2021 Semiannual Groundwater Monitoring and Corrective Action Report

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

February 28, 2022

2021 Semiannual Groundwater Monitoring and Corrective Action Report

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

February 28, 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 2021 Semiannual Groundwater Monitoring and Corrective Action Report provides the status of the groundwater monitoring and corrective action program from July through December 2021 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[1] 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.

Plant Yates and the site

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 2021 semiannual reporting period, the site remained in assessment monitoring.

During this reporting period, Arcadis conducted a groundwater sampling event in August 2021. 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[2] parameters in wells provided in the table below. There were no statistically significant levels (SSLs) detected for Appendix IV[3] parameters[4].

Appendix III Parameter	August 2021
Boron	YGWC-44, YGWC-45, YGWC-46A

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

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

[3] Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228.

[4] A state statistically significant level SSL-related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available, or the calculated background interwell prediction limit. A federal 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.

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

Tables

Figures

Appendices

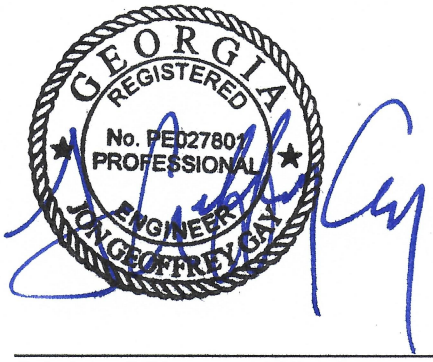
Acronyms and Abbreviations

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 2021 Semiannual 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.

Arcadis U.S., Inc.



2.28.22

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

Date

1 Introduction

This 2021 Semiannual 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 and December 2021. 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.

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 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. During the August 2021 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, 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. This documentation will serve 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 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 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_e = effective porosity

Groundwater flow velocities were calculated for the site based on hydraulic gradients, average hydraulic conductivity based on previous slug test data, and an estimated effective porosity of 0.20 (based on a review of several sources including Driscoll 1986, USEPA 1989, and Freeze and Cherry 1979). Groundwater flow velocities have been calculated and are presented in **Table 4**. The calculated flow velocity is approximately 1.3 feet per day or 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:

- ± 0.1 standard units for pH;
- ± 5% for specific conductance;
- Turbidity measurements less than 5 nephelometric turbidity units; and
- ±10% or ±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 semiannual assessment event 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. 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 of this title;
- 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). Presently, those updated GWPS have not yet been incorporated in the current GAEPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, background concentrations are considered when determining the GWPS for constituents for which an MCL has not been established (or where background is higher than the MCL). Under the existing GAEPD rules, the GWPS is:

- The MCL; or

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

Following the above federal and state rules, GWPS have been established for statistical comparison of Appendix IV constituents at AP-1. **Table 7** summarizes the background levels established at each monitoring well for the August 2021 sampling event along with the GWPS established under federal and state rules.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV parameters in each downgradient well. Those confidence intervals were compared to the GWPS established under the federal and state rules. A well/constituent pair was considered to exceed its respective standard only when the entire confidence interval exceeded a GWPS. If there was an exceedance of the established standard, an SSL exceedance was identified.

4.2 Statistical Analysis Results

Appendix III statistical analysis for wells associated with the site was performed to determine whether constituents have returned to background levels. Appendix IV assessment monitoring parameters were evaluated to determine whether concentrations statistically exceed the established GWPS. Analytical data from the semiannual assessment monitoring event (August 2021) 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 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 SSIs for Appendix III parameters.

6 Conclusions and Future Actions

This 2021 Semiannual 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 February 2022. The February 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
2021 Semiannual 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
Upgradient Wells							
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
Downgradient Wells							
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
Non-Network Wells							
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
2021 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates AP-1

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

Notes

1. All well analyzed for Appendix III and IV.

Appendix III = Consituents 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
2021 Semiannual 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

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
2021 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - AP-1

ARCADIS

Equation

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

where:

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

Values Used in Calculation

Value			Source
K:	3.70E-03	cm/sec	See note 1
	10.5	ft/day	
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
n_e =	0.20	unitless	See note 2

Average Linear Velocity

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

Aug. 2021

V_{min} = 1.3 ft/day, or 475 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
2021 Semiannual 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
2021 Semiannual Groundwater Monitoring and Corrective Actioin Report
Georgia Power Company
Plant Yates AP-1

Analyte		Location	YGWA-47	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
		Sample Date	8/19/2021	8/19/2021	8/19/2021	8/27/2021	8/20/2021
		Units					
Appendix III	pH	SU	5.50	5.73	6.13	6.83	6.71
	Boron	mg/l	0.011 J	0.56	0.31	1.9	< 0.0086
	Calcium	mg/l	9.6	31.7	50.4	108	47.9
	Chloride	mg/l	3.5	13.0	4.1	29.3	3.1
	Fluoride	mg/l	< 0.050	< 0.050	0.075 J	0.13	< 0.050
	Sulfate	mg/l	52.6	115	149	423	122
	Total Dissolved Solids	mg/l	134	333	391	810	289
Appendix IV	Antimony	mg/l	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078
	Arsenic	mg/l	< 0.0011	< 0.0011	< 0.0011	0.0022 J	< 0.0011
	Barium	mg/l	0.029	0.089	0.055	0.043	0.019
	Beryllium	mg/l	< 0.000054	< 0.000054	< 0.000054	< 0.000054	< 0.000054
	Cadmium	mg/l	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011
	Chromium	mg/l	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011
	Cobalt	mg/l	0.00099 J	0.0014 J	0.00048 J	0.00056 J	0.0013 J
	Fluoride	mg/l	< 0.050	< 0.050	0.075 J	0.13	< 0.050
	Lead	mg/l	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089
	Lithium	mg/l	0.0038 J	0.013 J	0.012 J	0.014 J	0.0043 J
	Mercury	mg/l	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
	Molybdenum	mg/l	< 0.00074	< 0.00074	0.0012 J	0.0022 J	< 0.00074
	Combined Radium - 226/228	pci/l	1.07 U	0.261 U	1.38	1.83	0.496 U
	Selenium	mg/l	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
	Thallium	mg/l	< 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 Minium Detection Concentration (MCD) 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
2021 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - AP-1

