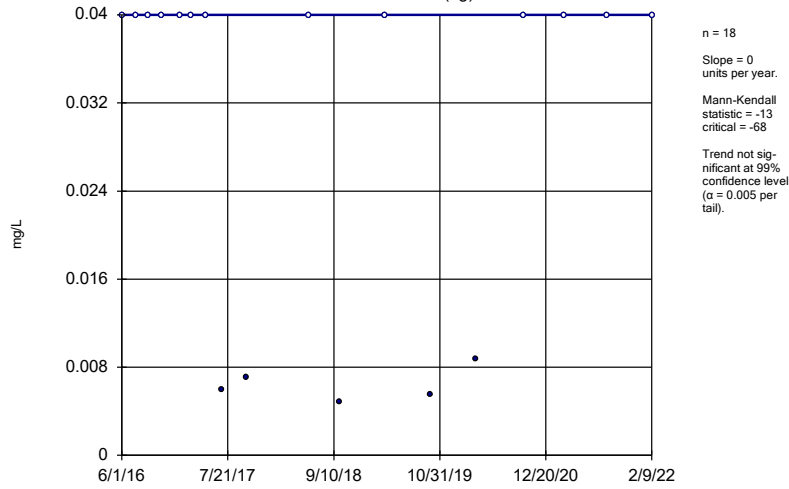


Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1



### Sen's Slope Estimator

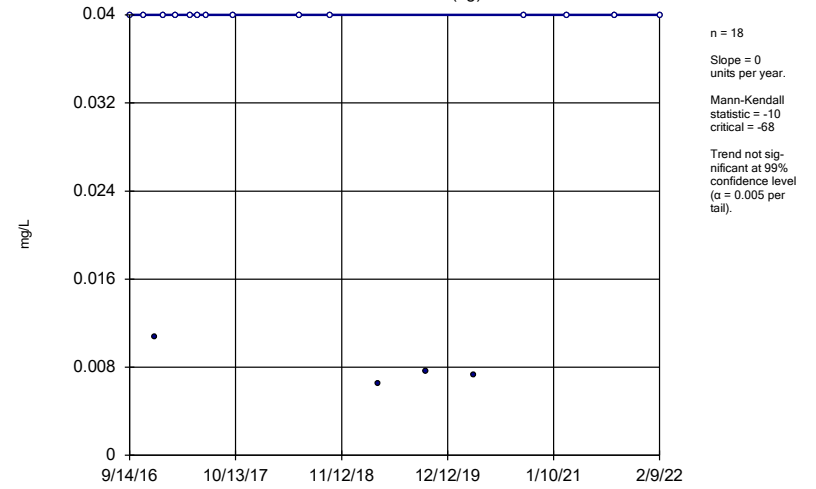
YGWA-11 (bg)



Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

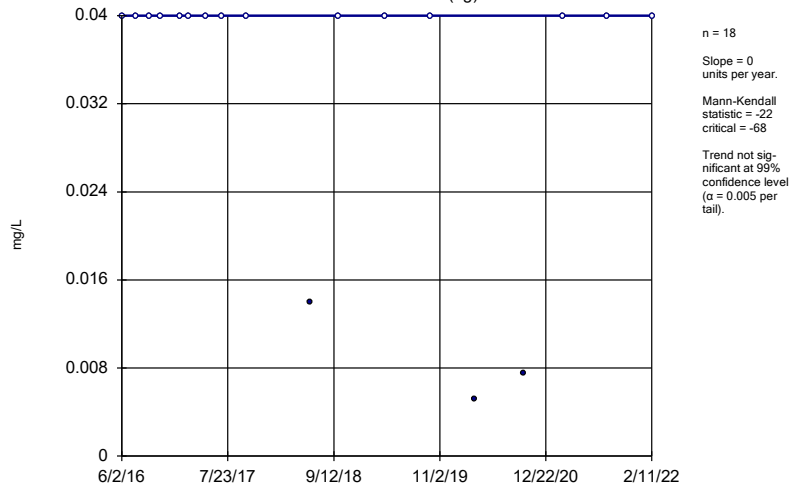
YGWA-21 (bg)



Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

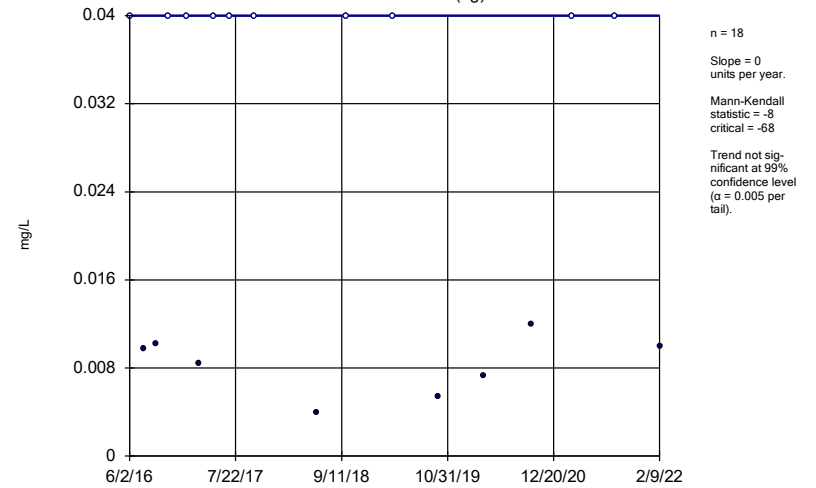
YGWA-30I (bg)



Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

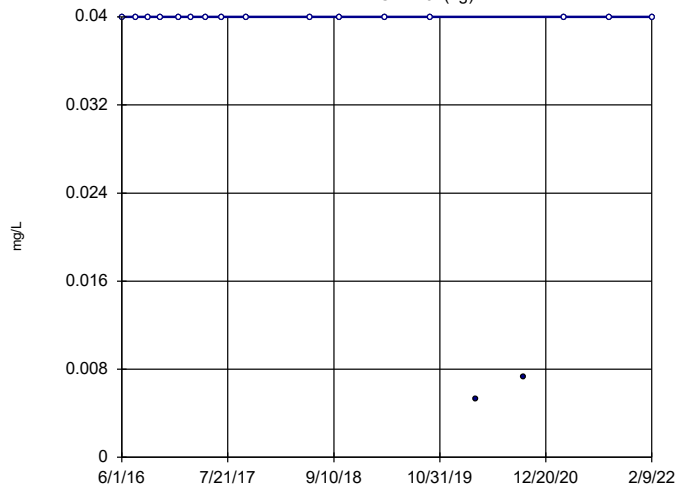
YGWA-3D (bg)



Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-3I (bg)

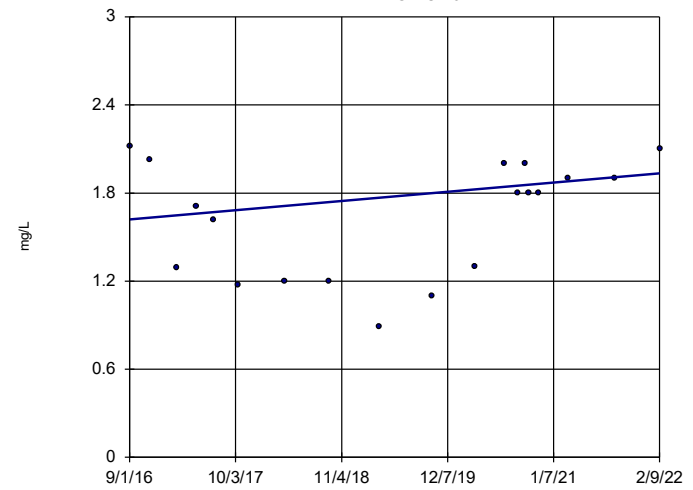


n = 18  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = -19  
critical = -68  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWC-46A

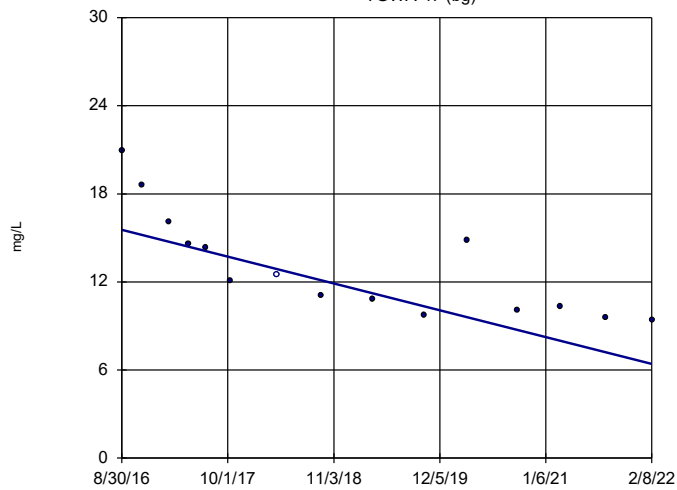


n = 19  
Slope = 0.05753  
units per year.  
Mann-Kendall  
statistic = 31  
critical = 74  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-47 (bg)

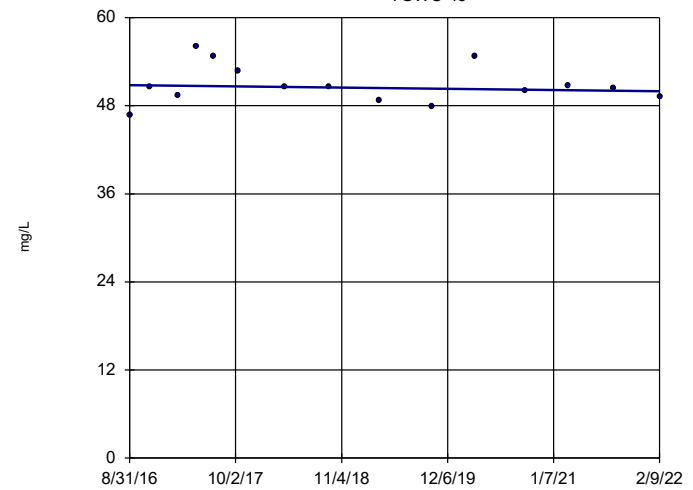


n = 15  
Slope = -1.677  
units per year.  
Mann-Kendall  
statistic = -83  
critical = -53  
Decreasing trend  
significant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWC-45

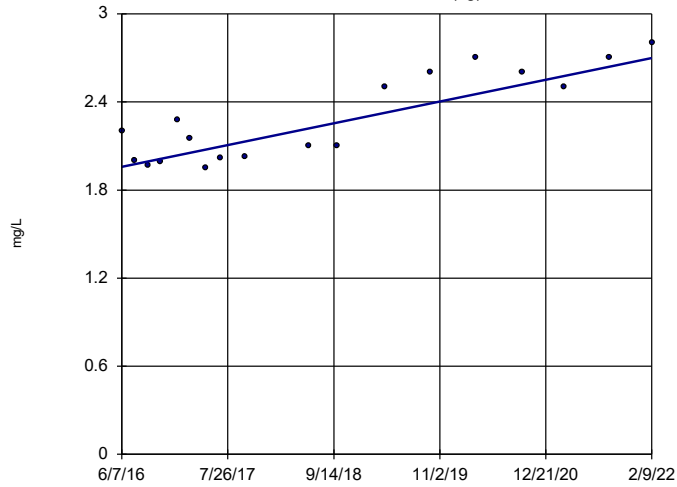


n = 15  
Slope = -0.1554  
units per year.  
Mann-Kendall  
statistic = -13  
critical = -53  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-17S (bg)

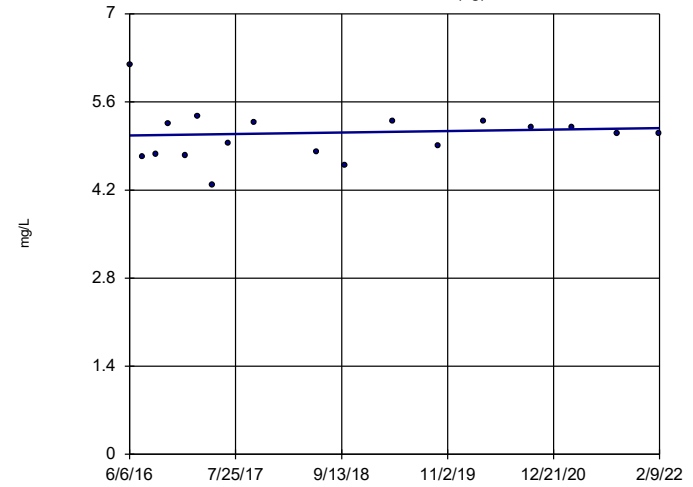


n = 18  
 Slope = 0.1305 units per year.  
 Mann-Kendall statistic = 91  
 critical = 68  
 Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-18I (bg)

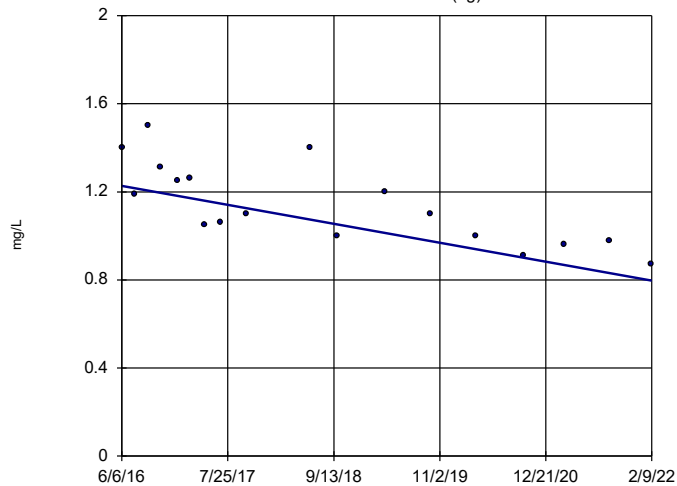


n = 18  
 Slope = 0.02072 units per year.  
 Mann-Kendall statistic = 10  
 critical = 68  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-18S (bg)

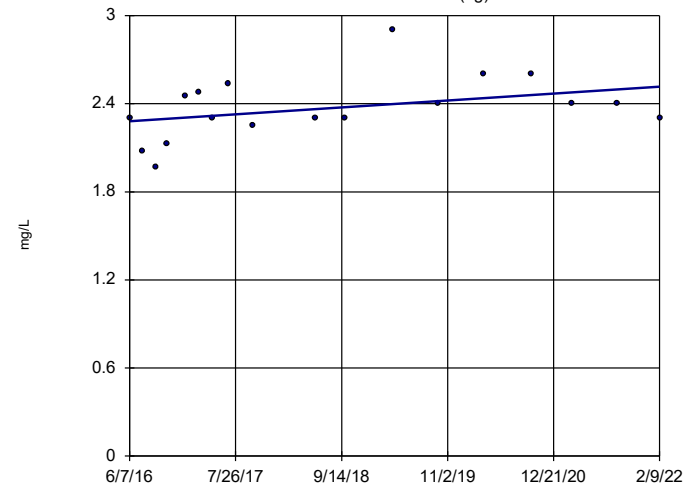


n = 18  
 Slope = -0.07569 units per year.  
 Mann-Kendall statistic = -96  
 critical = -68  
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-20S (bg)

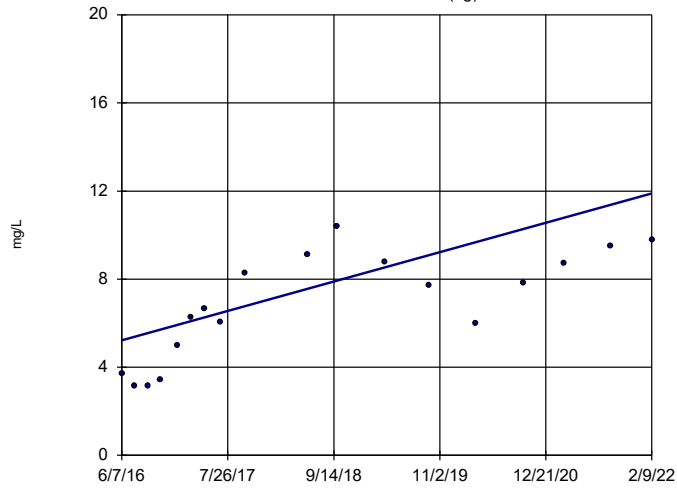


n = 18  
 Slope = 0.04138 units per year.  
 Mann-Kendall statistic = 51  
 critical = 68  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-21I (bg)

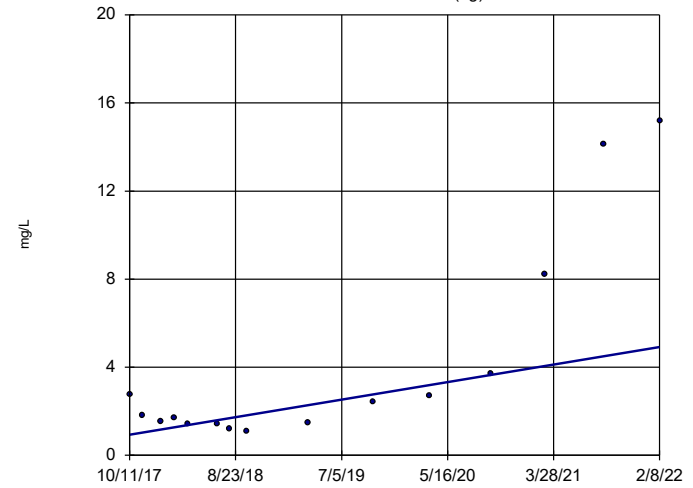


n = 18  
 Slope = 1.174  
 units per year.  
 Mann-Kendall  
 statistic = 97  
 critical = 68  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

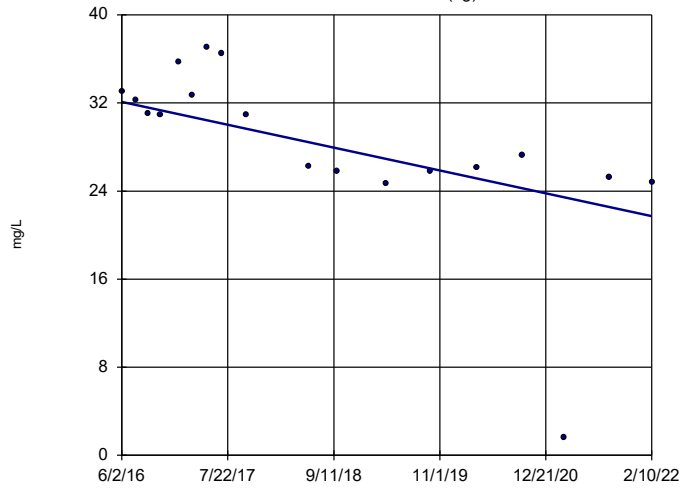
### Sen's Slope Estimator

YGWA-39 (bg)



### Sen's Slope Estimator

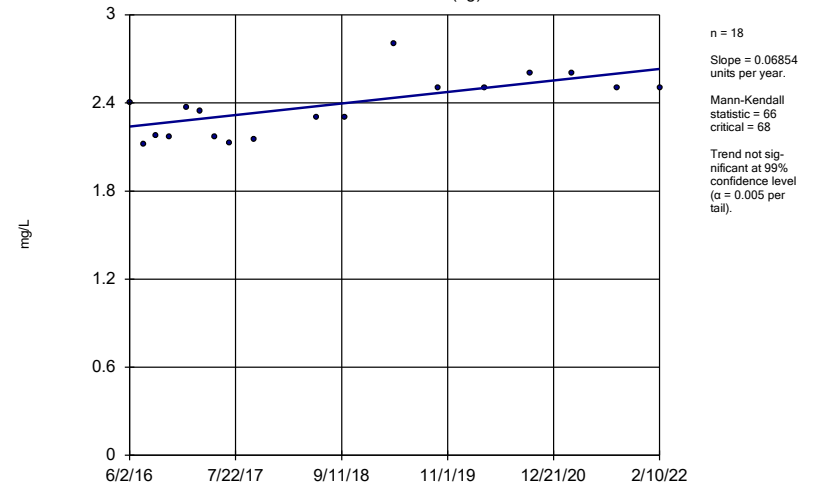
YGWA-5D (bg)



Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

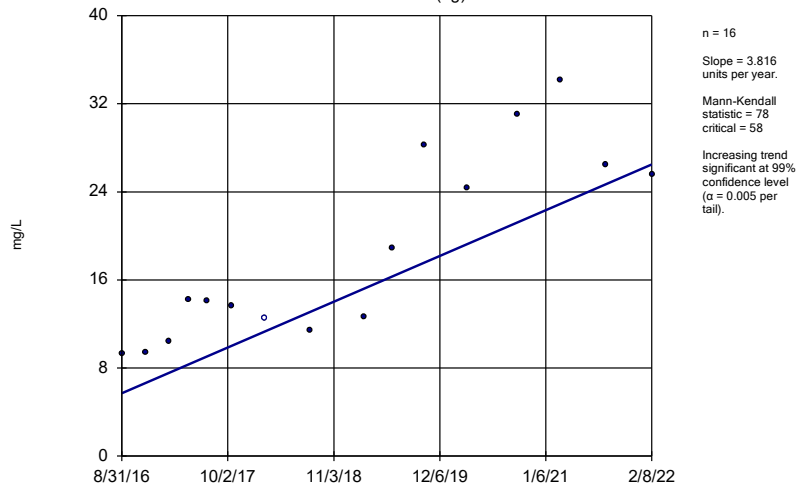
YGWA-5I (bg)



Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

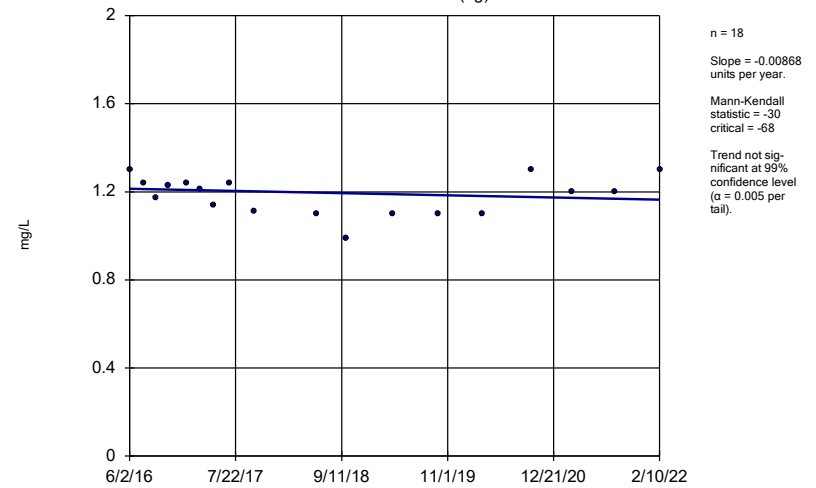
GWA-2 (bg)



Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

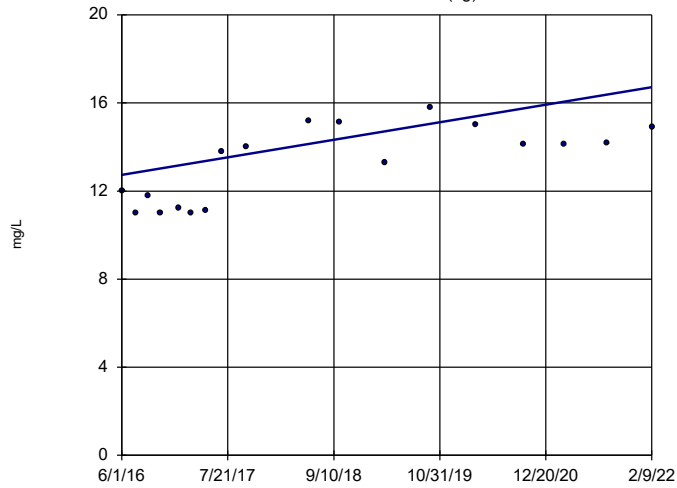
YGWA-14S (bg)



Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

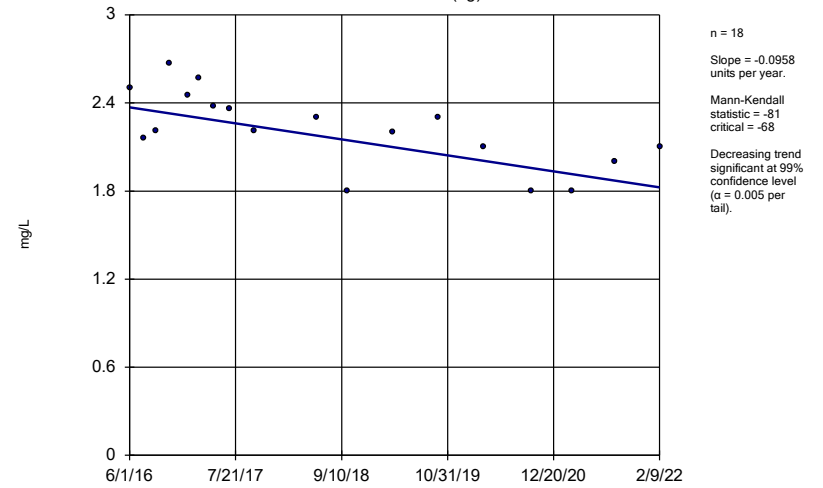
YGWA-1D (bg)



Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

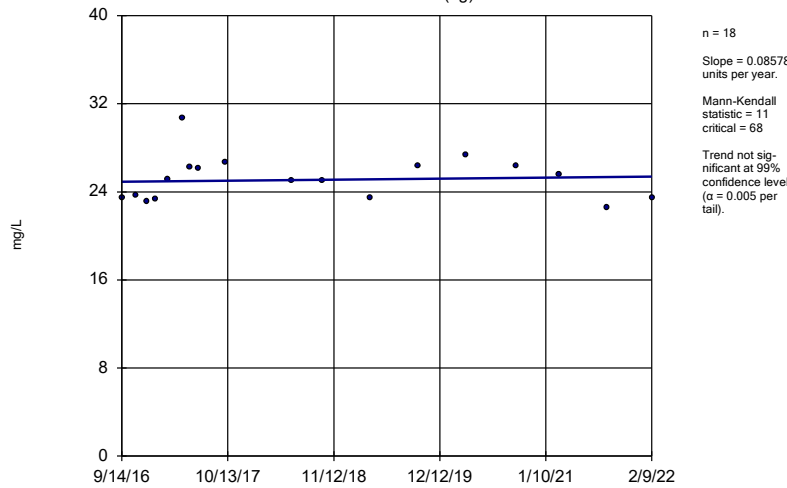
YGWA-1I (bg)



Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

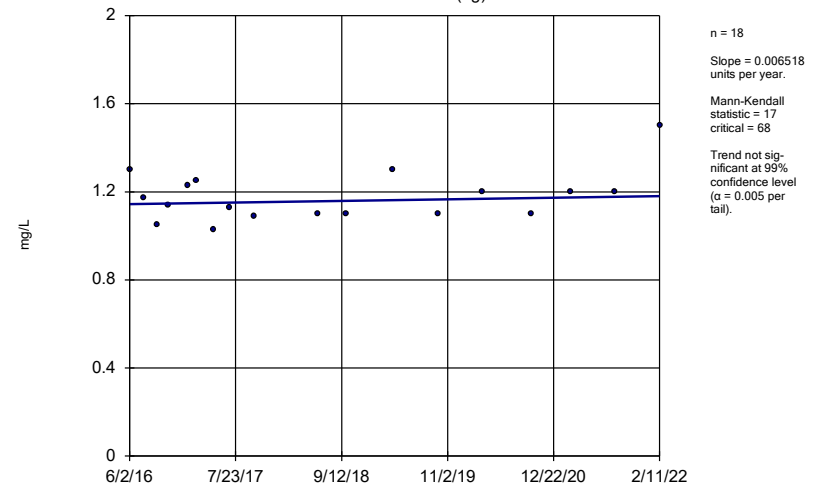
YGWA-2I (bg)



Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

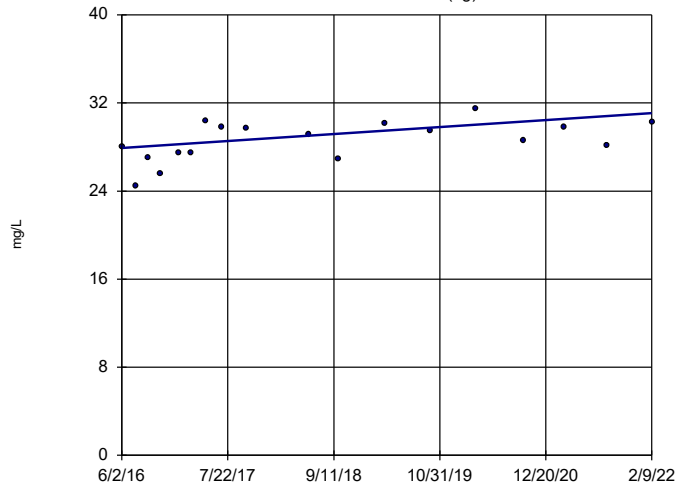
### Sen's Slope Estimator

YGWA-30I (bg)



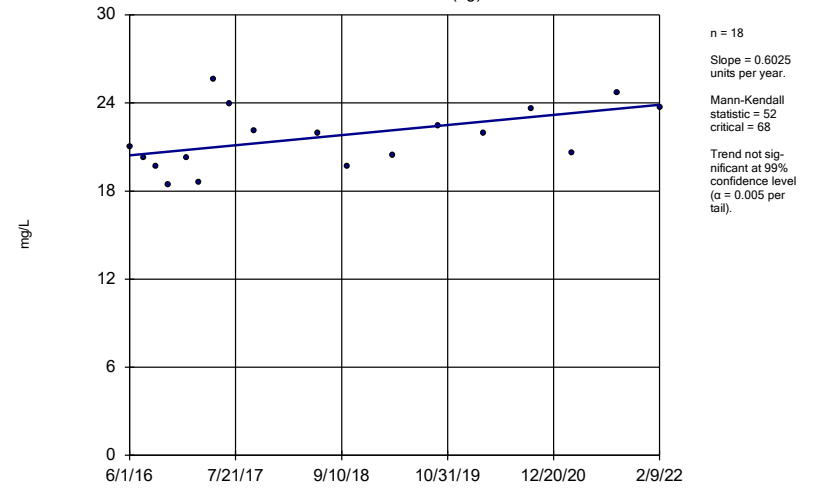
Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-3D (bg)



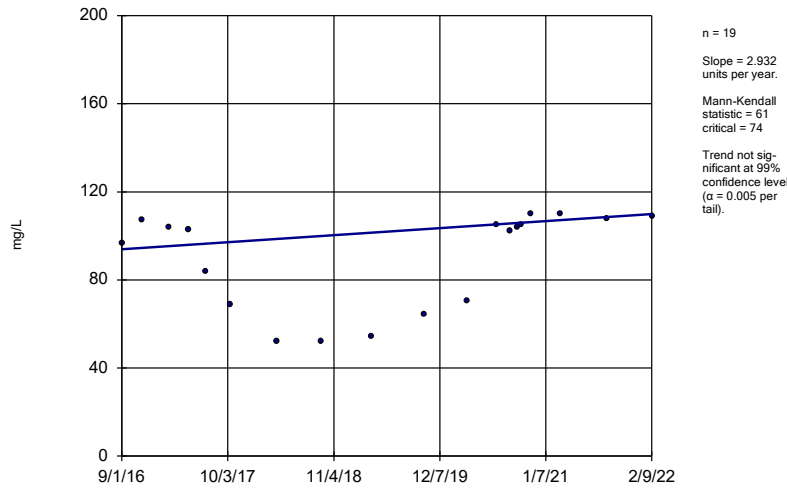
Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-3I (bg)



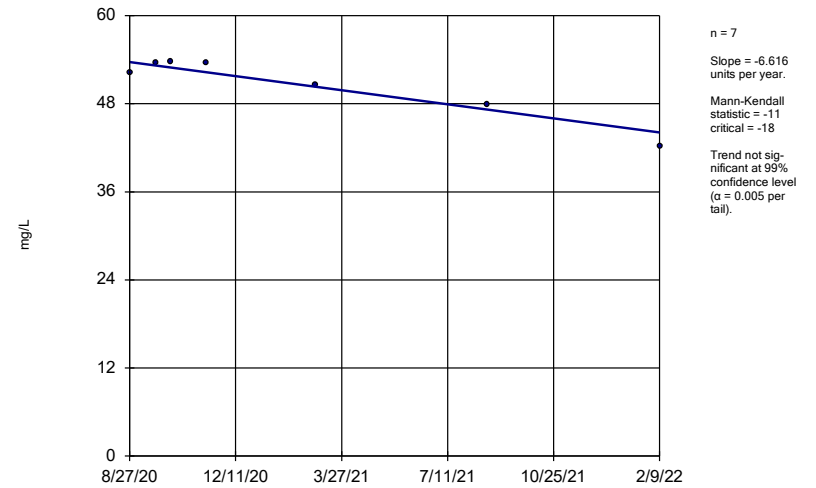
Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWC-46A



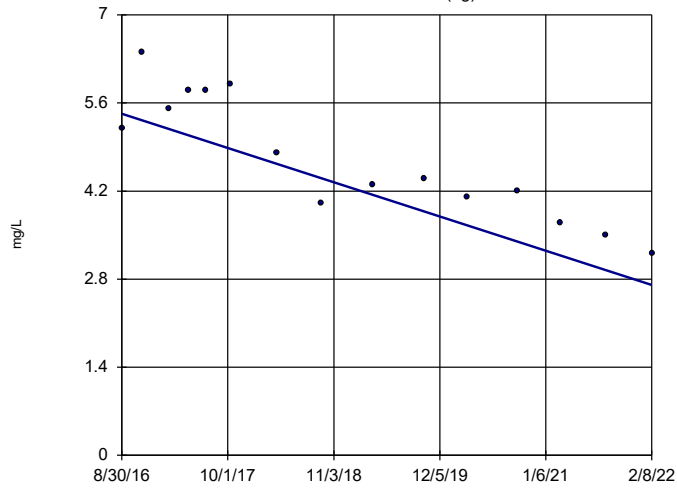
Constituent: Calcium, total Analysis Run 3/17/2022 2:51 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWC-52



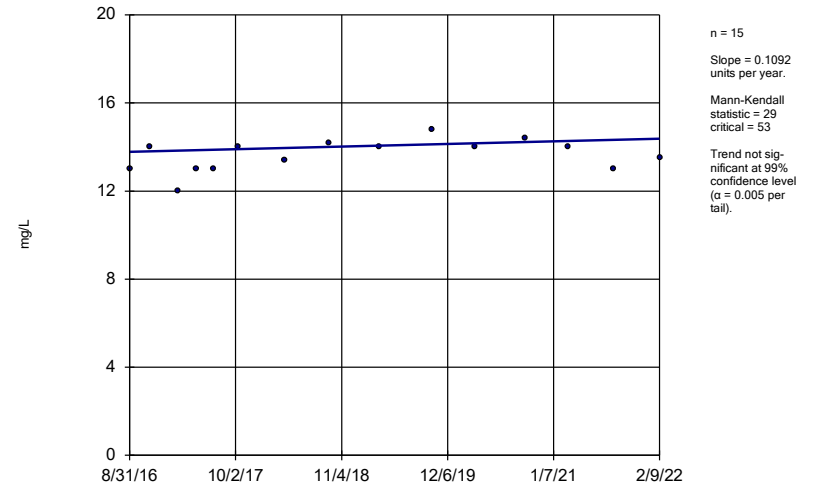
Constituent: Calcium, total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-47 (bg)



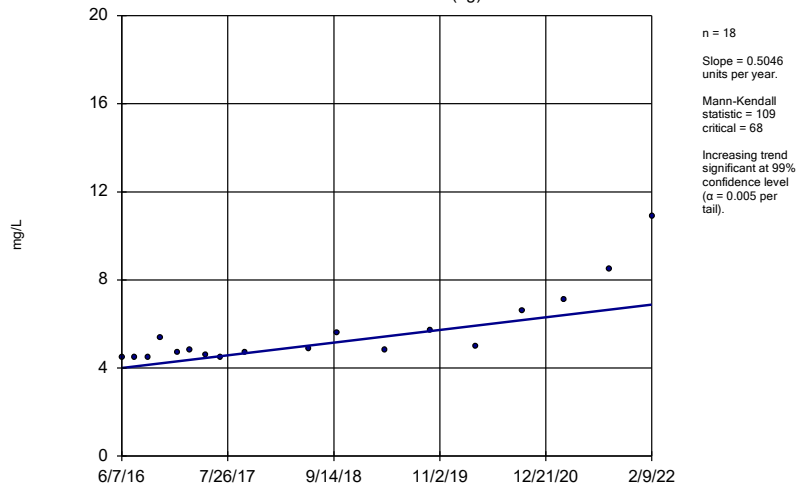
Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWC-44



Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-17S (bg)

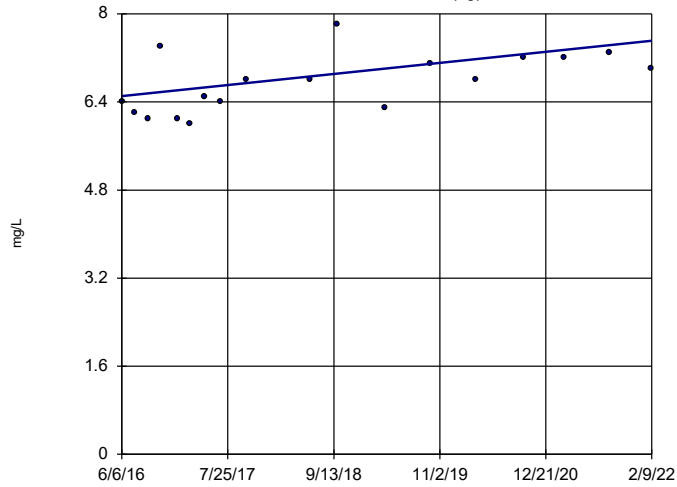


Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1



### Sen's Slope Estimator

YGWA-18S (bg)

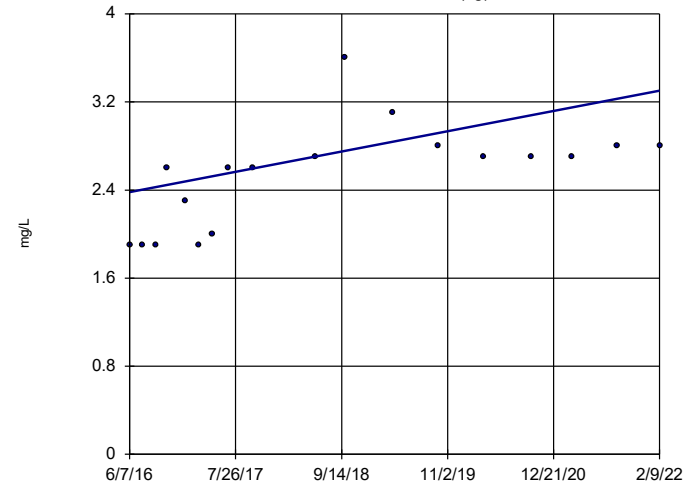


n = 18  
 Slope = 0.1771  
 units per year.  
 Mann-Kendall  
 statistic = 67  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-20S (bg)