Constituent	Units	Background	Federal GWPS	State GWPS
August 2021				
Antimony	mg/L	0.0047	0.006	0.006
Arsenic	mg/L	0.005	0.010	0.010
Barium	mg/L	0.071	2	2
Beryllium	mg/L	0.0005	0.004	0.004
Cadmium	mg/L	0.0005	0.005	0.005
Chromium	mg/L	0.0093	0.100	0.100
Cobalt	mg/L	0.035	0.035[1]	0.035[1]
Fluoride	mg/L	0.68	4	4
Lead	mg/L	0.0013	0.015	0.0013
Lithium	mg/L	0.03	0.040	0.030
Mercury	mg/L	0.0002	0.002	0.002
Molybdenum	mg/L	0.014	0.1	0.014
Selenium	mg/L	0.005	0.050	0.050
Thallium	mg/L	0.001	0.002	0.002
Combined Radium - 226/228	pCi/L	6.92	6.92[1]	6.92[1]

Notes

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

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

State GWPS - Groundwater Protection Standard per Georgia EPD Rule 391-3-4-.10(6)(a).

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

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

Acronyms and Abbreviations:

GWPS - Grounwater Protection Standard

mg/L - millgrams per liter

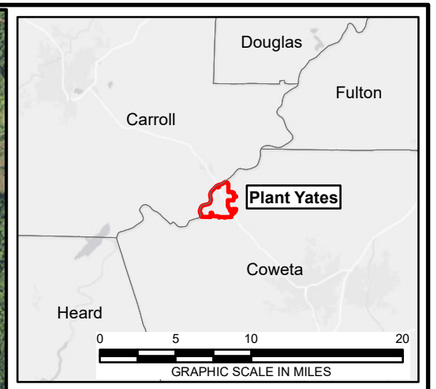
pCi/L - picoCuries per liter

Figures

84°55'30"W 84°55'20"W 84°55'10"W 84°55'0"W 84°54'50"W 84°54'40"W 84°54'30"W 84°54'20"W 84°54'10"W 84°54'0"W 84°53'50"W 84°53'40"W 84°53'30"W 84°53'20"W 84°53'10"W 84°53'0"W 84°52'50"W 84°52'40"W 84°52'30"W

33°28'40"N
33°28'30"N
33°28'20"N
33°28'10"N
33°28'0"N
33°27'50"N
33°27'40"N
33°27'30"N
33°27'20"N
33°27'10"N
33°27'0"N
33°26'50"N
33°26'40"N

FORMER ASH POND 1



LEGEND

APPROXIMATE PROPERTY BOUNDARY
PERMITTED UNIT BOUNDARY

NOTE:
AERIAL IMAGE SOURCES: JULY 1, 2021 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

0 650 1,300 2,600
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES AP-1
NEWNAN, GA
2021 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

SITE LOCATION MAP

ARCADIS

FIGURE
1

84°54'50"W 84°54'40"W 84°54'30"W 84°54'20"W 84°54'10"W 84°54'0"W 84°53'50"W 84°53'40"W 84°53'30"W 84°53'20"W 84°53'10"W 84°53'0"W 84°52'50"W

33°28'10"N
33°28'0"N
33°27'50"N
33°27'40"N
33°27'30"N
33°27'20"N
33°27'10"N
33°27'0"N
33°26'50"N

YGWA-47
YGWC-52
PZ-09S
PZ-09I
YGWC-44
YGWC-45
FORMER ASH POND 1
GWC-4R
GWC-2R
GWC-1R
GWC-6R
GWC-3R
GWC-5R
GWA-2
FORMER GYPSUM STACK LANDFILL
PZ-53
YGWC-46A
PZ-10I
PZ-10S
YGWA-6I
YGWA-6S
PZ-06D
PZ-48
YGWC-26S
YGWC-26I
AP-2 WEST
YGWC-27S
YGWC-27I
ASH POND 2
YGWC-28S
YGWC-28I
YGWC-29I
FORMER ASH POND A
YGWC-49
YGWC-24SA
PZ-25I
PZ-25S
PZ-24IA
PZ-35
YAMW-1
YGWC-36A
YGWA-30I
AP-2 AMAX COVE
PZ-31S
ASH POND B
AMA - PERIMETER ROAD
ASH POND B'
PZ-13S
PZ-13I
YGWA-14S
PZ-14I
PZ-51
YGWC-43
YGWA-17S
R6 ASH DISPOSAL AREA
YGWA-18S
YGWA-18I
YGWA-1I
YGWA-1D
PZ-01S
YAMW-2
YAMW-3
YGWC-42
YAMW-4
YGWC-41
ASH POND 3
EAST COVE
PZ-37D
PZ-37
PZ-53D
YGWC-23S
PZ-52D
PZ-03S
YGWA-3I
YGWA-3D
YGWA-2I
YAMW-5
YGWC-38
ASH MANAGEMENT AREA
YGWA-40
YGWA-39
YGWA-21I
YGWA-20S
SOUTH COVE
PZ-04S
YGWA-4I
YGWA-5I
YGWA-5D
PZ-05S