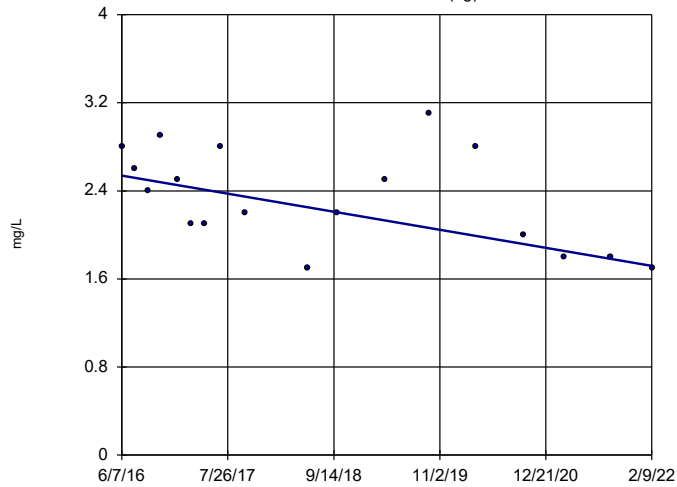


n = 18  
 Slope = 0.1624  
 units per year.  
 Mann-Kendall  
 statistic = 93  
 critical = 68  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-21I (bg)

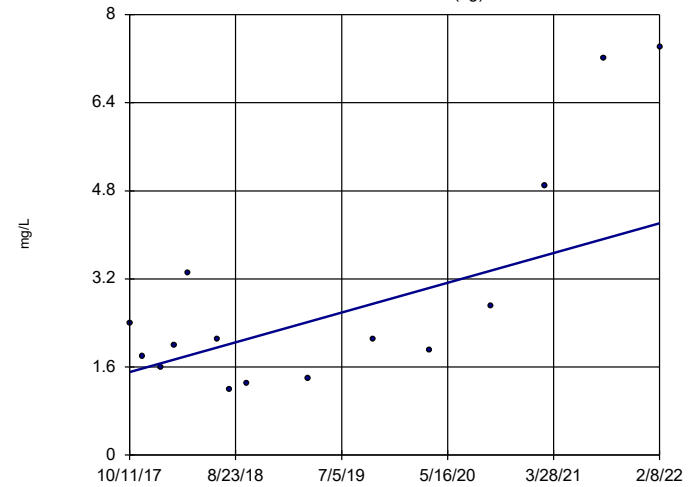


n = 18  
 Slope = -0.1442  
 units per year.  
 Mann-Kendall  
 statistic = -57  
 critical = -68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

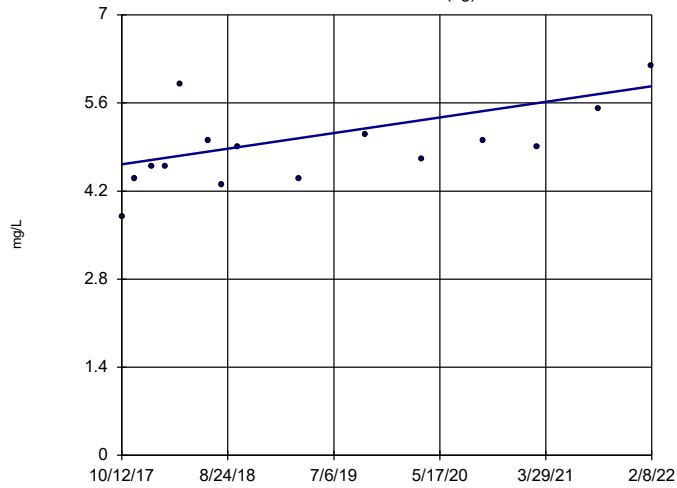
YGWA-39 (bg)



n = 15  
 Slope = 0.6239  
 units per year.  
 Mann-Kendall  
 statistic = 40  
 critical = 53  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

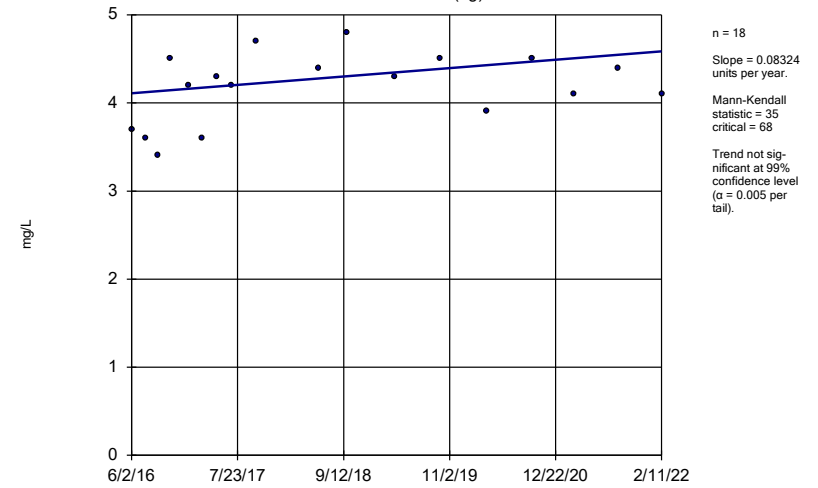
Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-40 (bg)



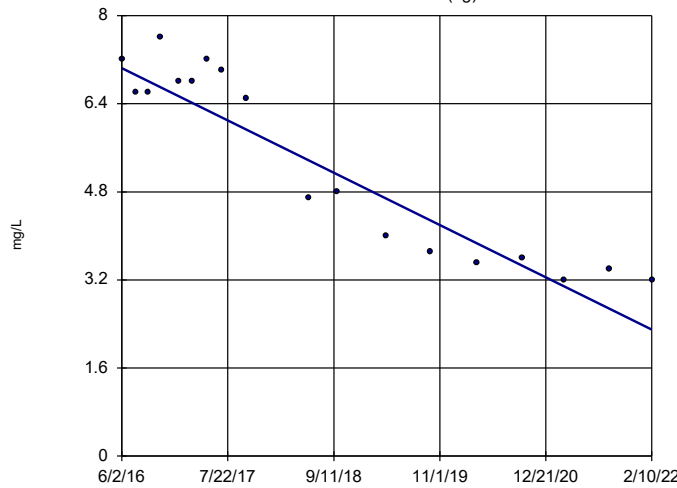
Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-4I (bg)



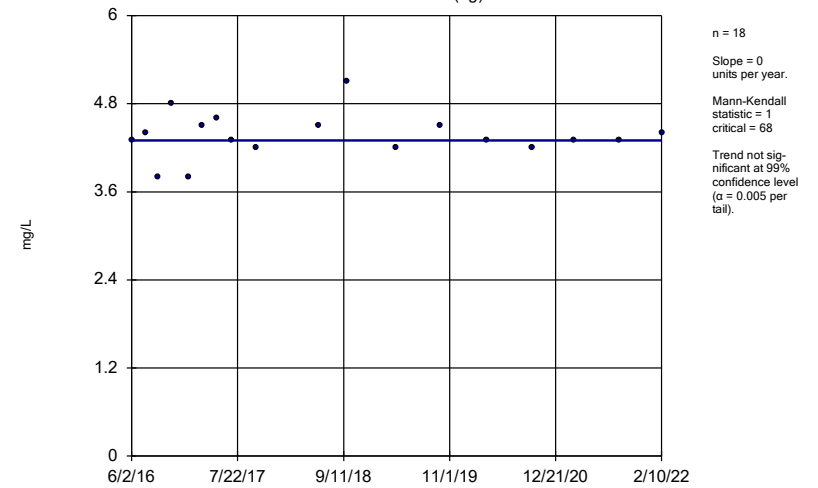
Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator  
YGWA-5D (bg)



Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

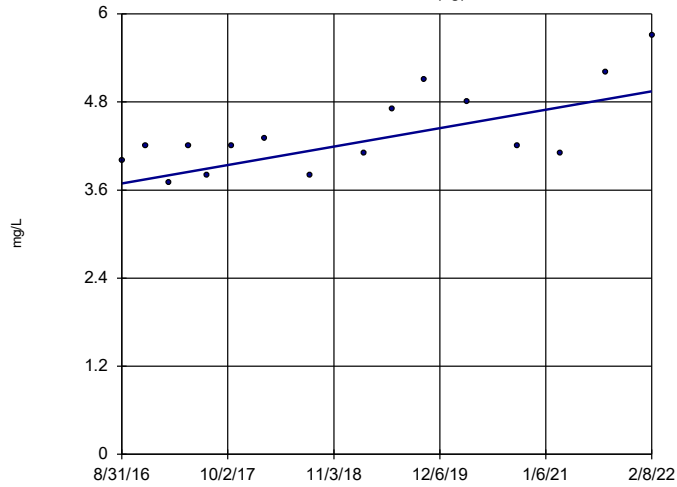
Sen's Slope Estimator  
YGWA-5I (bg)



Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

GWA-2 (bg)

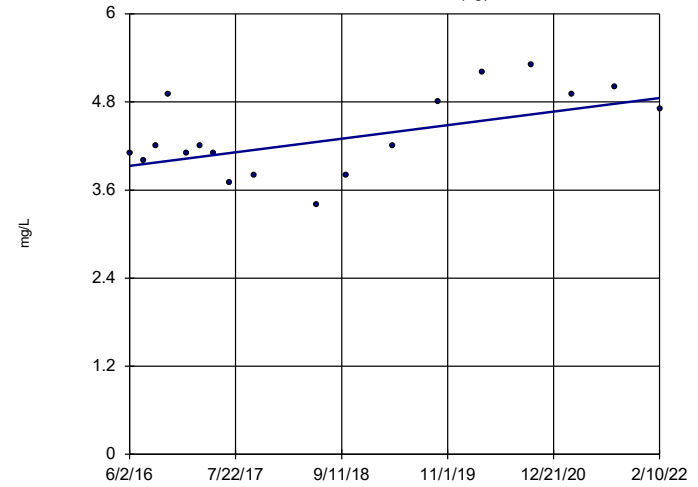


n = 16  
 Slope = 0.2307 units per year.  
 Mann-Kendall statistic = 58  
 critical = 58  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-14S (bg)

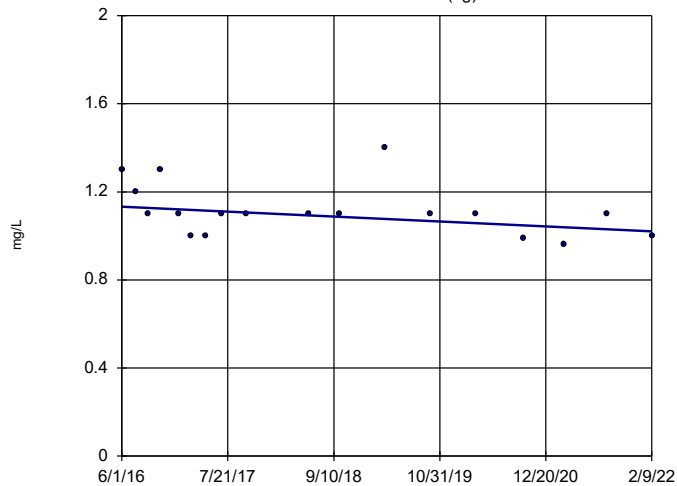


n = 18  
 Slope = 0.1623 units per year.  
 Mann-Kendall statistic = 47  
 critical = 68  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-1D (bg)

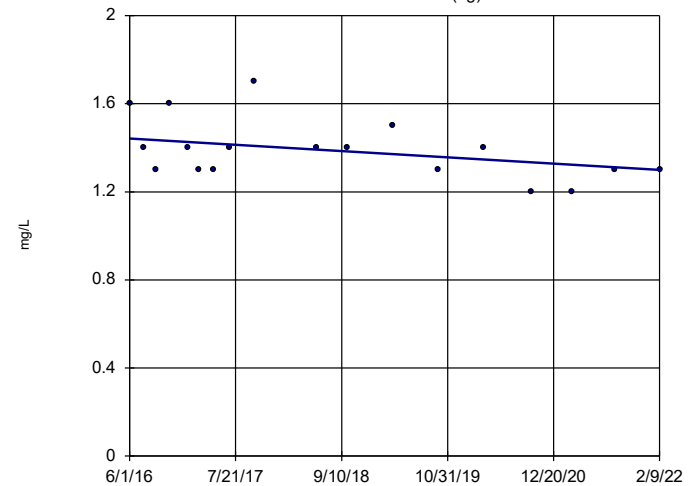


n = 18  
 Slope = -0.01968 units per year.  
 Mann-Kendall statistic = -51  
 critical = -68  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

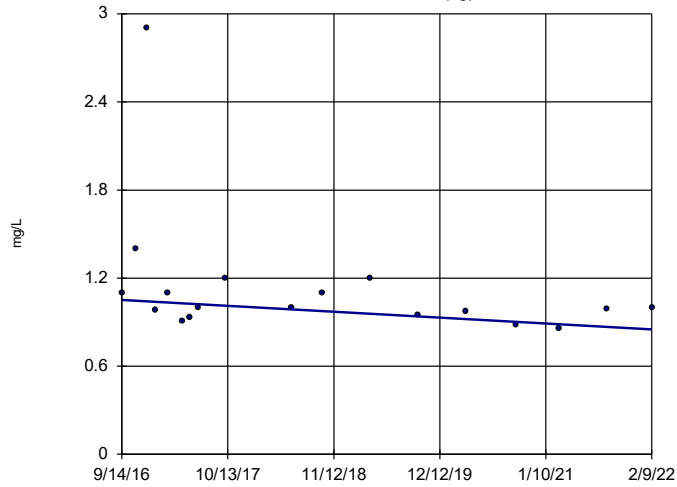
### Sen's Slope Estimator

YGWA-11 (bg)



### Sen's Slope Estimator

YGWA-21 (bg)

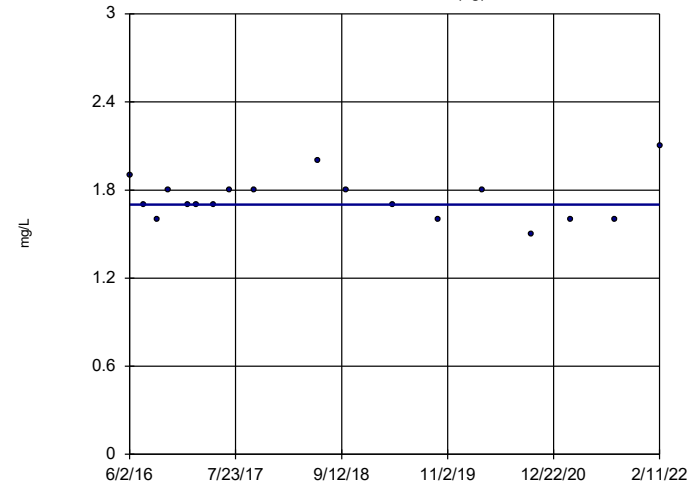


n = 18  
 Slope = -0.03702  
 units per year.  
 Mann-Kendall  
 statistic = -46  
 critical = -68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-30I (bg)

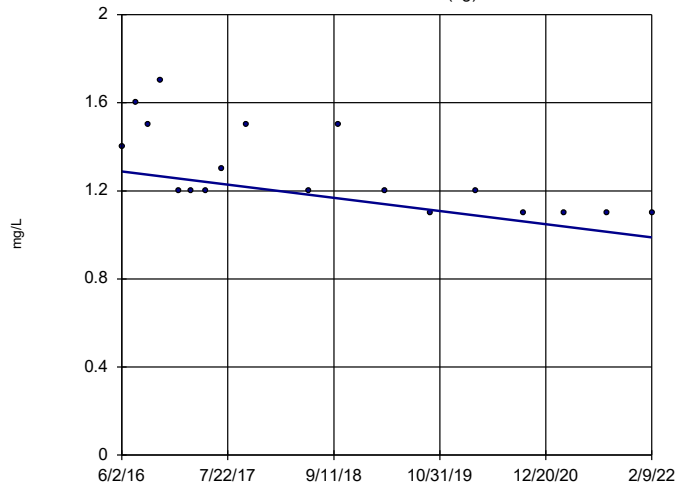


n = 18  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = -15  
 critical = -68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-3D (bg)

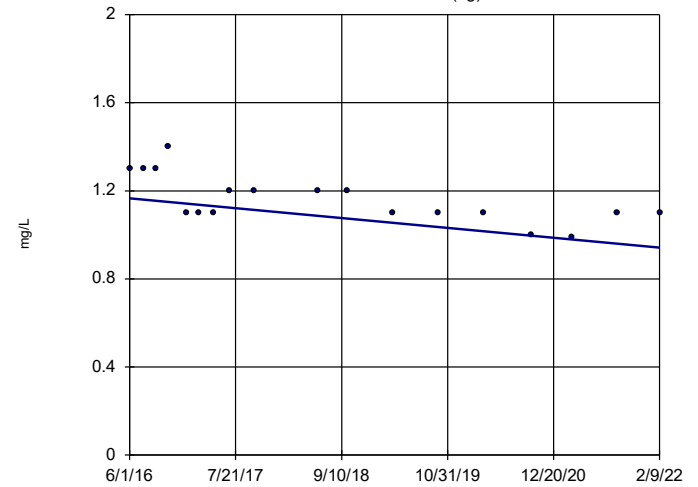


n = 18  
 Slope = -0.05275  
 units per year.  
 Mann-Kendall  
 statistic = -85  
 critical = -68  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-3I (bg)

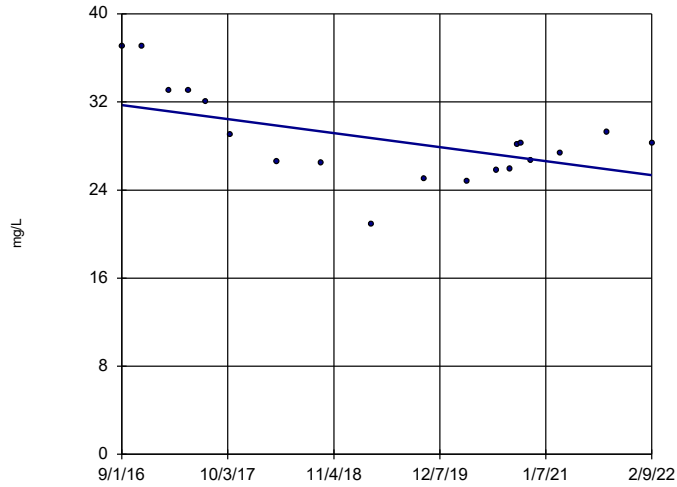


n = 18  
 Slope = -0.03927  
 units per year.  
 Mann-Kendall  
 statistic = -78  
 critical = -68  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWC-46A

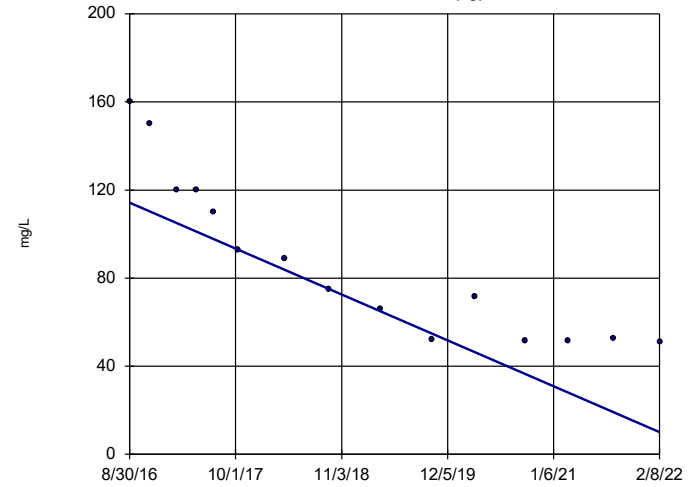


n = 19  
 Slope = -1.169  
 units per year.  
 Mann-Kendall  
 statistic = -46  
 critical = -74  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride, Total Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-47 (bg)