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 2/28/2022

NOTE:
AERIAL IMAGE SOURCES: JULY 1, 2021 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

0 450 900 1,800
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power
PLANT YATES AP-1
NEWNAN, GA
2021 SEMIANNUAL 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

YGWA-47
YGWC-52
PZ-09S
PZ-09I
YGWC-44
YGWC-45
FORMER ASH POND 1
YGWC-46A
PZ-53
PZ-10I
PZ-10S

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: JULY 1, 2021 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

Georgia Power

PLANT YATES AP-1
NEWNAN, GA
2021 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

WELL LOCATION MAP

ARCADIS

FIGURE
3

84°54'30"W
84°54'20"W
84°54'10"W
33°28'0"N
33°27'50"N

YGWA-47
723.54
YGWC-52
717.43
YGWC-44
708.41
YGWC-45
697.00
YGWC-46A
694.64
PZ-09S
694.16
PZ-09I
693.95
PZ-53
694.64
PZ-10I
686.44*
PZ-10S
693.04
FORMER ASH POND 1
725
720
715
710
705
700
695

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 INFERRED
- **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: JULY 1, 2021 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

Georgia Power

PLANT YATES AP-1
NEWNAN, GA

2021 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP, AUGUST 2021

ARCADIS

FIGURE
4

Appendix A

Laboratory Analytical and Data Validation Reports

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 (January2017).

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.

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	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES) Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
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	
Miscellaneous Instrumentation					
Tier II Validation					
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 (±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:

$$Normalized\ \ absolute\ difference_{\ MethodBlank} = \frac{|\ Sample\ -\ Blank\ |}{\sqrt{(U_{Sample}\ )^2 + (U_{Blank}\ )^2}}$$

Where:

U_{Sample} = uncertainty of the sample

U_{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 < ±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.

$u^2(x)$, $u^2(x0)$, $u^2(c)$ = 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 ±3 sigma. Warning limits have been established as ±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 ±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 ±3 sigma. Warning limits have been established as ±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 ± 0.297	0.822 ± 0.266	AC
	Radium-228	0.866 ± 0.441	0.684 ± 0.420	
	Total Radium	1.83 ± 0.738	1.51 ± 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% to110% 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 ±3 sigma. Warning limits have been established as ±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	
Miscellaneous Instrumentation					
Tier II Validation					
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.

Page : 1 Of 1

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 DG
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10640

Regulatory Agency
CCR
State / Location
GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (use valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS 2450C	Anions Suite 300.0	App III Metals (B & Ca)	App IV Metals	Mercury 7470A	Radium 226/228, 9315/9320	Residual Chlorine (Y/N)	
1	YGWC-52	WT	G	08/20	1415	08/20	1445			X		X							X	X	X	X	X	X		pH 6.71
2	YGWC-44	WT	G	08/19	1322	08/19	1438			X		X							X	X	X	X	X	X		pH 5.73
3	YGWC-45	WT	G	08/20	0950	08/19	1211			X		X							X	X	X	X	X	X		pH 6.13
4	~~YGWC-48A~~	WT	G																X	X	X	X	X	X		pH —
5	~~AP-1-EB-1~~	WT	G		"														X	X	X	X	X	X		pH —
6	AP-1-EB-1	WT	G	08/19	1600	08/19	1601			X		X							X	X	X	X	X	X		pH off of WLM @ YGWC-52
7	AP-1-FB-1	WT	G	8/21	0900	08/A	0901			X		X							X	X	X	X	X	X		pH taken at YGWC-45
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Anions Suite 300.0 (Cl, F, Sulfate)	(Arcadis)	8/20	1730		8/20/19	1750	5.0	Y	N	Y
App III 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	
PRINT Name of SAMPLER:	Ash Willis
SIGNATURE of SAMPLER:	
DATE Signed:	08/20/19

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

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

Regulatory Agency	
CCR	
State / Location	GA

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS: 2450C	Anions Suite 300.0	App III Metals (B & Ca)	App. IV Metals	Mercury: 7470A	Radium 226/228: 9315/9320	Residual Chlorine (Y/N)
1																									
2																									
3																									
4	YGWC-46A	WT	G	8/27/21	1320				5	X		X													
5	AP-1-DUP-1	WT	G	8/27/21	—				2	X		X							x	x	x	x	x	x	pH: 6.83
6																			x	x	x	x	x	x	pH: —
7																									
8																									
9																									
10																									
11																									
12																									

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/27/21	1440		8/27	1440	
App III Metals: Boron 6020B, Ca 6010D		827	1640		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 Chese

SIGNATURE of SAMPLER: DATE Signed:

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
92557049	No qualifiers assigned						
92557073	No qualifiers assigned						

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
92557049001	**YGWC-52**					
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	
92557049002	**YGWC-44**					
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	
92557049003	**YGWC-45**					
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	
92557049004	**AP-1-EB-1**					
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

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

Sample: YGWC-52 **Lab ID: 92557049001** Collected: 08/20/21 14:40 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	**0.152 ± 0.134 (0.247) C:89% T:NA**	pCi/L	09/20/21 12:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.344 ± 0.360 (0.745) C:72% T:90%**	pCi/L	09/17/21 13:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.496 ± 0.494 (0.992)**	pCi/L	09/21/21 16:28	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.0505 ± 0.103 (0.240) C:86% T:NA**	pCi/L	09/20/21 12:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.210 ± 0.369 (0.805) C:74% T:88%**	pCi/L	09/17/21 13:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.261 ± 0.472 (1.05)**	pCi/L	09/21/21 16:28	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.893 ± 0.311 (0.337) C:84% T:NA**	pCi/L	09/20/21 12:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.485 ± 0.449 (0.924) C:74% T:90%**	pCi/L	09/17/21 13:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.38 ± 0.760 (1.26)**	pCi/L	09/21/21 16:28	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

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

Sample: AP-1-EB-1 **Lab ID: 92557049004** Collected: 08/19/21 16:01 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	**0.0750 ± 0.126 (0.283) C:85% T:NA**	pCi/L	09/20/21 12:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0878 ± 0.339 (0.807) C:78% T:84%**	pCi/L	09/17/21 13:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0750 ± 0.465 (1.09)**	pCi/L	09/21/21 16:28	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

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

Sample: AP-1-FB-1 **Lab ID: 92557049005** Collected: 08/19/21 09:01 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	**0.167 ± 0.135 (0.237) C:96% T:NA**	pCi/L	09/20/21 12:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0637 ± 0.437 (0.994) C:74% T:83%**	pCi/L	09/17/21 13:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.231 ± 0.572 (1.23)**	pCi/L	09/21/21 16:28	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.968 ± 0.297 (0.209) C:96% T:NA**	pCi/L	09/20/21 12:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.866 ± 0.441 (0.775) C:73% T:91%**	pCi/L	09/17/21 13:58	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.83 ± 0.738 (0.984)**	pCi/L	09/21/21 16:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

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

Sample: AP-1-DUP-1 **Lab ID: 92557049007** Collected: 08/27/21 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	**0.822 ± 0.266 (0.219) C:97% T:NA**	pCi/L	09/20/21 12:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.684 ± 0.420 (0.785) C:73% T:89%**	pCi/L	09/17/21 13:58	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.51 ± 0.686 (1.00)**	pCi/L	09/21/21 16:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

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

QC Batch: 463393 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92557049001, 92557049002, 92557049003, 92557049004, 92557049005, 92557049006, 92557049007

METHOD BLANK: 2237295 Matrix: Water
Associated Lab Samples: 92557049001, 92557049002, 92557049003, 92557049004, 92557049005, 92557049006, 92557049007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0556 ± 0.118 (0.276) C:82% T:NA	pCi/L	09/20/21 12:38	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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		

Pace Analytical	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: [illegible]

Project #:

WO# : 92557049

92557049

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ____

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun ID: 283 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 2.6 Correction Factor: Add/Subtract (°C) 0.6

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of solit 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, LL-Hg

**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) (CI-)	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) (CI-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CI-)	WGFU Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CI-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (CI-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(CI-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA NaHSO4 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-Purge & Trap (N/A)	V/GK (3 vials per kit) VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – Lab)	SP21-250 mL Sterile Plastic (N/A – Lab)	BP1A-250 mL Plastic (NH4)2SO4 (N/A)	AG4U-120 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1	✓																2	✓			
2		1	1			1	✓																2	✓			
3		1	1			1	✓																2				
4		1	1			1	✓																2	✓			
5		1	1			1	✓																2	✓			
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.

Page : 1 Of 1

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 DG
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10640

Regulatory Agency
CCR
State / Location
GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (use valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS 2450C	Anions Suite 300.0	App III Metals (B & Ca)	App IV Metals	Mercury 7470A	Radium 226/228, 9315/9320	Residual Chlorine (Y/N)	
1	YGWC-52	WT	G	08/20	1415	08/20	1440			X		X							X	X	X	X	X	X		pH 6.71
2	YGWC-44	WT	G	08/19	1322	08/19	1438			X		X							X	X	X	X	X	X		pH 5.73
3	YGWC-45	WT	G	08/20	0950	08/19	1219			X		X							X	X	X	X	X	X		pH 6.13
4	~~YGWC-48A~~	WT	G																X	X	X	X	X	X		pH —
5	~~AP-1-EB-1~~	WT	G		"														X	X	X	X	X	X		pH —
6	AP-1-EB-1	WT	G	08/19	1600	08/19	1601			X		X							X	X	X	X	X	X		pH off of WLM @ YGWC-52
7	AP-1-FB-1	WT	G	8/21	0900	08/A	0901			X		X							X	X	X	X	X	X		pH taken at YGWC-45
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Anions Suite 300.0 (Cl, F, Sulfate)	(Arcadis)	8/20	1730		8/20/21	1150	5.0	Y	N	Y
App III 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	
PRINT Name of SAMPLER:	Ash Willis
SIGNATURE of SAMPLER:	
DATE Signed:	08/20/21

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

Pace Analytical	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# : 92557049

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

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☐ No **Seals Intact?** ☐ Yes ☐ No

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Type of Ice:

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

Cooler Temp Corrected (°C): 3.0

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?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ 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#: 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-)	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)	BP1N	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				
3		1	1			1																			2				
4																									2				
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.