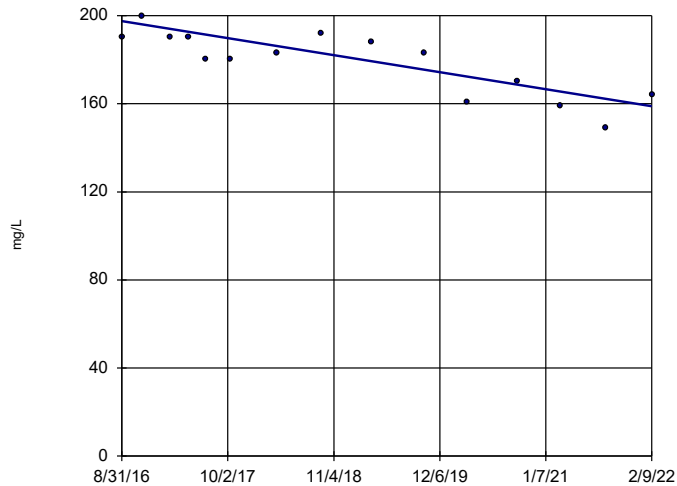


n = 15  
 Slope = -19.14  
 units per year.  
 Mann-Kendall  
 statistic = -92  
 critical = -53  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWC-45

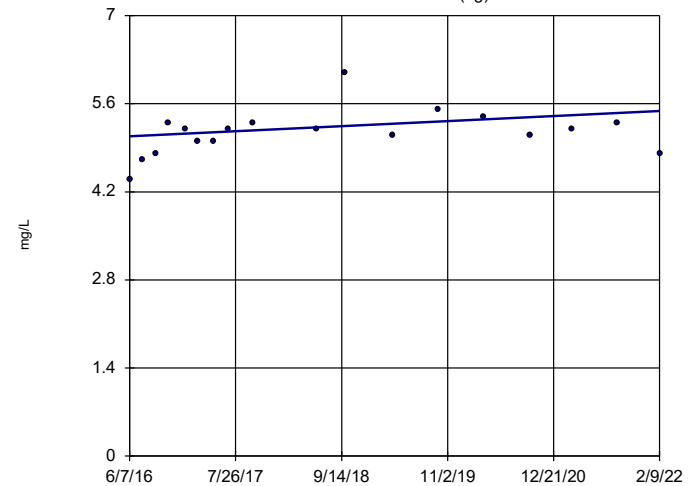


n = 15  
 Slope = -7.091  
 units per year.  
 Mann-Kendall  
 statistic = -64  
 critical = -53  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-17S (bg)



n = 18  
 Slope = 0.07043  
 units per year.  
 Mann-Kendall  
 statistic = 47  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

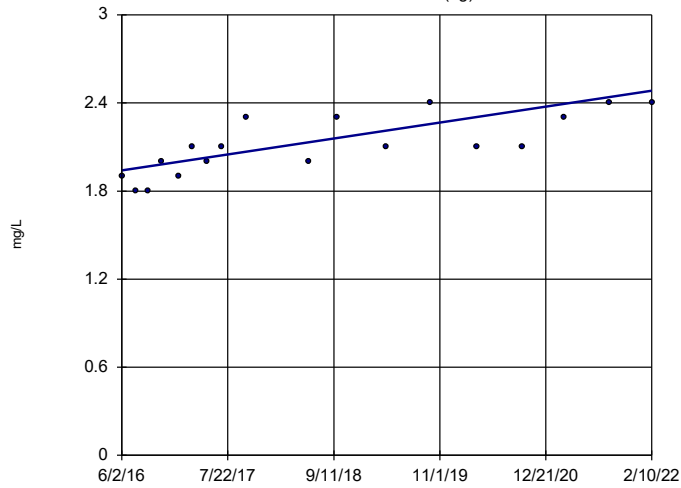
Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1





### Sen's Slope Estimator

YGWA-5I (bg)

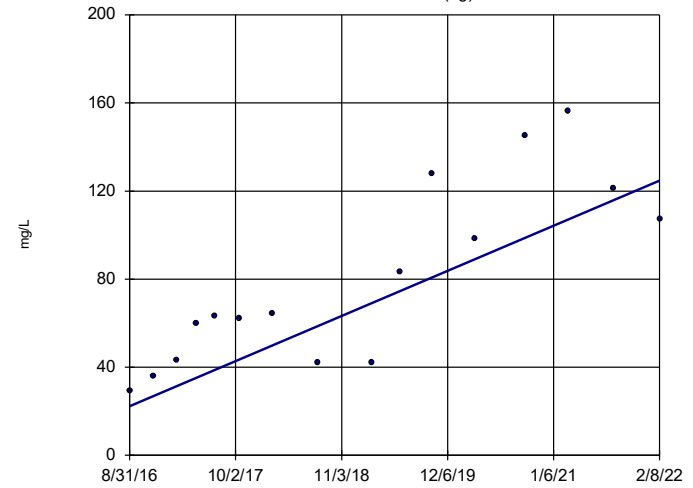


n = 18  
 Slope = 0.0955  
 units per year.  
 Mann-Kendall  
 statistic = 100  
 critical = 68  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

GWA-2 (bg)

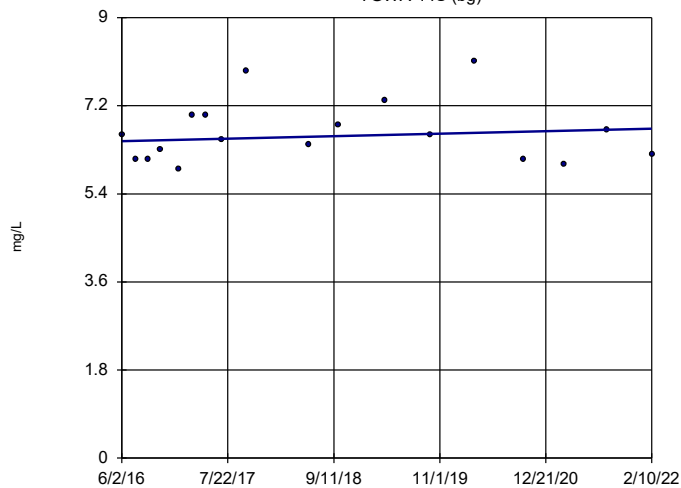


n = 16  
 Slope = 18.82  
 units per year.  
 Mann-Kendall  
 statistic = 81  
 critical = 58  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-14S (bg)

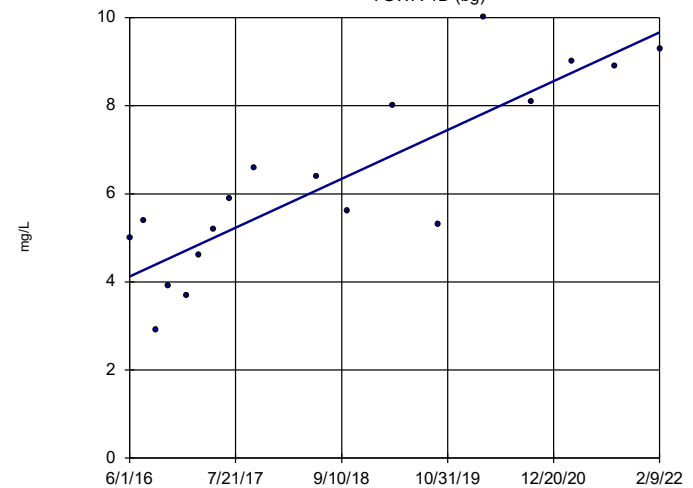


n = 18  
 Slope = 0.04468  
 units per year.  
 Mann-Kendall  
 statistic = 14  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-1D (bg)



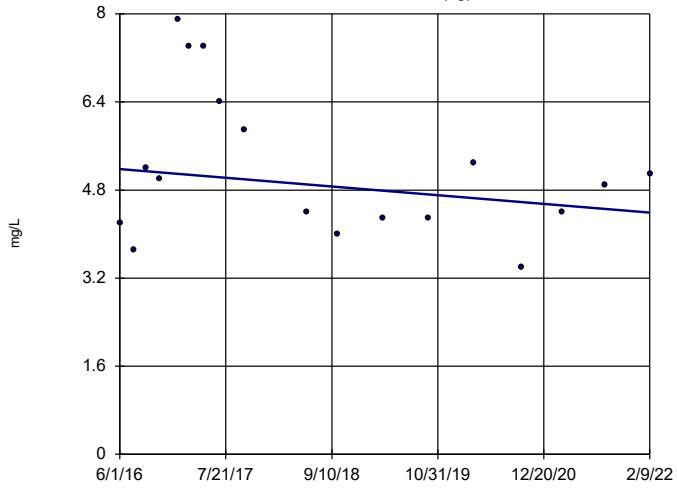
n = 18  
 Slope = 0.9733  
 units per year.  
 Mann-Kendall  
 statistic = 103  
 critical = 68  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1



### Sen's Slope Estimator

YGWA-11 (bg)

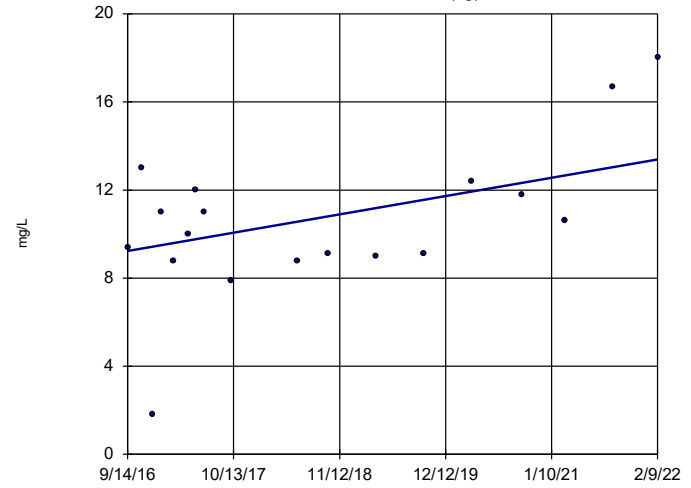


n = 18  
 Slope = -0.1386  
 units per year.  
 Mann-Kendall  
 statistic = -20  
 critical = -68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-21 (bg)

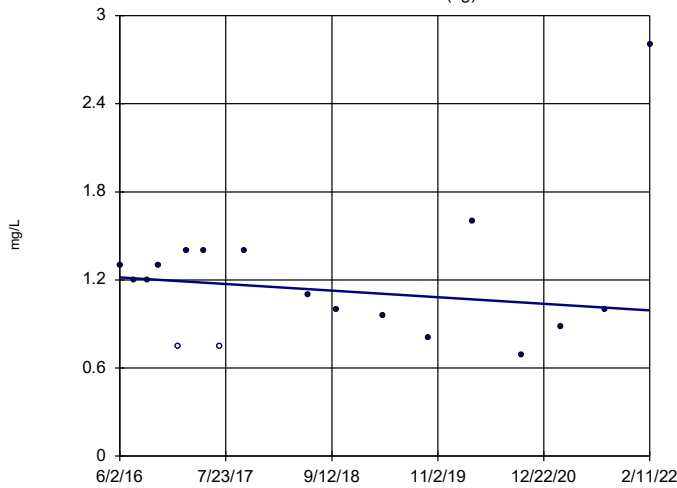


n = 18  
 Slope = 0.7686  
 units per year.  
 Mann-Kendall  
 statistic = 44  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-30I (bg)

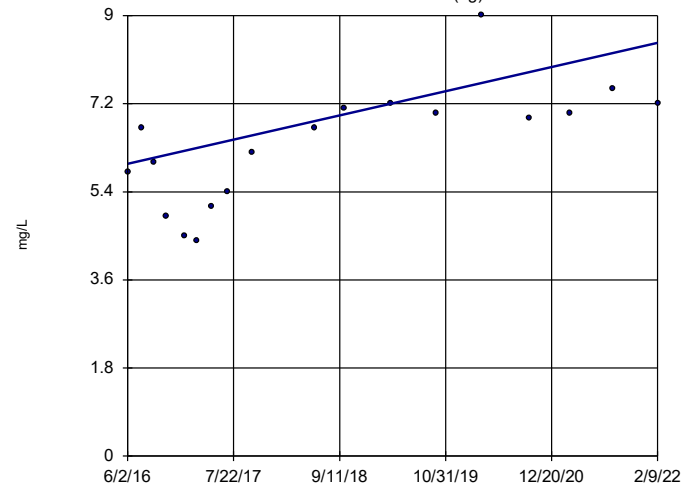


n = 18  
 Slope = -0.03944  
 units per year.  
 Mann-Kendall  
 statistic = -14  
 critical = -68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-3D (bg)

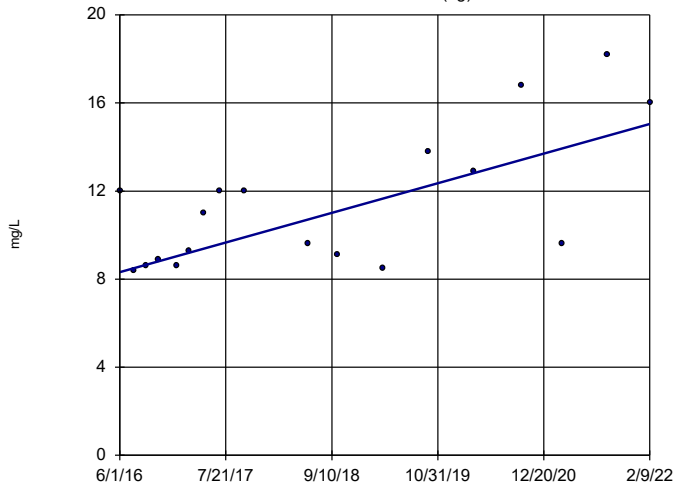


n = 18  
 Slope = 0.4345  
 units per year.  
 Mann-Kendall  
 statistic = 86  
 critical = 68  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-3I (bg)

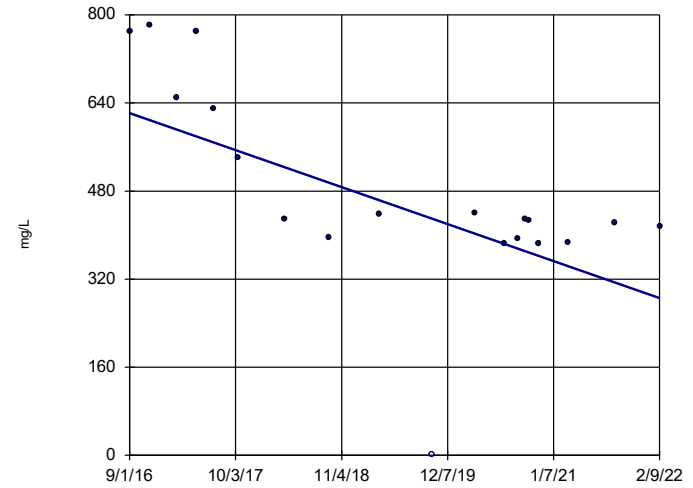


n = 18  
 Slope = 1.183  
 units per year.  
 Mann-Kendall  
 statistic = 74  
 critical = 68  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWC-46A

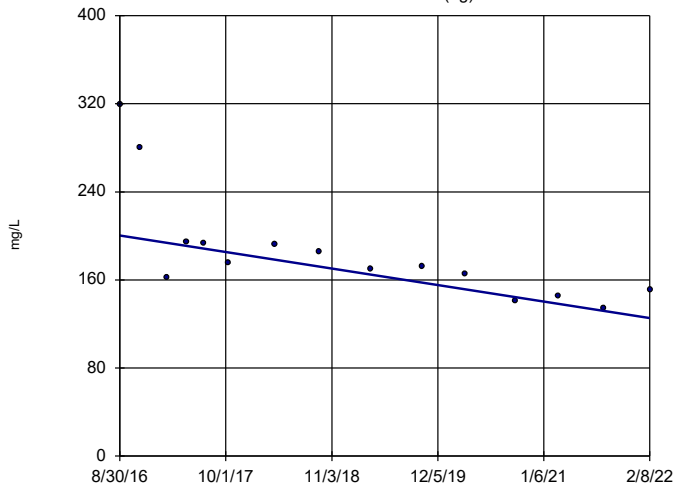


n = 19  
 Slope = -61.76  
 units per year.  
 Mann-Kendall  
 statistic = -98  
 critical = -74  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tests  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-47 (bg)

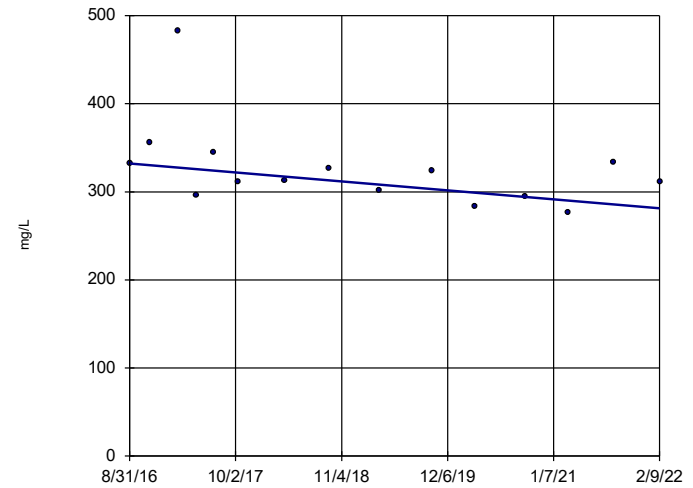


n = 15  
 Slope = -13.78  
 units per year.  
 Mann-Kendall  
 statistic = -75  
 critical = -53  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

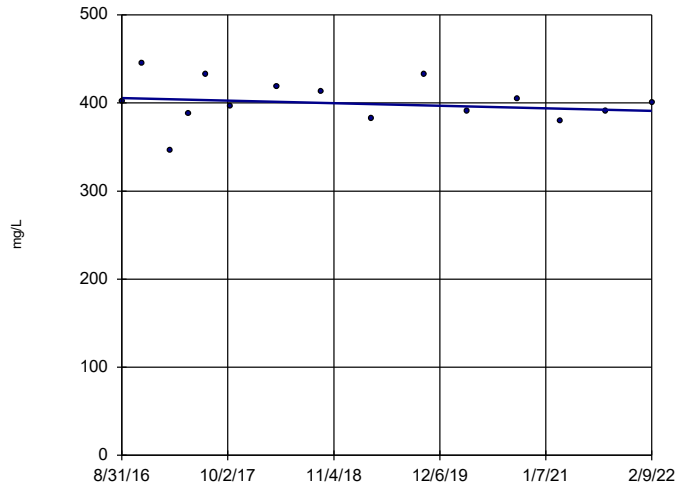
YGWC-44



n = 15  
 Slope = -9.353  
 units per year.  
 Mann-Kendall  
 statistic = -40  
 critical = -53  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

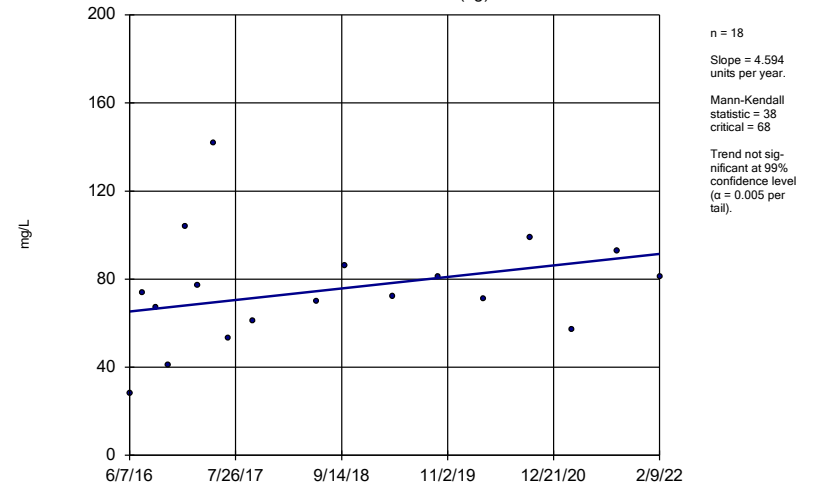
Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator YGWC-45



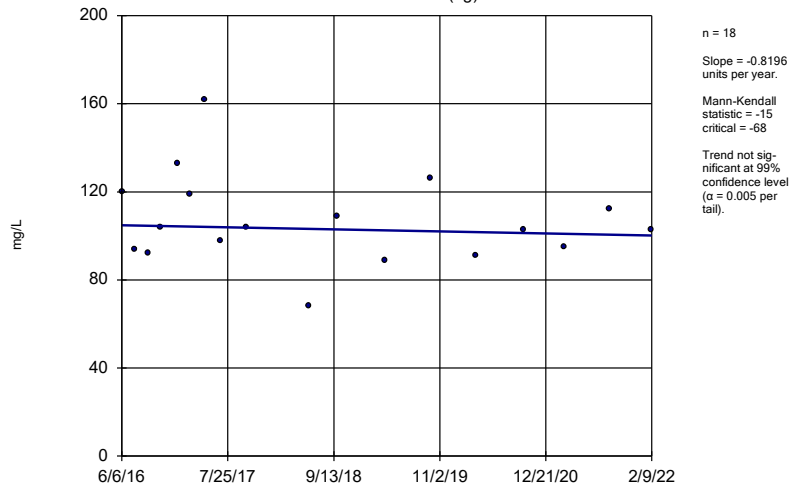
Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator YGWA-17S (bg)



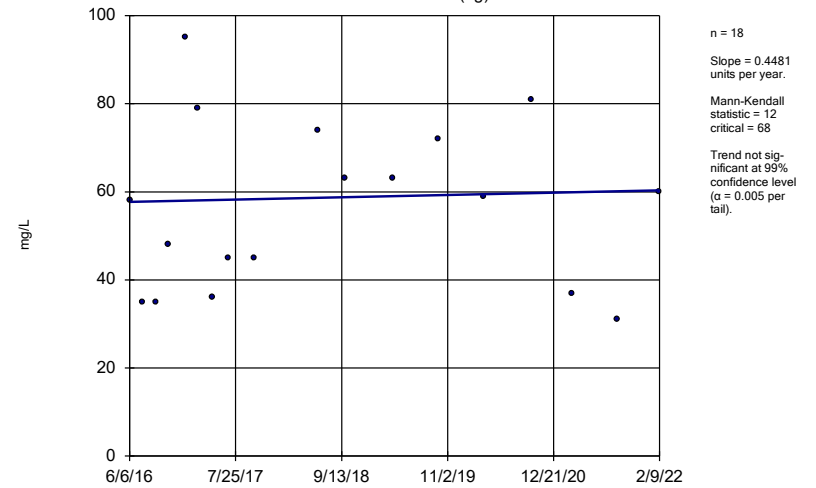
Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator YGWA-18I (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

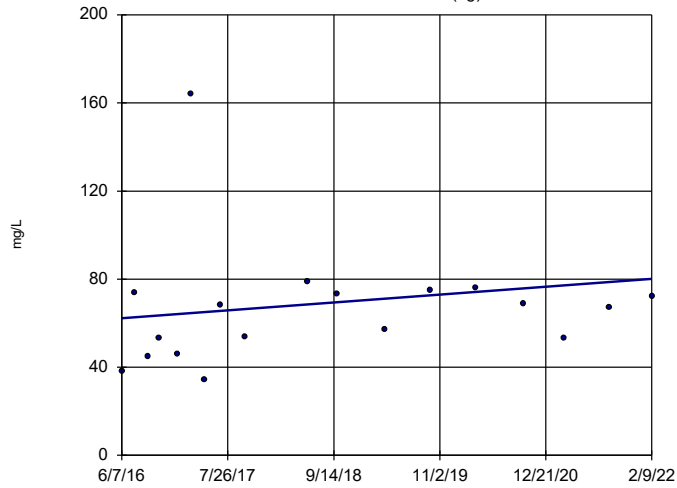
### Sen's Slope Estimator YGWA-18S (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-20S (bg)

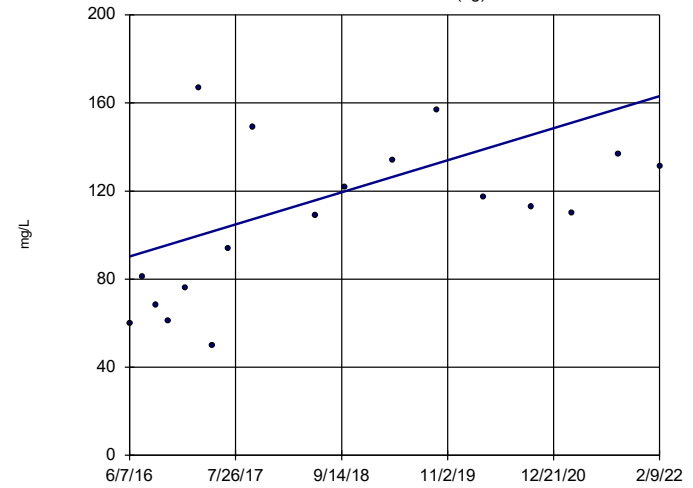


n = 18  
 Slope = 3.147  
 units per year.  
 Mann-Kendall  
 statistic = 36  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-21I (bg)

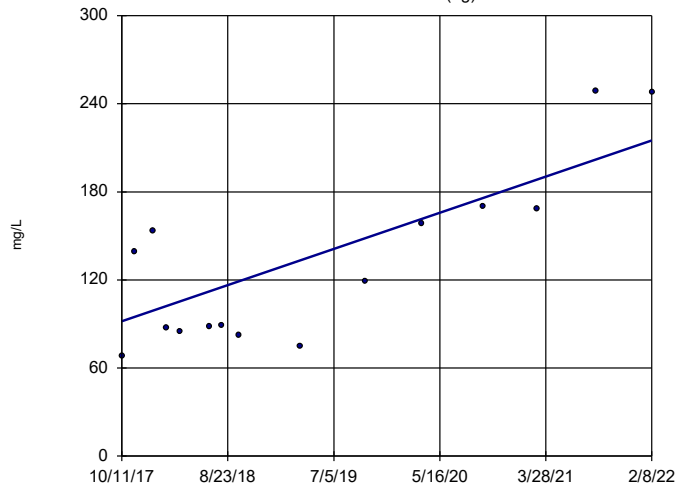


n = 18  
 Slope = 12.83  
 units per year.  
 Mann-Kendall  
 statistic = 63  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-39 (bg)

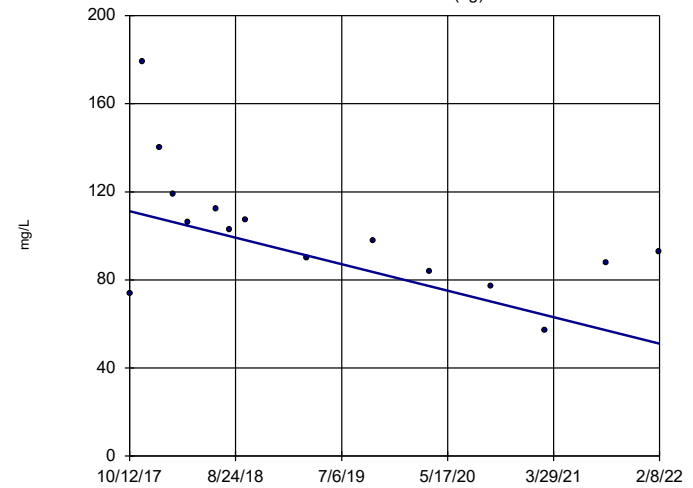


n = 15  
 Slope = 28.42  
 units per year.  
 Mann-Kendall  
 statistic = 53  
 critical = 53  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-40 (bg)

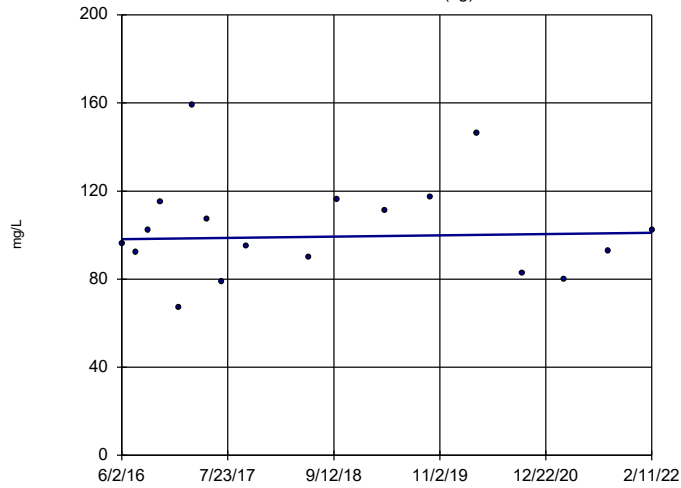


n = 15  
 Slope = -13.89  
 units per year.  
 Mann-Kendall  
 statistic = -55  
 critical = -53  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-4I (bg)

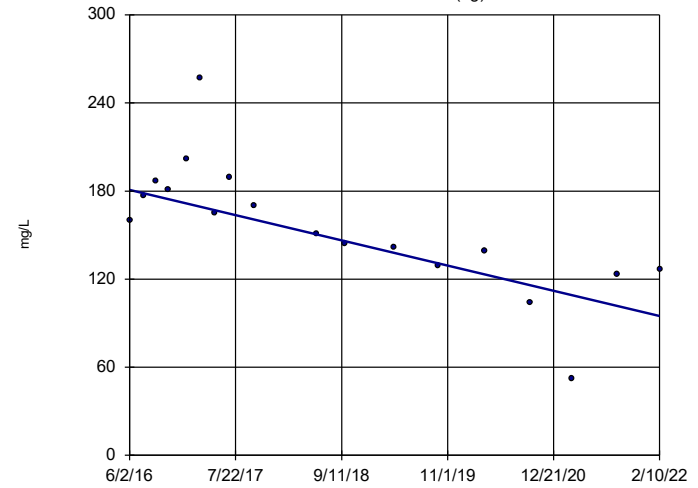


n = 18  
 Slope = 0.5267  
 units per year.  
 Mann-Kendall  
 statistic = 6  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-5D (bg)

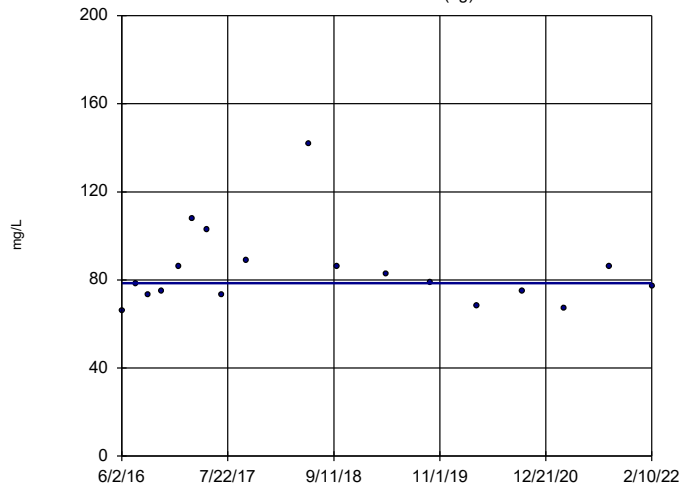


n = 18  
 Slope = -15.08  
 units per year.  
 Mann-Kendall  
 statistic = -97  
 critical = -68  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-5I (bg)

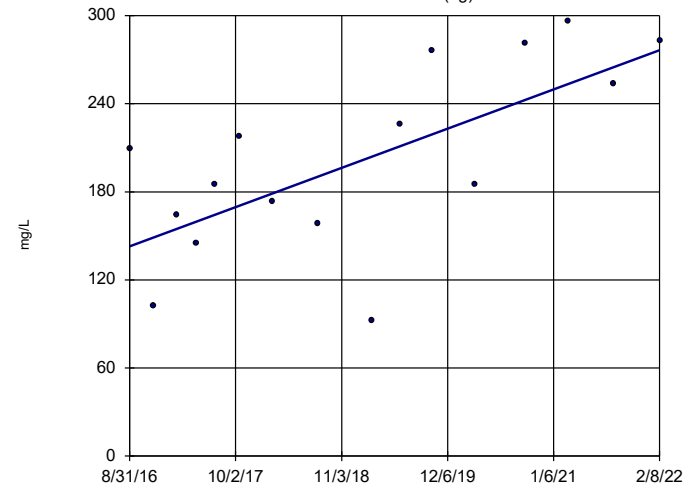


n = 18  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = -4  
 critical = -68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

GWA-2 (bg)

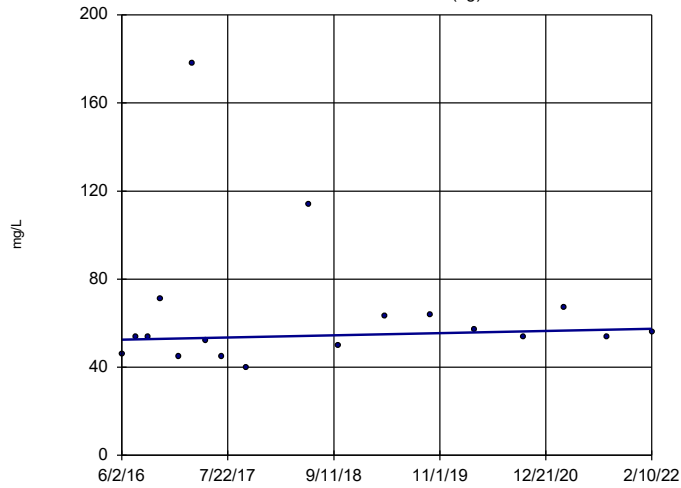


n = 16  
 Slope = 24.56  
 units per year.  
 Mann-Kendall  
 statistic = 61  
 critical = 58  
 Increasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-14S (bg)

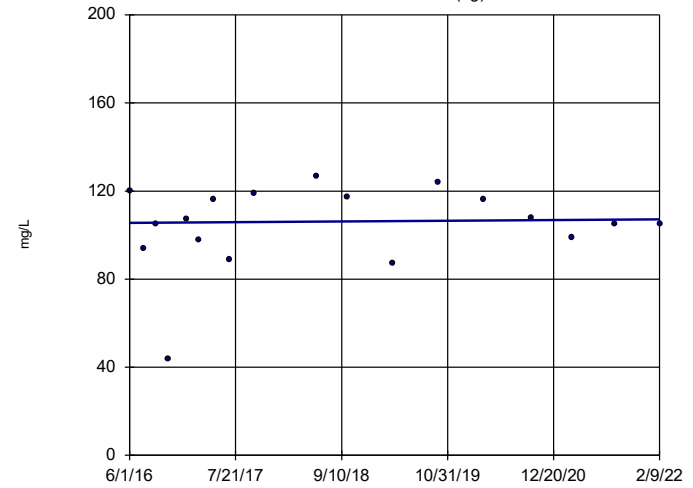


n = 18  
 Slope = 0.8555  
 units per year.  
 Mann-Kendall  
 statistic = 20  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-1D (bg)

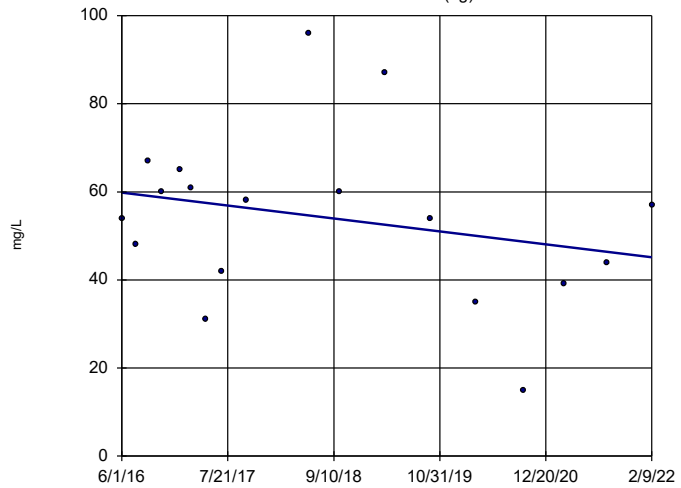


n = 18  
 Slope = 0.2702  
 units per year.  
 Mann-Kendall  
 statistic = 7  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-11 (bg)

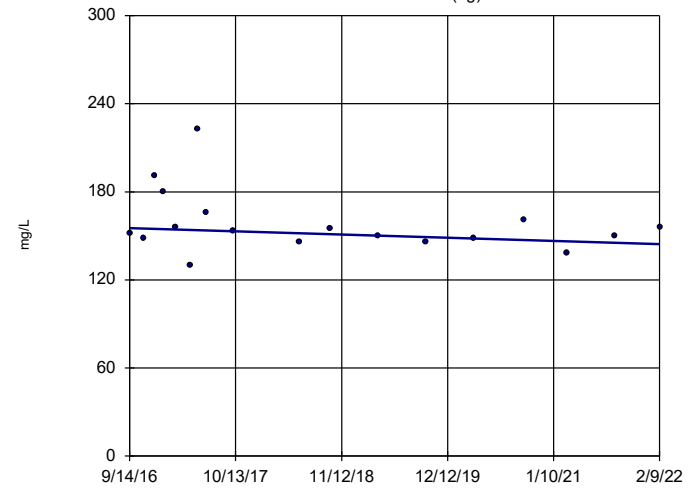


n = 18  
 Slope = -2.568  
 units per year.  
 Mann-Kendall  
 statistic = -31  
 critical = -68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

YGWA-2I (bg)

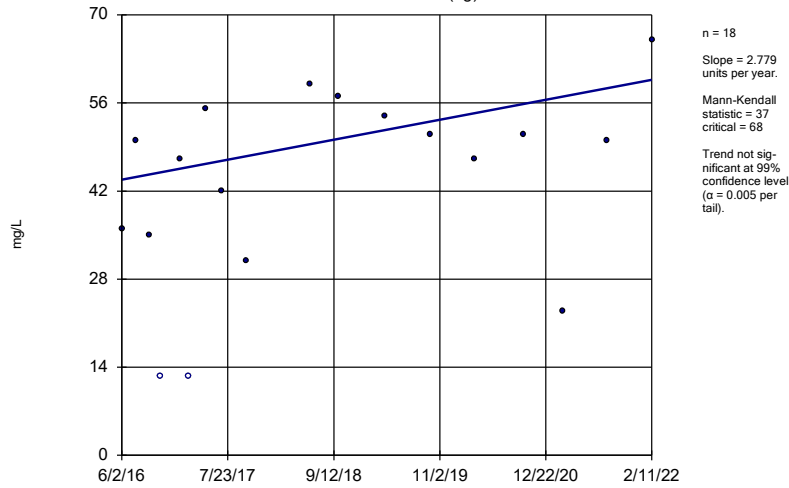


n = 18  
 Slope = -2.032  
 units per year.  
 Mann-Kendall  
 statistic = -29  
 critical = -68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