Page : Of

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

Regulatory Agency	
CCR	
State / Location	GA

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: TDS: 2450C	Anions Suite 300.0	App III Metals (B & Ca)	App. IV Metals	Mercury: 7470A	Radium 226/228: 9315/9320	Residual Chlorine (Y/N)	
1																										
2																										
3																										
4	YGWC-46A	WT	G	8/27/21	1320				5	X		X														
5	AP-1-DUP-1	WT	G	8/27/21	—				2	X		X							x	x	x	x	x	x		pH: 6.83
6																			x	x	x	x	x	x		pH: —
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/27/21	1440		8/27	1440	
App III Metals: Boron 6020B, Ca 6010D		827	1640		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 Chese

SIGNATURE of SAMPLER: DATE Signed:

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

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	Y
	LCS62587	LCSD62587
Count Date:	9/20/2021	9/20/2021
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):	0.502	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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS62587	92557062001
Duplicate Sample I.D.	LCSD62587	92557062001DUP
Sample Result (pCi/L, g, F):	5.465	0.067
Sample Result Counting Uncertainty (pCi/L, g, F):	0.589	0.125
Sample Duplicate Result (pCi/L, g, F):	4.582	0.253
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.525	0.173
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	2.193	-1.708
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	13.30%	116.14%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Pass	Fail***
% RPD Limit:	25%	25%

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 Counting Uncertainty (pCi/L, g, F):		
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:		

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.~~ N/A
LAM 9/21/21

CANCELLED

LAM 9/21/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2237294
MB concentration:	0.204
M/B 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)?	Y
	LCS62586	LCSD62586
Count Date:	9/17/2021	9/17/2021
Spike I.D.:	21-029	21-029
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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS62586	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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%	

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:		

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

Comments:

9/20/21

9/20/21

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

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

Pace Analytical Services Charlotte
9800 Kincey 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

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

Lab ID	Sample ID	Method	Analysts	Analytes Reported

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
92557073001	**YGWC-52**					
	Performed by	CUSTOMER			08/23/21 16:45	
	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	
92557073002	**YGWC-44**					
	Performed by	CUSTOMER			08/23/21 16:45	
	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	
92557073003	**YGWC-45**					
	Performed by	CUSTOMER			08/23/21 16:46	
	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	
92557073006	**YGWC-46A**					
	Performed by	CUSTOMER			08/30/21 09:52	
	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
92557073006	**YGWC-46A**					
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	
92557073007	**AP-1-DUP-1**					
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	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 16:45		
pH	**6.71**	Std. Units			1		08/23/21 16:45		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**47.9**	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 13:45	7440-70-2	
6020 MET ICPMS	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	**0.019**	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	**0.0013J**	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	**0.0043J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**289**	mg/L	10.0	10.0	1		08/26/21 19:24		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.1**	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	**122**	mg/L	3.0	1.5	3		08/29/21 13:31	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 16:45		
pH	**5.73**	Std. Units			1		08/23/21 16:45		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**31.7**	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 13:49	7440-70-2	
6020 MET ICPMS	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	**0.089**	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	**0.56**	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	**0.0014J**	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	**0.013J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**333**	mg/L	10.0	10.0	1		08/26/21 18:48		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**13.0**	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	**115**	mg/L	3.0	1.5	3		08/29/21 13:46	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 16:46		
pH	**6.13**	Std. Units			1		08/23/21 16:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**50.4**	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 13:54	7440-70-2	
6020 MET ICPMS	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	**0.055**	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	**0.31**	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	**0.00048J**	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	**0.012J**	mg/L	0.030	0.00073	1	08/26/21 09:56	08/31/21 15:42	7439-93-2	
Molybdenum	**0.0012J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**391**	mg/L	10.0	10.0	1		08/26/21 19:23		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.1**	mg/L	1.0	0.60	1		08/29/21 04:03	16887-00-6	
Fluoride	**0.075J**	mg/L	0.10	0.050	1		08/29/21 04:03	16984-48-8	
Sulfate	**149**	mg/L	3.0	1.5	3		08/29/21 14:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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 Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	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	
6020 MET ICPMS	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	
7470 Mercury	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	
2540C Total Dissolved Solids	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		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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 Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	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	
6020 MET ICPMS	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	
7470 Mercury	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	
2540C Total Dissolved Solids	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		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 09:52		
pH	**6.83**	Std. Units			1		08/30/21 09:52		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**108**	mg/L	1.0	0.12	1	09/09/21 11:30	09/09/21 16:21	7440-70-2	
6020 MET ICPMS	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	**0.0022J**	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:33	7440-38-2	
Barium	**0.043**	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	**1.9**	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	**0.00056J**	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	**0.014J**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:33	7439-93-2	
Molybdenum	**0.0022J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**810**	mg/L	20.0	20.0	1		08/31/21 16:51		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**29.3**	mg/L	1.0	0.60	1		09/06/21 02:28	16887-00-6	
Fluoride	**0.13**	mg/L	0.10	0.050	1		09/06/21 02:28	16984-48-8	
Sulfate	**423**	mg/L	9.0	4.5	9		09/06/21 16:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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 Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**107**	mg/L	1.0	0.12	1	09/09/21 11:30	09/09/21 16:41	7440-70-2	
6020 MET ICPMS	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	**0.0022J**	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:38	7440-38-2	
Barium	**0.046**	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	**1.9**	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	**0.00060J**	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	**0.014J**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:38	7439-93-2	
Molybdenum	**0.0023J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**810**	mg/L	20.0	20.0	1		08/31/21 16:51		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**29.2**	mg/L	1.0	0.60	1		09/06/21 02:44	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		09/06/21 02:44	16984-48-8	
Sulfate	**427**	mg/L	9.0	4.5	9		09/06/21 16:35	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	92555938008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

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

QC Batch: 645799
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
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	92557720001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

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

QC Batch: 643162
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
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 Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3374857 3374858

Parameter	Units	92555938008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

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

QC Batch: 645800
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
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 Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387413 3387414

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

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

QC Batch: 646051
QC Batch Method: EPA 7470A
Analysis 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	92557073001 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	0.0026	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

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

QC Batch: 646057
QC Batch Method: EPA 7470A
Analysis 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	92557720001 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	0.0025	0.0022	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

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

QC Batch: 643140
QC Batch Method: SM 2540C-2011
Analysis 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