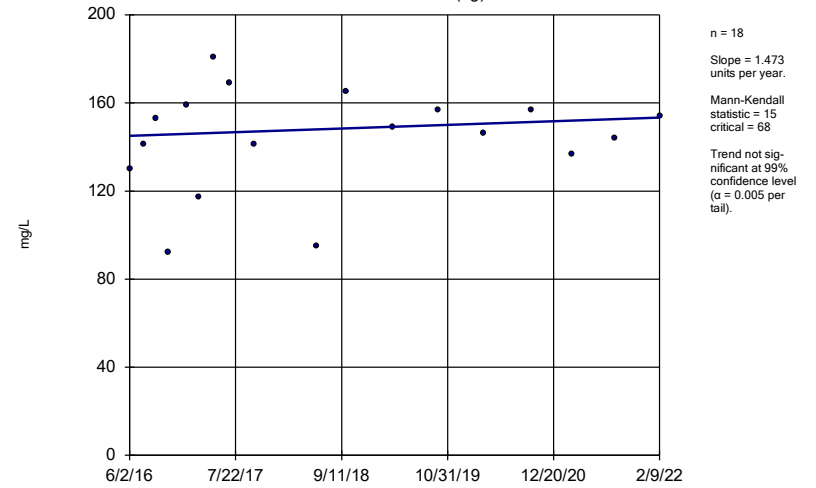
YGWA-30I (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

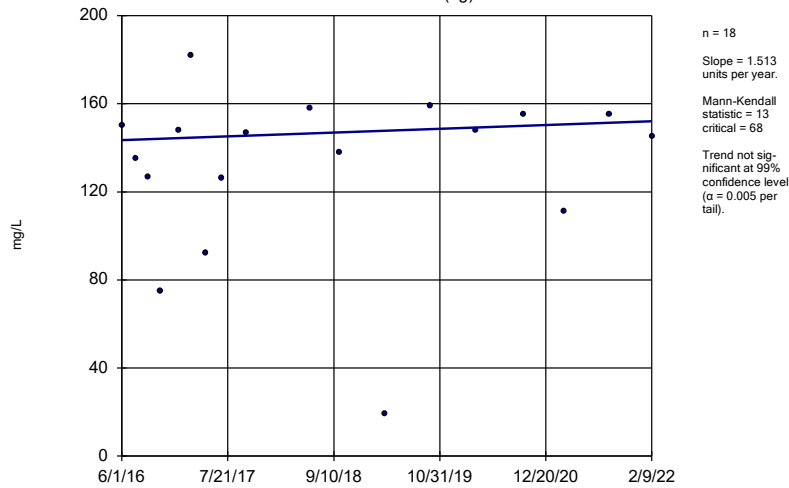
YGWA-3D (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator

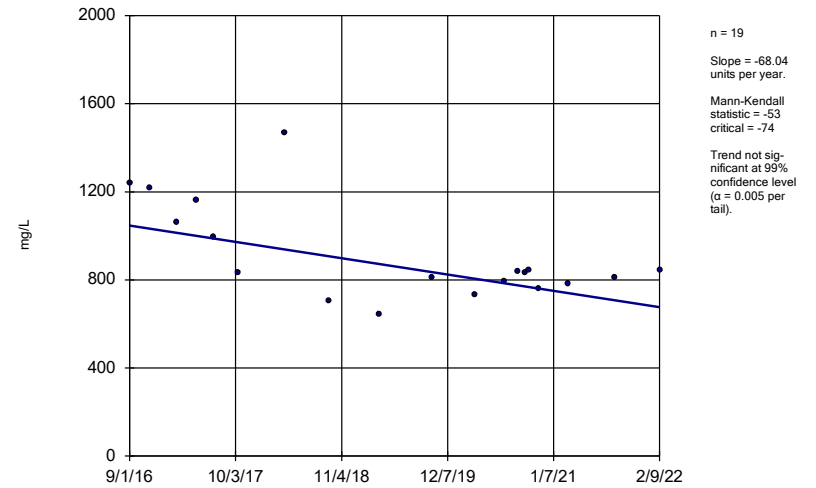
YGWA-3I (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

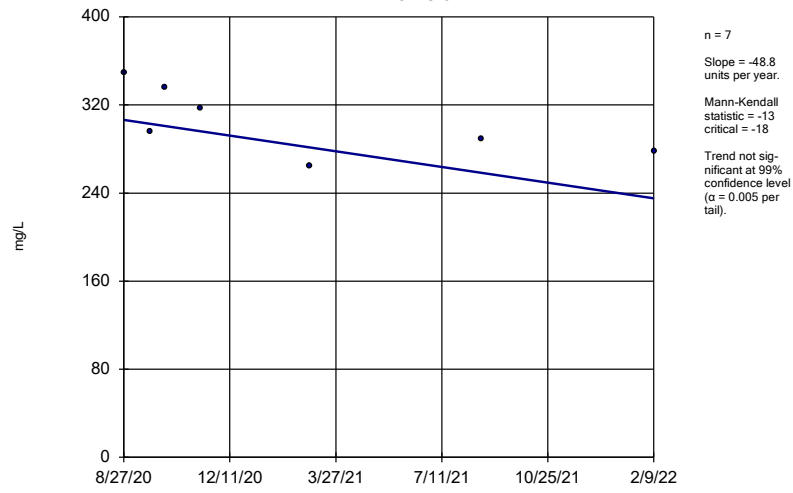
### Sen's Slope Estimator

YGWC-46A



Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Sen's Slope Estimator YGWC-52



Constituent: Total Dissolved Solids [TDS] Analysis Run 3/17/2022 2:52 PM View: Appendix III - Trend Tes  
Plant Yates Client: Southern Company Data: Yates Ash Pond1



FIGURE F.

# Appendix IV Welch's t-test/Mann-Whitney - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 4/27/2022, 12:06 PM

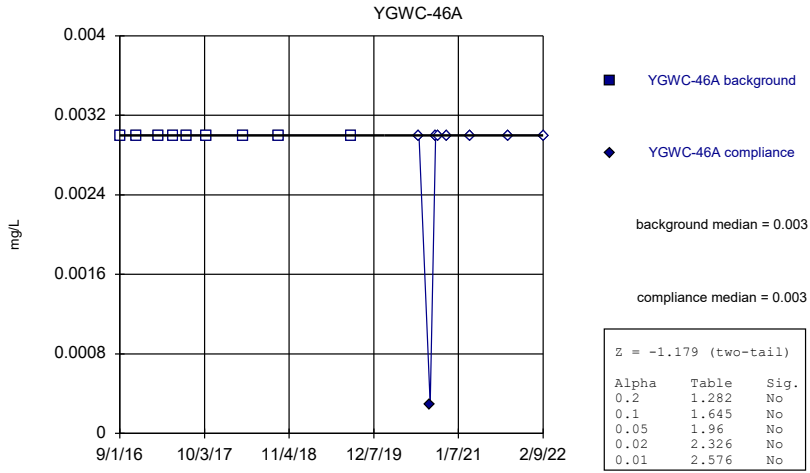
<u>Constituent</u>	<u>Well</u>	<u>Calc.</u>	<u>0.01</u>	<u>Method</u>
<b>Barium (mg/L)</b>	<b>YGWC-46A</b>	<b>3.6</b>	<b>Yes</b>	<b>Mann-W</b>
<b>Cobalt (mg/L)</b>	<b>YGWC-46A</b>	<b>-3.674</b>	<b>Yes</b>	<b>Mann-W</b>
<b>Lithium (mg/L)</b>	<b>YGWC-46A</b>	<b>3.317</b>	<b>Yes</b>	<b>Mann-W</b>

# Appendix IV Welch's t-test/Mann-Whitney - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 4/27/2022, 12:06 PM

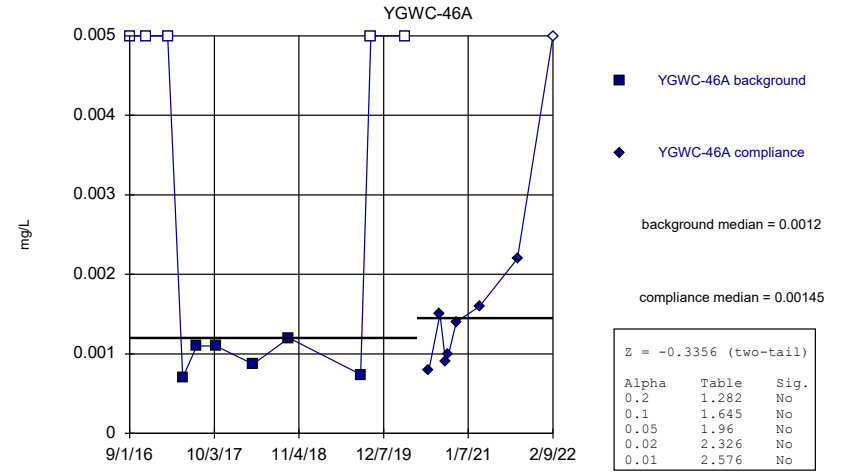
<u>Constituent</u>	<u>Well</u>	<u>Calc.</u>	<u>0.01</u>	<u>Method</u>
Antimony (mg/L)	YGWC-46A	-1.179	No	Mann-W
Arsenic (mg/L)	YGWC-46A	-0.3356	No	Mann-W
<b>Barium (mg/L)</b>	<b>YGWC-46A</b>	<b>3.6</b>	<b>Yes</b>	<b>Mann-W</b>
<b>Cobalt (mg/L)</b>	<b>YGWC-46A</b>	<b>-3.674</b>	<b>Yes</b>	<b>Mann-W</b>
Fluoride, total (mg/L)	YGWC-46A	-0.5962	No	Mann-W
Lead (mg/L)	YGWC-46A	-1.179	No	Mann-W
<b>Lithium (mg/L)</b>	<b>YGWC-46A</b>	<b>3.317</b>	<b>Yes</b>	<b>Mann-W</b>
Molybdenum (mg/L)	YGWC-46A	0.7451	No	Mann-W

Mann-Whitney (Wilcoxon Rank Sum)



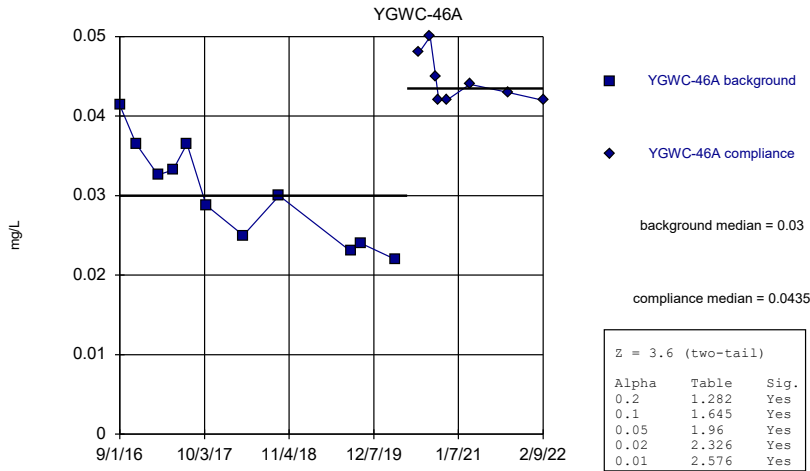
Constituent: Antimony Analysis Run 4/27/2022 12:05 PM View: Mann-Whitney  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Mann-Whitney (Wilcoxon Rank Sum)



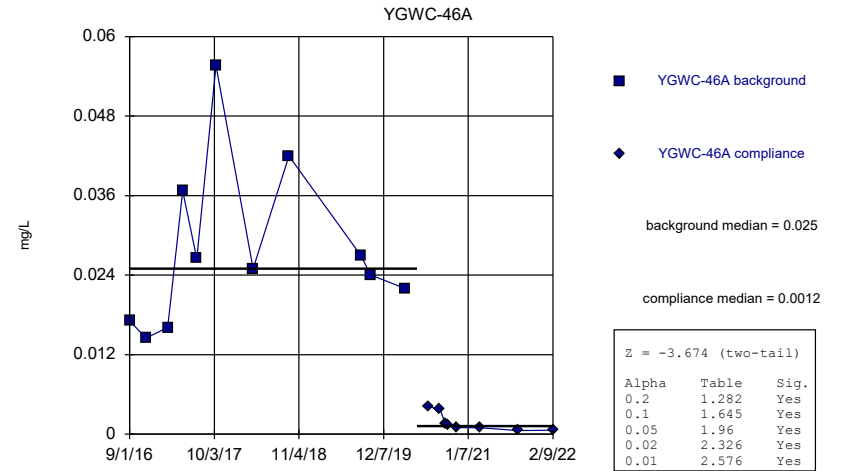
Constituent: Arsenic Analysis Run 4/27/2022 12:05 PM View: Mann-Whitney  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Mann-Whitney (Wilcoxon Rank Sum)



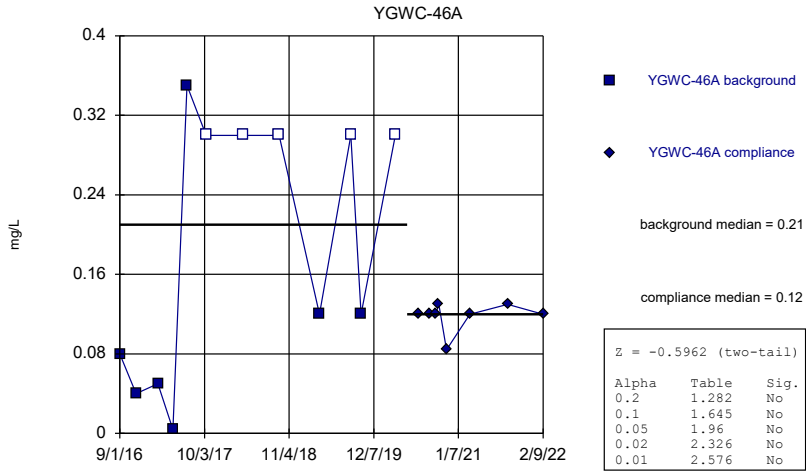
Constituent: Barium Analysis Run 4/27/2022 12:05 PM View: Mann-Whitney  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Mann-Whitney (Wilcoxon Rank Sum)



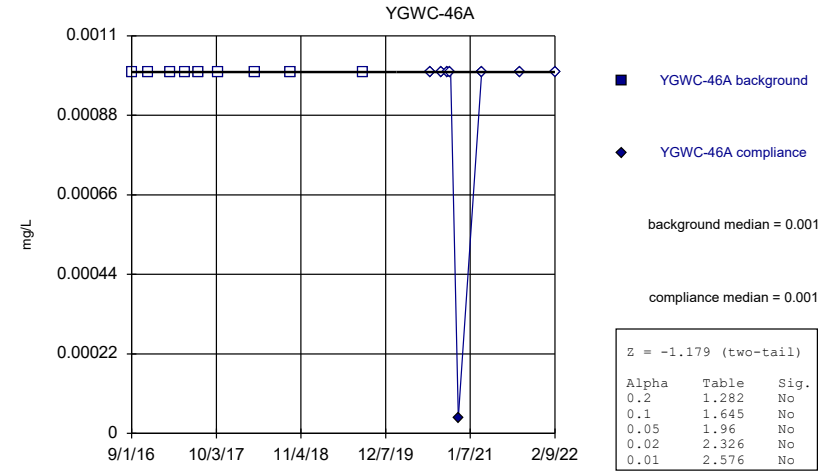
Constituent: Cobalt Analysis Run 4/27/2022 12:05 PM View: Mann-Whitney  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Mann-Whitney (Wilcoxon Rank Sum)



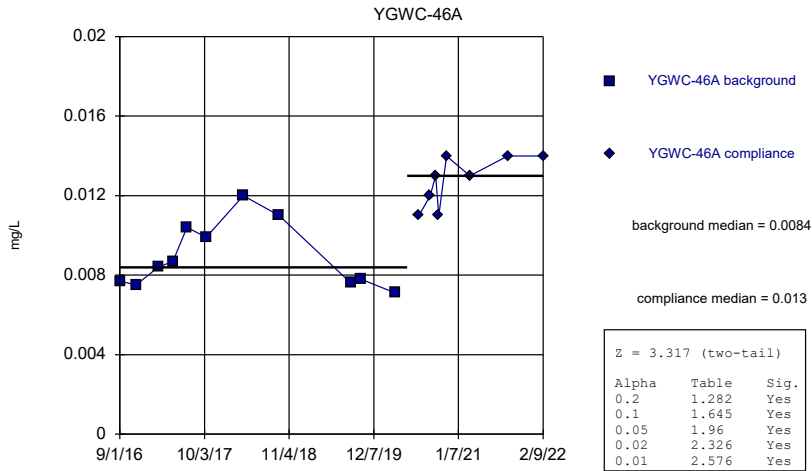
Constituent: Fluoride, total Analysis Run 4/27/2022 12:05 PM View: Mann-Whitney  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Mann-Whitney (Wilcoxon Rank Sum)



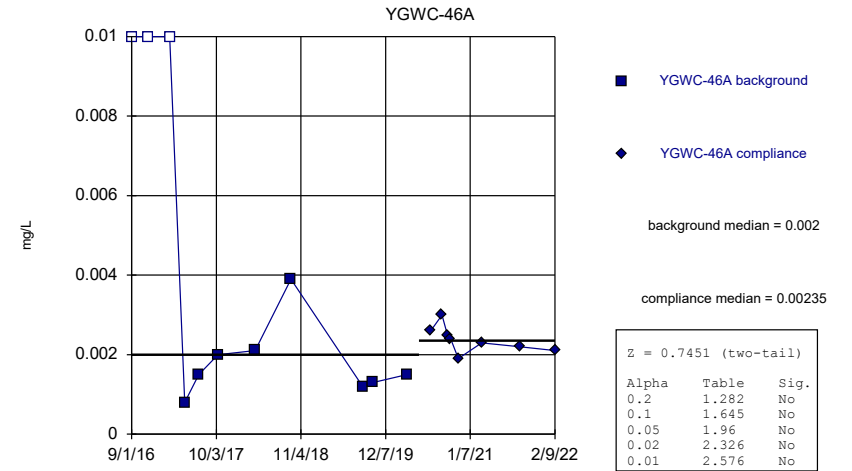
Constituent: Lead Analysis Run 4/27/2022 12:05 PM View: Mann-Whitney  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Mann-Whitney (Wilcoxon Rank Sum)



Constituent: Lithium Analysis Run 4/27/2022 12:05 PM View: Mann-Whitney  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Mann-Whitney (Wilcoxon Rank Sum)



Constituent: Molybdenum Analysis Run 4/27/2022 12:05 PM View: Mann-Whitney  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

# Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Antimony (mg/L) Analysis Run 4/27/2022 12:06 PM View: Mann-Whitney  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A	YGWC-46A
9/1/2016	<0.003	
11/16/2016	<0.003	
2/27/2017	<0.003	
5/8/2017	<0.003	
7/13/2017	<0.003	
10/11/2017	<0.003	
4/4/2018	<0.003	
9/19/2018	<0.003	
8/21/2019	<0.003	
7/6/2020		<0.003
8/28/2020		0.00029 (J)
9/23/2020		<0.003
10/7/2020		<0.003
11/12/2020		<0.003
3/2/2021		<0.003
8/27/2021		<0.003
2/9/2022		<0.003

# Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Arsenic (mg/L) Analysis Run 4/27/2022 12:06 PM View: Mann-Whitney

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A	YGWC-46A
9/1/2016	<0.005	
11/16/2016	<0.005	
2/27/2017	<0.005	
5/8/2017	0.0007 (J)	
7/13/2017	0.0011 (J)	
10/11/2017	0.0011 (J)	
4/4/2018	0.00087 (J)	
9/19/2018	0.0012 (J)	
8/21/2019	0.00074 (J)	
10/9/2019	<0.005	
3/17/2020	<0.005	
7/6/2020		0.00079 (J)
8/28/2020		0.0015 (J)
9/23/2020		0.00091 (J)
10/7/2020		0.001 (J)
11/12/2020		0.0014 (J)
3/2/2021		0.0016 (J)
8/27/2021		0.0022 (J)
2/9/2022		<0.005

# Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Barium (mg/L) Analysis Run 4/27/2022 12:06 PM View: Mann-Whitney

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A	YGWC-46A
9/1/2016	0.0414	
11/16/2016	0.0365	
2/27/2017	0.0326	
5/8/2017	0.0332	
7/13/2017	0.0365	
10/11/2017	0.0288	
4/4/2018	0.025	
9/19/2018	0.03	
8/21/2019	0.023	
10/9/2019	0.024	
3/17/2020	0.022	
7/6/2020		0.048
8/28/2020		0.05
9/23/2020		0.045
10/7/2020		0.042
11/12/2020		0.042
3/2/2021		0.044
8/27/2021		0.043
2/9/2022		0.042



# Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Cobalt (mg/L) Analysis Run 4/27/2022 12:06 PM View: Mann-Whitney

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A	YGWC-46A
9/1/2016	0.0171	
11/16/2016	0.0145	
2/27/2017	0.0161	
5/8/2017	0.0367	
7/13/2017	0.0265	
10/11/2017	0.0556	
4/4/2018	0.025	
9/19/2018	0.042	
8/21/2019	0.027	
10/9/2019	0.024	
3/17/2020	0.022	
7/6/2020		0.0041 (J)
8/28/2020		0.0038 (J)
9/23/2020		0.0015 (J)
10/7/2020		0.0014 (J)
11/12/2020		0.001 (J)
3/2/2021		0.00096 (J)
8/27/2021		0.00056 (J)
2/9/2022		0.0006 (J)

# Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride, total (mg/L) Analysis Run 4/27/2022 12:06 PM View: Mann-Whitney

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A	YGWC-46A
9/1/2016	0.08 (J)	
11/16/2016	0.04 (J)	
2/27/2017	0.05 (J)	
5/8/2017	0.004 (J)	
7/13/2017	0.35	
10/11/2017	<0.3	
4/4/2018	<0.3	
9/19/2018	<0.3	
3/27/2019	0.12 (J)	
8/21/2019	<0.3	
10/9/2019	0.12 (J)	
3/17/2020	<0.3	
7/6/2020		0.12
8/28/2020		0.12
9/23/2020		0.12
10/7/2020		0.13
11/12/2020		0.084 (J)
3/2/2021		0.12
8/27/2021		0.13
2/9/2022		0.12

# Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Lead (mg/L) Analysis Run 4/27/2022 12:06 PM View: Mann-Whitney  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A	YGWC-46A
9/1/2016	<0.001	
11/16/2016	<0.001	
2/27/2017	<0.001	
5/8/2017	<0.001	
7/13/2017	<0.001	
10/11/2017	<0.001	
4/4/2018	<0.001	
9/19/2018	<0.001	
8/21/2019	<0.001	
7/6/2020		<0.001
8/28/2020		<0.001
9/23/2020		<0.001
10/7/2020		<0.001
11/12/2020		4.4E-05 (J)
3/2/2021		<0.001
8/27/2021		<0.001
2/9/2022		<0.001

# Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Lithium (mg/L) Analysis Run 4/27/2022 12:06 PM View: Mann-Whitney

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A	YGWC-46A
9/1/2016	0.0077 (J)	
11/16/2016	0.0075 (J)	
2/27/2017	0.0084 (J)	
5/8/2017	0.0087 (J)	
7/13/2017	0.0104 (J)	
10/11/2017	0.0099 (J)	
4/4/2018	0.012 (J)	
9/19/2018	0.011 (J)	
8/21/2019	0.0076 (J)	
10/9/2019	0.0078 (J)	
3/17/2020	0.0071 (J)	
7/6/2020		0.011 (J)
8/28/2020		0.012 (J)
9/23/2020		0.013 (J)
10/7/2020		0.011 (J)
11/12/2020		0.014 (J)
3/2/2021		0.013 (J)
8/27/2021		0.014 (J)
2/9/2022		0.014 (J)

# Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Molybdenum (mg/L) Analysis Run 4/27/2022 12:06 PM View: Mann-Whitney

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A	YGWC-46A
9/1/2016	<0.01	
11/16/2016	<0.01	
2/27/2017	<0.01	
5/8/2017	0.0008 (J)	
7/13/2017	0.0015 (J)	
10/11/2017	0.002 (J)	
4/4/2018	0.0021 (J)	
9/19/2018	0.0039 (J)	
8/21/2019	0.0012 (J)	
10/9/2019	0.0013 (J)	
3/17/2020	0.0015 (J)	
7/6/2020		0.0026 (J)
8/28/2020		0.003 (J)
9/23/2020		0.0025 (J)
10/7/2020		0.0024 (J)
11/12/2020		0.0019 (J)
3/2/2021		0.0023 (J)
8/27/2021		0.0022 (J)
2/9/2022		0.0021 (J)

FIGURE G.

# Upper Tolerance Limits Summary Table

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 4/27/2022, 12:19 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>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	0.0047	n/a	n/a	n/a	n/a	353	n/a	n/a	87.25	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	401	n/a	n/a	75.06	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.071	n/a	n/a	n/a	n/a	401	n/a	n/a	2.743	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	385	n/a	n/a	80.26	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.00063	n/a	n/a	n/a	n/a	385	n/a	n/a	95.58	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0093	n/a	n/a	n/a	n/a	353	n/a	n/a	79.6	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.035	n/a	n/a	n/a	n/a	396	n/a	n/a	69.19	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.92	n/a	n/a	n/a	n/a	380	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride, total (mg/L)	n/a	0.68	n/a	n/a	n/a	n/a	400	n/a	n/a	67.5	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	n/a	355	n/a	n/a	84.51	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	n/a	380	n/a	n/a	26.32	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	n/a	309	n/a	n/a	93.2	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.014	n/a	n/a	n/a	n/a	344	n/a	n/a	60.17	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	383	n/a	n/a	91.91	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	319	n/a	n/a	96.87	n/a	n/a	NaN	NP Inter(NDs)

FIGURE H.



<b>YATES ASH POND 1 GWPS</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>GWPS</b>
Antimony, Total (mg/L)	0.006		0.0047	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.071	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.00063	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.92	6.92
Fluoride, Total (mg/L)	4		0.68	4
Lead, Total (mg/L)		0.015	0.0013	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residual*

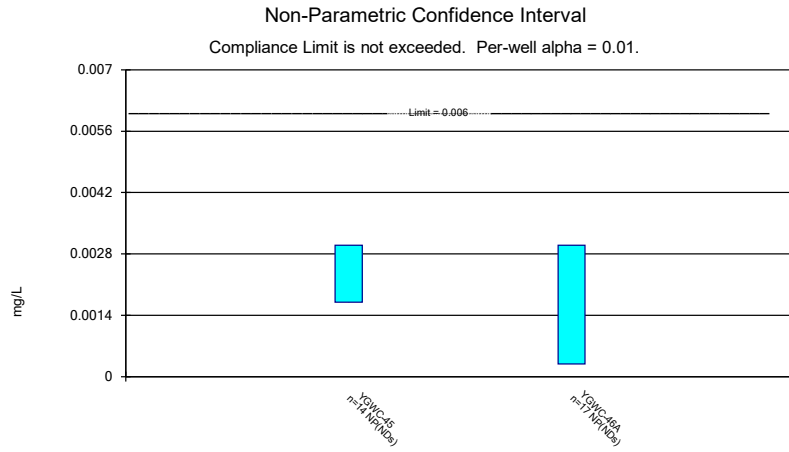
*\*GWPS = Groundwater Protection Standard*

FIGURE I.

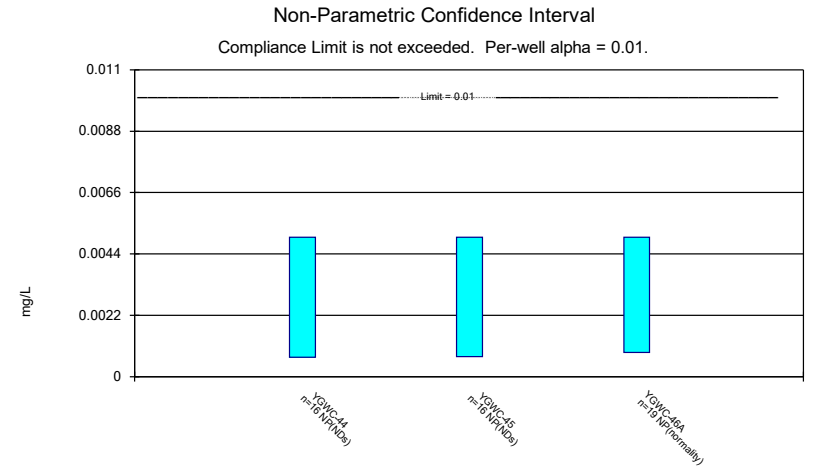
# Confidence Intervals - All Results (No Significant)

Plant Yates    Client: Southern Company    Data: Yates Ash Pond1    Printed 4/27/2022, 12:27 PM

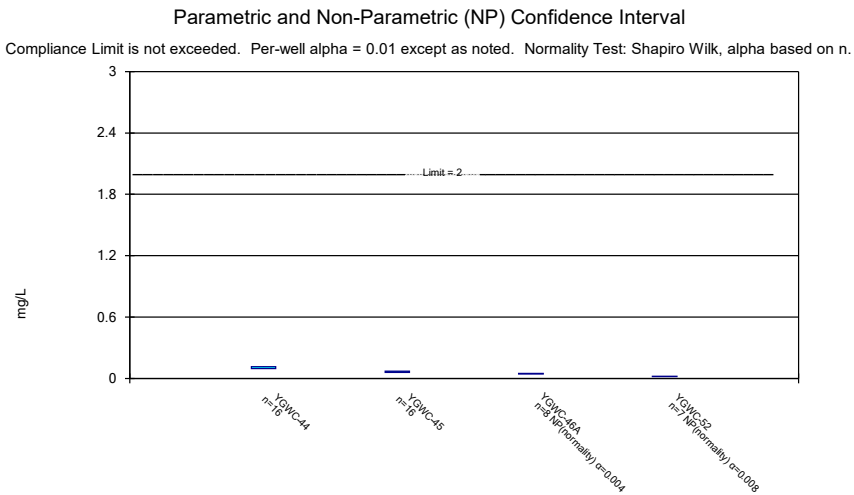
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-45	0.003	0.0017	0.006	No	14	0.002907	0.0003474	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-46A	0.003	0.00029	0.006	No	17	0.002841	0.0006573	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-44	0.005	0.0007	0.01	No	16	0.003664	0.002048	68.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00072	0.01	No	16	0.003919	0.001933	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-46A	0.005	0.00087	0.01	No	19	0.002374	0.001865	31.58	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-44	0.1139	0.09519	2	No	16	0.1046	0.0144	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.07061	0.05758	2	No	16	0.06409	0.01001	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46A	0.05	0.042	2	No	8	0.0445	0.003024	0	None	No	0.004	NP (normality)
Barium (mg/L)	YGWC-52	0.021	0.018	2	No	7	0.01943	0.001134	0	None	No	0.008	NP (normality)
Cadmium (mg/L)	YGWC-46A	0.0005	0.00012	0.005	No	16	0.0004275	0.0001559	81.25	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-45	0.0061	0.0006	0.1	No	14	0.004449	0.001661	78.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-52	0.005	0.00073	0.1	No	7	0.002676	0.002179	42.86	None	No	0.008	NP (normality)
Cobalt (mg/L)	YGWC-44	0.004	0.0017	0.035	No	16	0.003262	0.002618	6.25	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-45	0.0008461	0.0006232	0.035	No	15	0.0007347	0.0001644	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46A	0.00305	0.0005501	0.035	No	8	0.00174	0.001406	0	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	YGWC-52	0.002068	0.001246	0.035	No	7	0.001657	0.0003457	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	1.006	0.2896	6.92	No	16	0.7131	0.624	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.526	0.9474	6.92	No	16	1.237	0.4447	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46A	1.71	1.029	6.92	No	19	1.369	0.5814	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-52	0.9886	0.3443	6.92	No	6	0.7012	0.26	0	None	x^2	0.01	Param.
Fluoride, total (mg/L)	YGWC-44	0.12	0.07	4	No	17	0.09588	0.01698	82.35	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	YGWC-45	0.2	0.075	4	No	17	0.1623	0.1631	23.53	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	YGWC-46A	0.12	0.084	4	No	20	0.1104	0.06526	25	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-45	0.001	0.0001	0.015	No	14	0.0009357	0.0002405	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-46A	0.001	0.000044	0.015	No	17	0.0009438	0.0002319	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-52	0.001	0.00006	0.015	No	7	0.0004719	0.0004942	42.86	None	No	0.008	NP (normality)
Lithium (mg/L)	YGWC-44	0.0135	0.01245	0.04	No	16	0.01298	0.0008054	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.0147	0.012	0.04	No	16	0.0132	0.001573	0	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-46A	0.014	0.011	0.04	No	8	0.01275	0.001282	0	None	No	0.004	NP (normality)
Lithium (mg/L)	YGWC-52	0.004672	0.004099	0.04	No	7	0.004386	0.000241	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0002	0.00006	0.002	No	12	0.0001883	0.00004041	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0002	0.000071	0.002	No	12	0.0001892	0.00003724	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-46A	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.0005	0.1	No	16	0.009406	0.002375	93.75	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.0024	0.0012	0.1	No	16	0.003037	0.003469	18.75	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-46A	0.0039	0.0015	0.1	No	19	0.003332	0.003045	15.79	None	No	0.01	NP (normality)
Thallium (mg/L)	YGWC-44	0.001	0.00008	0.002	No	14	0.0009343	0.0002459	92.86	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-46A	0.001	0.000073	0.002	No	16	0.0009421	0.0002318	93.75	None	No	0.01	NP (NDs)



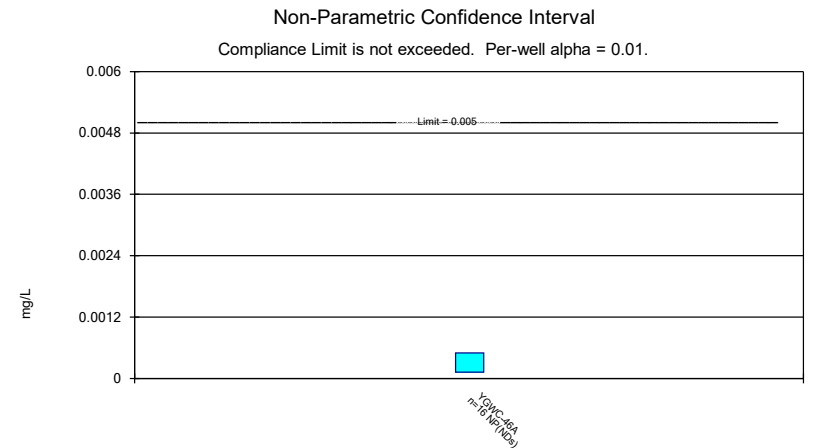
Constituent: Antimony Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1



Constituent: Arsenic Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1



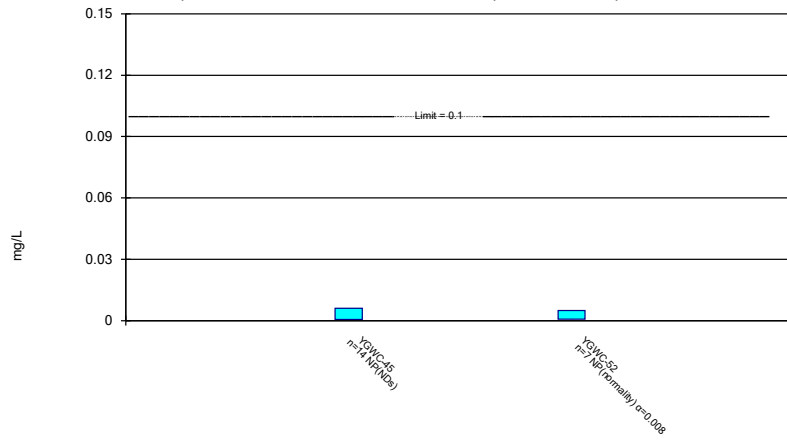
Constituent: Barium Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1



Constituent: Cadmium Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

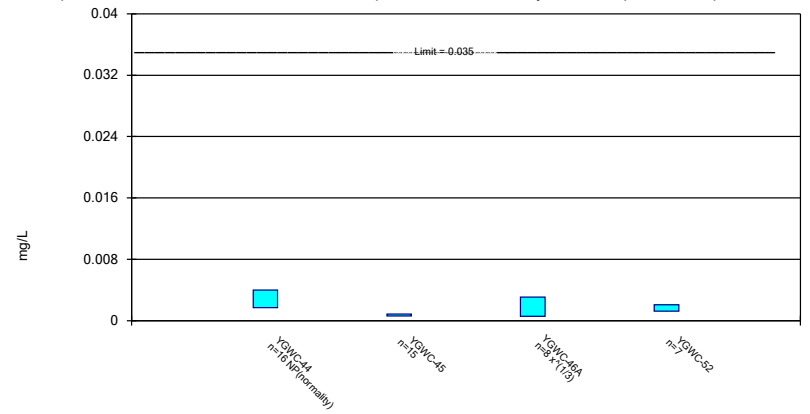
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Parametric and Non-Parametric (NP) Confidence Interval

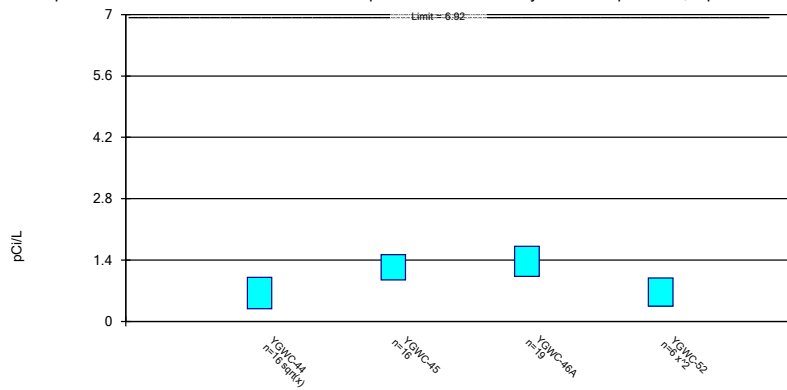
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Parametric Confidence Interval