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

QC Batch: 644074
QC Batch Method: SM 2540C-2011
Analysis 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

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

QC Batch: 643665
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis 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	92555948025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	61.0	59.7	122	119	90-110	2	10	M1
Fluoride	mg/L	ND	2.5	2.5	3.1	3.1	126	123	90-110	2	10	M1
Sulfate	mg/L	ND	50	50	62.7	61.8	125	124	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3377166 3377167

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

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

QC Batch: 645268
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis 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	92555948053 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical	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# : 92557073

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 mr

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

Cooler Temp Corrected (°C): 2.0

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?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ 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# : 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)	BP1A-250 mL Plastic (NH4)2SO4 (9.4-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1																	2				
2		1	1			1																	2				
3		1	1			1																	2				
4		1	1			1																	2				
5		1	1			1																	2				
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.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
				Address:	
Email To:	SCS and Arcadis Contacts	Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates AP-1 DG	Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Requested Due Date:	10 Day	Project Number:		Pace Profile #:	10840

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: 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 226/228, 9315/9320	Residual Chlorine (Y/N)	
1	YGWC-52	WT	G	08/20	1415	08/20	1446			X		X						x	x	x	x	x	x		pH 6.71
2	YGWC-44	WT	G	08/19	1322	08/19	1438			X		X						x	x	x	x	x	x		pH 5.73
3	YGWC-45	WT	G	08/20	0950	08/19	1219			X		X						x	x	x	x	x	x		pH 6.13
4	~~YGWC-46A~~	WT	G															x	x	x	x	x	x		pH /
5	~~AP-1-EB-1~~	WT	G															x	x	x	x	x	x		pH /
6	AP-1-EB-1	WT	G	08/19	1600	08/19	1601			X		X						x	x	x	x	x	x		pH offof WLM @ YGWC-46
7	AP-1-FB-1	WT	G	8/20	0900	08/19	0901			X		X						x	x	x	x	x	x		pH Not at YGWC-45
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/20	1730		8/20/20	1750
App III 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)						

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ash Willis

SIGNATURE of SAMPLER:

DATE Signed: 08/20/20

Pace Analytical	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#: 92557073
PM: NMG Due Date: 09/03/21
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 CAM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A

Thermometer: ☐ IR Gun ID: 083 ☒ Wet ☐ Blue ☐ None

Type of Ice:

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

Cooler Temp Corrected (°C): 3.0

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?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ 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# : 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																								BP1U				
2		1	1			1																		1				
3		1	1			1																		2				
4																								2				
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.

Page : Of

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

Regulatory Agency
CCR
State / Location
GA

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS: 2450C	Anions Suite 300.0	App III Metals (B & Ca)	App. IV Metals	Mercury: 7470A	Radium 226/228: 9315/9320	Residual Chlorine (Y/N)
1																									
2																									
3																									
4	YGWC-48A	WT	G	8/27/24	1321				5	X		X							x	x	x	x	x	x	pH: 6.53
5	AP-1-DUP-1	WT	G	8/27/24	—				5	X		X							x	x	x	x	x	x	pH: —
6																			x	x	x	x	x	x	
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/27/24	1440		8/27	1440	
App III Metals. Boron 6020B, Ca 6010D		8/27	1540		8/27/24	1540	
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 Chese

SIGNATURE of SAMPLER: DATE Signed:

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

Upgradient Well Data

August 2021

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

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

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	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES) Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
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	
Miscellaneous Instrumentation					
Tier II Validation					
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 (±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:

$$Normalized\ \ absolute\ difference_{\ MethodBlank} = \frac{|\ Sample\ -\ Blank\ |}{\sqrt{(U_{Sample}\ )^2 + (U_{Blank}\ )^2}}$$

Where:

U_{Sample} = uncertainty of the sample

U_{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 < ±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.

$u^2(x)$, $u^2(x0)$, $u^2(c)$ = 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 ±3 sigma. Warning limits have been established as ±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 ±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 ±3 sigma. Warning limits have been established as ±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 ± 0.104	0.325 ± 0.195	AC
	Radium-228	0.483 ± 0.364	0.333 ± 0.342	
	Total Radium	0.528 ± 0.468	0.658 ± 0.537	
YGWA-14S / UP-DUP-2	Radium-226	0.00466 ± 0.157	0.111 ± 0.167	AC
	Radium-228	0.781 ± 0.436	1.08 ± 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% to110% 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 ±3 sigma. Warning limits have been established as ±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	
Miscellaneous Instrumentation					
Tier II Validation					
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.

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Georgia Power	Report To: SCS Contacts	Attention: Southern Co.
Address: Atlanta, GA	Copy To: Arcadis Contacts	Company Name:
		Address:
Email To: SCS and Arcadis Contacts	Purchase Order #: UPGRADIENT	Pace Quote:
Phone: Fax:	Project Name: ~~Yates Gypsum Pond Groundwater~~	Pace Project Manager: Kevin Herring/Nicole D'Oleo
Requested Due Date: 10 Day	Project Number:	Pace Profile #: 10840

Regulatory Agency: CCR

State / Location: GA

Requested Analysis Filtered (Y/N)

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analyses Test: TDS 2450C	Anions Suite 300.0	App III Metals	App IV Metals	Mercury 7470A	Radium 226/228 9315/9320	App I and III Metals 6020B Ca, Ni, Ag, Tl, V, Zn	Residual Chlorine (Y/N)	
1	UP-DUP-1	WT	G	8/20	—														x	x	x	x	x	x	x		pH 5.86
2	GWA-2	WT	G	8/20	1200				5	✓		✓							x	x	x	x	x	x	x		pH 5.36
3		WT	G																								
4		WT	G																								
5		WT	G																								
6		WT	G																								
7		WT	G																								
8		WT	G																								
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/20	1730		8/20/21	1745	5.0	Y	N	Y
App III 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