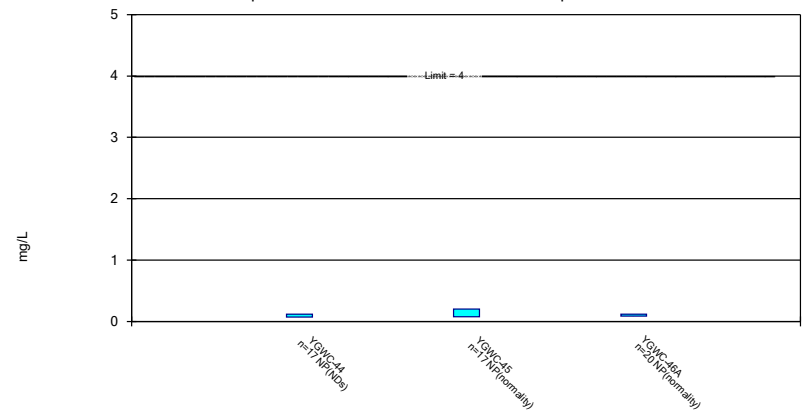
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confide  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

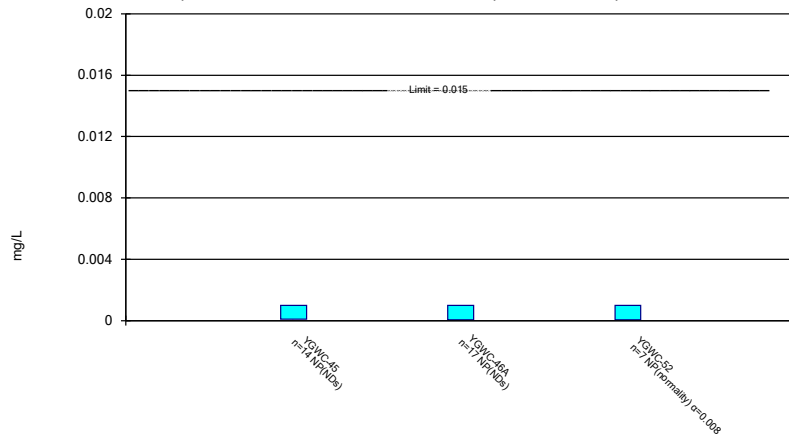
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Fluoride, total Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
 Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

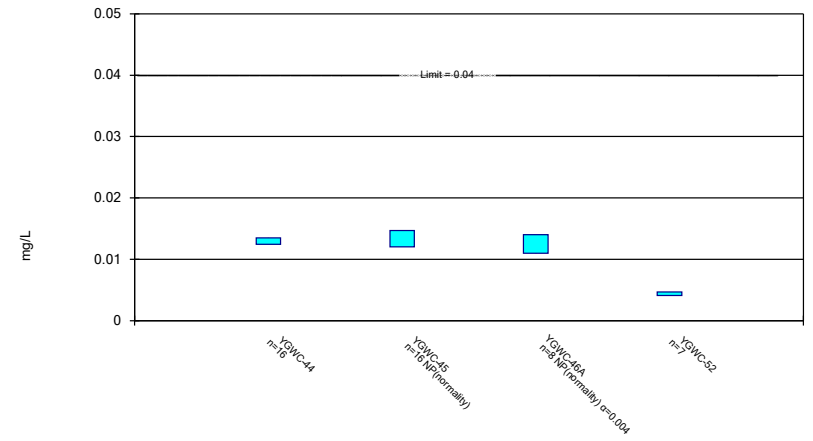
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Parametric and Non-Parametric (NP) Confidence Interval

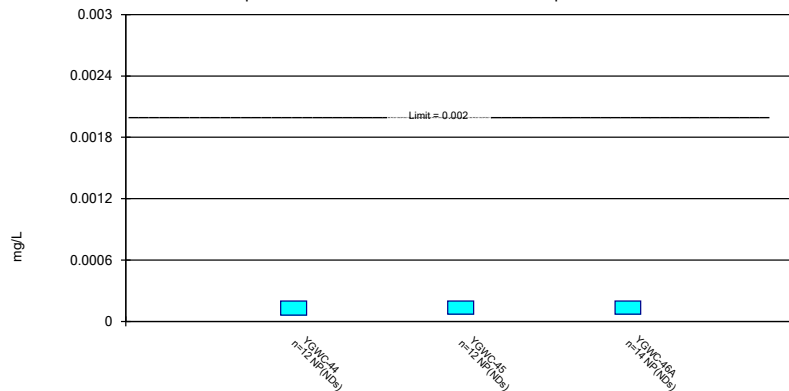
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

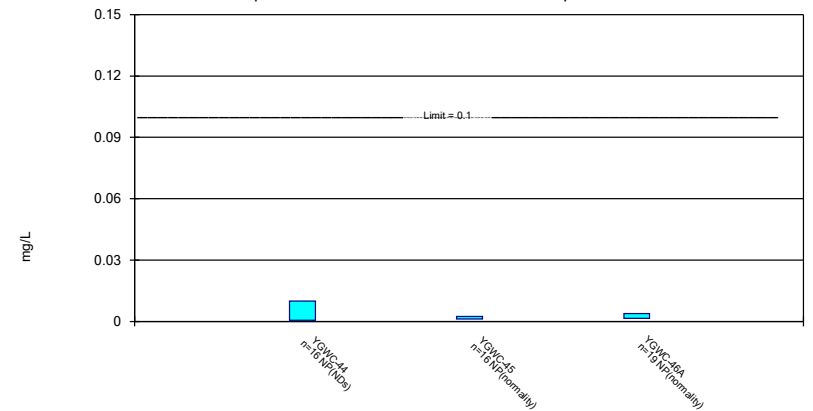
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

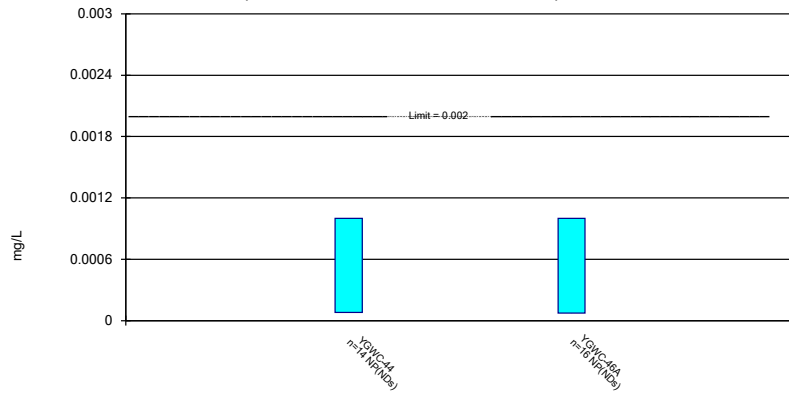
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Molybdenum Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

### Non-Parametric Confidence Interval

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



Constituent: Thallium Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals  
Plant Yates Client: Southern Company Data: Yates Ash Pond1

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-45	YGWC-46A
8/31/2016	<0.003	
9/1/2016		<0.003
11/14/2016	<0.003	
11/16/2016		<0.003
2/27/2017	<0.003	<0.003
5/8/2017		<0.003
5/9/2017	<0.003	
7/13/2017	<0.003	<0.003
10/10/2017	<0.003	
10/11/2017		<0.003
4/3/2018	<0.003	
4/4/2018		<0.003
9/19/2018	<0.003	<0.003
8/20/2019	<0.003	
8/21/2019		<0.003
7/6/2020		<0.003
8/28/2020	0.0017 (J)	0.00029 (J)
9/23/2020	<0.003	<0.003
10/7/2020		<0.003
11/12/2020		<0.003
3/1/2021	<0.003	
3/2/2021		<0.003
8/19/2021	<0.003	
8/27/2021		<0.003
2/9/2022	<0.003	<0.003
Mean	0.002907	0.002841
Std. Dev.	0.0003474	0.0006573
Upper Lim.	0.003	0.003
Lower Lim.	0.0017	0.00029



# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
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
3/17/2020	<0.005	<0.005	<0.005
7/6/2020			0.00079 (J)
8/27/2020	<0.005		
8/28/2020		<0.005	0.0015 (J)
9/22/2020	<0.005		
9/23/2020		<0.005	0.00091 (J)
10/7/2020			0.001 (J)
11/12/2020			0.0014 (J)
3/1/2021	<0.005	<0.005	
3/2/2021			0.0016 (J)
8/19/2021	<0.005	<0.005	
8/27/2021			0.0022 (J)
2/9/2022	<0.005	<0.005	<0.005
Mean	0.003664	0.003919	0.002374
Std. Dev.	0.002048	0.001933	0.001865
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.0007	0.00072	0.00087

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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	
3/17/2020	0.099	0.061	0.022	
7/6/2020			0.048	
8/27/2020	0.086			0.021
8/28/2020		0.053	0.05	
9/22/2020	0.096			0.021
9/23/2020		0.052	0.045	
10/7/2020			0.042	0.019
11/12/2020			0.042	0.019
3/1/2021	0.087	0.055		0.019
3/2/2021			0.044	
8/19/2021	0.089	0.055		
8/20/2021				0.019
8/27/2021			0.043	
2/9/2022	0.083	0.053	0.042	0.018
Mean	0.1046	0.06409	0.0445	0.01943
Std. Dev.	0.0144	0.01001	0.003024	0.001134
Upper Lim.	0.1139	0.07061	0.05	0.021
Lower Lim.	0.09519	0.05758	0.042	0.018

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-46A
9/1/2016	<0.0005
11/16/2016	<0.0005
2/27/2017	<0.0005
5/8/2017	0.0001 (J)
7/13/2017	<0.0005
10/11/2017	<0.0005
4/4/2018	<0.0005
9/19/2018	<0.0005
8/21/2019	0.00012 (J)
10/9/2019	<0.0005
3/17/2020	0.00012 (J)
7/6/2020	<0.0005
8/28/2020	<0.0005
11/12/2020	<0.0005
8/27/2021	<0.0005
2/9/2022	<0.0005
Mean	0.0004275
Std. Dev.	0.0001559
Upper Lim.	0.0005
Lower Lim.	0.00012

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-45	YGWC-52
8/31/2016	<0.005	
11/14/2016	0.0061 (J)	
2/27/2017	<0.005	
5/9/2017	<0.005	
7/13/2017	0.0006 (J)	
10/10/2017	<0.005	
4/3/2018	<0.005	
9/19/2018	<0.005	
8/20/2019	<0.005	
8/27/2020		<0.005
8/28/2020	<0.005	
9/22/2020		0.00073 (J)
9/23/2020	0.00058 (J)	
10/7/2020		0.00086 (J)
11/12/2020		<0.005
3/1/2021	<0.005	0.00094 (J)
8/19/2021	<0.005	
8/20/2021		<0.005
2/9/2022	<0.005	0.0012 (J)
Mean	0.004449	0.002676
Std. Dev.	0.001661	0.002179
Upper Lim.	0.0061	0.005
Lower Lim.	0.0006	0.00073

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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	<0.005		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	
3/17/2020	0.004 (J)	0.00081 (J)	0.022	
7/6/2020			0.0041 (J)	
8/27/2020	0.003 (J)			0.0022 (J)
8/28/2020		0.00055 (J)	0.0038 (J)	
9/22/2020	0.0065			0.0019 (J)
9/23/2020		0.00053 (J)	0.0015 (J)	
10/7/2020			0.0014 (J)	0.0019 (J)
11/12/2020			0.001 (J)	0.0015 (J)
3/1/2021	0.0033 (J)	0.00062 (J)		0.0013 (J)
3/2/2021			0.00096 (J)	
8/19/2021	0.0014 (J)	0.00048 (J)		
8/20/2021				0.0013 (J)
8/27/2021			0.00056 (J)	
2/9/2022	0.0027 (J)	0.00051 (J)	0.0006 (J)	0.0015 (J)
Mean	0.003262	0.0007347	0.00174	0.001657
Std. Dev.	0.002618	0.0001644	0.001406	0.0003457
Upper Lim.	0.004	0.0008461	0.00305	0.002068
Lower Lim.	0.0017	0.0006232	0.0005501	0.001246

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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)	
3/17/2020	1.37	1.44	1.74	
7/6/2020			2.27	
8/27/2020	0.0859 (U)			0.852 (U)
8/28/2020		0.983 (U)	2.34	
9/22/2020	0.327 (U)			0.268 (U)
9/23/2020		0.746 (U)	0.575 (U)	
10/7/2020			1.81	0.819 (U)
3/1/2021	0.0694 (U)	1.28		0.846 (U)
3/2/2021			1.64	
8/19/2021	0.261 (U)	1.38		
8/20/2021				0.496 (U)
8/27/2021			1.83	
2/9/2022	0.332 (U)	1.11	1.74	0.926
Mean	0.7131	1.237	1.369	0.7012
Std. Dev.	0.624	0.4447	0.5814	0.26
Upper Lim.	1.006	1.526	1.71	0.9886
Lower Lim.	0.2896	0.9474	1.029	0.3443

# Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
8/31/2016	<0.1	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	<0.1	0.11 (J)	0.35
10/10/2017	<0.1	0.39	
10/11/2017			<0.1
4/3/2018		<0.1	
4/4/2018	<0.1		<0.1
9/19/2018	<0.1	<0.1	<0.1
3/27/2019	<0.1	0.18 (J)	0.12 (J)
8/20/2019	<0.1	<0.1	
8/21/2019			<0.1
10/8/2019	<0.1		
10/9/2019		<0.1	0.12 (J)
3/17/2020	<0.1	0.076 (J)	<0.1
7/6/2020			0.12
8/27/2020	<0.1		
8/28/2020		0.07 (J)	0.12
9/22/2020	<0.1		
9/23/2020		0.082 (J)	0.12
10/7/2020			0.13
11/12/2020			0.084 (J)
3/1/2021	<0.1	0.073 (J)	
3/2/2021			0.12
8/19/2021	<0.1	0.075 (J)	
8/27/2021			0.13
2/9/2022	<0.1	0.063 (J)	0.12
Mean	0.09588	0.1623	0.1104
Std. Dev.	0.01698	0.1631	0.06526
Upper Lim.	0.12	0.2	0.12
Lower Lim.	0.07	0.075	0.084

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-45	YGWC-46A	YGWC-52
8/31/2016	<0.001		
9/1/2016		<0.001	
11/14/2016	<0.001		
11/16/2016		<0.001	
2/27/2017	<0.001	<0.001	
5/8/2017		<0.001	
5/9/2017	0.0001 (J)		
7/13/2017	<0.001	<0.001	
10/10/2017	<0.001		
10/11/2017		<0.001	
4/3/2018	<0.001		
4/4/2018		<0.001	
9/19/2018	<0.001	<0.001	
8/20/2019	<0.001		
8/21/2019		<0.001	
7/6/2020		<0.001	
8/27/2020			9.2E-05 (J)
8/28/2020	<0.001	<0.001	
9/22/2020			6E-05 (J)
9/23/2020	<0.001	<0.001	
10/7/2020		<0.001	<0.001
11/12/2020		4.4E-05 (J)	6.4E-05 (J)
3/1/2021	<0.001		8.7E-05 (J)
3/2/2021		<0.001	
8/19/2021	<0.001		
8/20/2021			<0.001
8/27/2021		<0.001	
2/9/2022	<0.001	<0.001	<0.001
Mean	0.0009357	0.0009438	0.0004719
Std. Dev.	0.0002405	0.0002319	0.0004942
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.0001	4.4E-05	6E-05



# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
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)	
3/17/2020	0.013 (J)	0.014 (J)	0.0071 (J)	
7/6/2020			0.011 (J)	
8/27/2020	0.013 (J)			0.0048 (J)
8/28/2020		0.012 (J)	0.012 (J)	
9/22/2020	0.013 (J)			0.0046 (J)
9/23/2020		0.012 (J)	0.013 (J)	
10/7/2020			0.011 (J)	0.0041 (J)
11/12/2020			0.014 (J)	0.0044 (J)
3/1/2021	0.013 (J)	0.012 (J)		0.0043 (J)
3/2/2021			0.013 (J)	
8/19/2021	0.013 (J)	0.012 (J)		
8/20/2021				0.0043 (J)
8/27/2021			0.014 (J)	
2/9/2022	0.014 (J)	0.012 (J)	0.014 (J)	0.0042 (J)
Mean	0.01298	0.0132	0.01275	0.004386
Std. Dev.	0.0008054	0.001573	0.001282	0.000241
Upper Lim.	0.0135	0.0147	0.014	0.004672
Lower Lim.	0.01245	0.012	0.011	0.004099

# Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
8/31/2016	<0.0002	<0.0002	
9/1/2016			<0.0002
11/14/2016		<0.0002	
11/15/2016	<0.0002		
11/16/2016			<0.0002
2/27/2017		<0.0002	<0.0002
2/28/2017	<0.0002		
5/8/2017	<0.0002		<0.0002
5/9/2017		<0.0002	
7/13/2017	<0.0002	<0.0002	<0.0002
10/10/2017	<0.0002	<0.0002	
10/11/2017			<0.0002
4/3/2018		<0.0002	
4/4/2018	<0.0002		<0.0002
9/19/2018	6E-05 (J)	7.1E-05 (J)	7E-05 (J)
8/20/2019	<0.0002	<0.0002	
8/21/2019			<0.0002
7/6/2020			<0.0002
8/27/2020	<0.0002		
8/28/2020		<0.0002	<0.0002
11/12/2020			<0.0002
8/19/2021	<0.0002	<0.0002	
8/27/2021			<0.0002
2/9/2022	<0.0002	<0.0002	<0.0002
Mean	0.0001883	0.0001892	0.0001907
Std. Dev.	4.041E-05	3.724E-05	3.474E-05
Upper Lim.	0.0002	0.0002	0.0002
Lower Lim.	6E-05	7.1E-05	7E-05

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
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)
3/17/2020	<0.01	0.0016 (J)	0.0015 (J)
7/6/2020			0.0026 (J)
8/27/2020	<0.01		
8/28/2020		0.0013 (J)	0.003 (J)
9/22/2020	<0.01		
9/23/2020		0.0011 (J)	0.0025 (J)
10/7/2020			0.0024 (J)
11/12/2020			0.0019 (J)
3/1/2021	<0.01	0.0012 (J)	
3/2/2021			0.0023 (J)
8/19/2021	<0.01	0.0012 (J)	
8/27/2021			0.0022 (J)
2/9/2022	<0.01	0.0012 (J)	0.0021 (J)
Mean	0.009406	0.003037	0.003332
Std. Dev.	0.002375	0.003469	0.003045
Upper Lim.	0.01	0.0024	0.0039
Lower Lim.	0.0005	0.0012	0.0015

# Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 4/27/2022 12:27 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

---

	YGWC-44	YGWC-46A
8/31/2016	<0.001	
9/1/2016		<0.001
11/15/2016	<0.001	
11/16/2016		<0.001
2/27/2017		<0.001
2/28/2017	<0.001	
5/8/2017	<0.001	<0.001
7/13/2017	<0.001	<0.001
10/10/2017	<0.001	
10/11/2017		<0.001
4/4/2018	<0.001	<0.001
9/19/2018	<0.001	<0.001
8/20/2019	<0.001	
8/21/2019		<0.001
10/8/2019	<0.001	
10/9/2019		<0.001
3/17/2020	8E-05 (J)	<0.001
7/6/2020		7.3E-05 (J)
8/27/2020	<0.001	
8/28/2020		<0.001
11/12/2020		<0.001
8/19/2021	<0.001	
8/27/2021		<0.001
2/9/2022	<0.001	<0.001
Mean	0.0009343	0.0009421
Std. Dev.	0.0002459	0.0002318
Upper Lim.	0.001	0.001
Lower Lim.	8E-05	7.3E-05

Arcadis U.S., Inc.  
2839 Paces Ferry Road, Suite 900  
Atlanta  
Georgia 30339  
Phone: 770 431 8666  
Fax: 770 435 2666  
[www.arcadis.com](http://www.arcadis.com)