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: DATE Signed: 8/20/21

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

Pace Analytical

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

Section A	Section B	Section C	
Required Client Information:	Required Project Information:	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		Address:	Regulatory Agency
Email:	Purchase Order #:	Pace Quote:	
Phone: Fax:	Project Name: ~~Yates 316-2~~ UG	Pace Project Manager: nicole.d'oleo@pacelabs.com	State / Location
Requested Due Date:	Project #:	Pace Profile #: 10840	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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1	~~AP-2-EB-1~~	WT		~~8/20~~	1070	35			5	✓		✓							X	X	X	X	—
2	~~AP-2-EB-2~~	WT		—		—													X	X	X	X	
3	AP-2-FB-1	WT		8/19	1530	35			5	✓		✓							X	X	X	X	—
4	~~AP-2-LRB~~	WT																	X	X	X	X	
5	~~YGWA-1I~~	WT																	X	X	X	X	
6	~~YGWA-1D~~	WT																	X	X	X	X	
7	~~YGWA-2I~~	WT																	X	X	X	X	
8	~~MGWA-3I~~	WT																	X	X	X	X	
9	~~YGWA-3D~~	WT																	X	X	X	X	
10	YGWA-14S	WT		8/19	~~1332~~	100			4	✓		✓							X	X	X	X	Ph: 7.32
11	UP-DUP-2	WT		8/19	—				4	✓		✓							X	X	X	X	—
12	~~YGWA-9S~~	WT																	X	X	X	X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		8/20	1730		8/21/12	1732	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/20/12

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.

Page : 3 Of 4

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
				Address:	
Email To:	SCS and Arcadis Contacts	Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	~~Yates AP-2~~ ~~CDG~~	Pace Project Manager:	Kevin Herring/Nicole D'oleo
Requested Due Date:	10 Day	Project Number:	UPGRADIENT	Pace Profile #:	10840

Regulatory Agency
CCR
State / Location
GA

SAMPLE ID: One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS: 2540C	Anions Suite 300.0	App III Metals	App IV Metals (No Tl) ~~Add Metals~~	Radium 226/228 9315/9320	Residual Chlorine (Y/N)	
1	~~AP-2 EB-1~~	WT	G																x	x	x	x	x		pH
2	~~AP-2 EB-2~~	WT	G																x	x	x	x	x		pH
3	~~AP-2 EB-3~~	WT	G																x	x	x	x	x		pH
4	~~AP-2 EB-4~~	WT	G																x	x	x	x	x		pH
5	~~YGWC-28S~~ YGWA-1D	WT	G	8/19	1110														x	x	x	x	x		pH 6.32
6	~~YGWC-28I~~ YGWA-1I	WT	G	8/19	1249														x	x	x	x	x		pH 6.38
7	~~AP-2 DUP-1~~ YGWA-3D	WT	G	8/19	1445														x	x	x	x	x		pH 5.34
8	~~[illegible]~~	WT	G																x	x	x	x	x		pH
9	~~YGWC-27I~~	WT	G																x	x	x	x	x		pH
10	~~YGWC-28S~~	WT	G	~~8/20~~	~~1124~~														x	x	x	x	x		pH
11	~~YGWC-28I~~	WT	G																x	x	x	x	x		pH
12	~~YGWC-29I~~	WT	G	~~8/20~~	~~938~~														x	x	x	x	x		pH

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	8/20	1730	[signature]	8/20/21	1740	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Chesk

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/20/21

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 : 4 Of 4

Section A – Required Client Information:		Section B – Required Project Information:		Section C – Invoice Information:	
Company:	Georgia Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	[redacted]-1 (upgradient)	Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Requested Due Date:	10 Day	Project Number:		Pace Profile #:	10840

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS 2450C	Anions Suite 300.0	App III Metals (B & Ca)	App IV Metals	Mercury: 7470A	Radium 228/226: 9315/9320	Residual Chlorine (Y/N)	
										Requested Analysis Filtered (Y/N)																
1	YGWA-47	WT	G	08/19	1005	08/19	1026			X		X							X	X	X	X	X	X		pH 5.50
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Anions Suite 300.0 (Cl, F, Sulfate)	(Arcadis)	8/20	1730		8/20	1730	5.0	Y	N	Y
App III 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

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: 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.

Page : Of

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 AMA-R6 (downgradient)
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

Regulatory Agency
CCR
State / Location
GA

Requested Analysis Filtered (Y/N)

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS: 2450C	Anions Suite 300.0	App III Metals	App IV Metals (No Tl)	Radium 228/226: 9315/9320	Alkalinity (2320B)	Cations (Na, K, Mg, Ca)	Mercury (7470A)				Residual Chlorine (Y/N)
1	~~YGWA-24~~	WT	G																										
2	YGWA-39	WT	G	8-26-21	1230					2		3							x	x	x	x	x			x			pH:
3	~~YGWA-40~~	WT	G																x	x	x	x	x			x			pH 6.91
4		WT	G																x	x	x	x	x			x			pH:
5		WT	G																										
6		WT	G																										
7		WT	G																										
8		WT	G																										
9		WT	G																										
10		WT	G																										
11		WT	G																										
12		WT	G																										

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Ssulfate)	Kate Pipkiewicz / Arcadis	8-26-21	1410		8/26	1410	
App III Metals: Boron 6020B, Ca 6010D		8/27	1640	Charlie Hunter	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)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kate Pipkiewicz

SIGNATURE of SAMPLER: Kate Pipkiewicz DATE Signed: 8-26-21

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 : 1 Of

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-2 (upgradient)
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

Regulatory Agency	
	CCR
State / Location	
	GA

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS: 2450C	Anions Suite 300.0	App III Metals	App IV Metals (No Tl)	Radium 226/228: 9315/9320	Residual Chlorine (Y/N)
	YGWA-2I	WT	G	8/27/24	1133				4	X		X							X	X	X	X	X	pH 7.14
	YGWA-3I	WT	G	8/27/24	0955				4	X		X							X	X	X	X	X	pH 7.39

Requested Analysis Filtered (Y/N)

		DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Anions Suite 300.0 (Cl, F, Sulfate)	Relinquished by / Arcadis	8/27/24	1440		8/27	1440
App III Metals: Boron 6020B, Ca 6010D		8/27	1640		8/27	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)						

SAMPLE CONDITIONS

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: Mark Chesnut

SIGNATURE of SAMPLER:

DATE Signed:

Pace Analytical
www.pacelabs.com

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

Section A Required Client Information:	Section B Required Project Information:	Section C 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		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates AMA	Pace Project Manager: nicole.d'oleo@pacelabs.com
Requested Due Date:	Project #:	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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
1	AMA-EB-1	WT																	X	X	X	X			
2	AMA EB-2	WT																	X	X	X	X			
3	AMA-FB-1	WT																	X	X	X	X			
4	AMA-FB-2	WT																	X	X	X	X			
5	UP-EB-1	WT																	X	X	X	X			
6	UP-FB-1	WT		8/26/21	1710				5	X		X							X	X	X	X			
7	~~UP-EB-2~~	WT																	X	X	X	X			
8	UP-FB-2	WT																	X	X	X	X			
9	YGWA-4I	WT		8/26/21	1124				5	X		X							X	X	X	X			5.82
10	YGWA-5I	WT		8/26/21	1628				5	X		X							X	X	X	X			5.51 SU
11	UP-DUP-3	WT		8/26/21	-				5	X		X							X	X	X	X			-
12	YGWA-5D	WT		8/26/21	1355				5	X		X							X	X	X	X			7.16 SU

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	8/27/21	1640	[signature]	8/27/21	1640	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Chestnut

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

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

Pace Analytical
www.pacelabs.com

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 2

Section A Required Client Information:		Section B Required Project Information:		Section C 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				Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates AMA	Pace Project Manager:	nicole.d'olac@pacelabs.com,
Requested Due Date:		Project #:		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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWA-17S	WT		8/27	1045				5	✓		✓							x	x	x	x			Ph: 5.27
14	~~YGWA-18S~~ JS YGWA-18S	WT		8/26	1535				5	✓		✓							x	x	x	x			Ph: 4.40
15	YGWA-18I	WT		8/27	0935				5	✓		✓							x	x	x	x			Ph: 5.40
16	YGWA-20S	WT		8/27	1310				5	✓		✓							x	x	x	x			Ph: 5.37
17	YGWA-21I	WT																	x	x	x	x			
18	YGWC-23S	WT																	x	x	x	x	x		
19	YGWC-24SA	WT																	x	x	x	x			
20	AMA-DUP-1	WT																	x	x	x	x			
21	YGWC-36A	WT																	x	x	x	x	x		
22	YGWC-49	WT																	x	x	x	x			
23	AMA-EB-1			8/26	1600				5										x	x	x	x			
24	AMA-EB-2			8/27	1340				5										x	x	x	x			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Arcadis	8/27			8/27/24	1640	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: DATE Signed: 8/27/24

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

Section A — Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	~~SCS Contacts~~ Becky Steed
Copy To:	~~Arcadis Contacts~~
Purchase Order #:	
Project Name:	Yates AMA-[redacted]
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

Regulatory Agency	CCR
State / Location	GA

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS: 2450C	Anions Suite 300.0	App III Metals	App. IV Metals (No Ti)	Radium 226/228: 9315/9320	Alkalinity	Cations (Na, K, Mg, Ca)	Residual Chlorine (Y/N)
1	~~UP-EB-1~~ JJ	WT	G																x	x	x	x	x			--
2	~~UP-FB-1~~ JS	WT	G																x	x	x	x	x			--
3	~~UP-EB-2~~ JS	WT	G																x	x	x	x	x			--
4	~~UP-FB-2~~ JS	WT	G																x	x	x	x	x			--
5	~~YGWA-4I~~ JS	WT	G																x	x	x	x	x	x		pH:
6	~~YGWA-5I~~ JS	WT	G																x	x	x	x	x			pH:
7	~~UP-DUP-3~~ JS	WT	G		--														x	x	x	x	x			pH:
8	~~YGWA-6D~~ JS	WT	G																x	x	x	x	x	x		pH:
9	~~YGWA-17S~~ JS	WT	G																x	x	x	x	x			pH:
10	~~YGWA-18S~~ JS AMA-DUP-1	WT	G	9/1	←				5	✓		✓							x	x	x	x	x	x		pH:
11	~~YGWA-18I~~ JS YGWC-245A	WT	G	9/1	1025				5	✓		✓							x	x	x	x	x	x		pH: 5.22
12	~~YGWA-20S~~ YGWA-21I	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 (Cl,F, sulfate)	/Arcadis	9/2/21	1530	/Arcadis	9/2/21	1530	
App III Metals: Boron 6020B Ca 6010D		9/2/21	1702	/Pace	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

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 9/2/21

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

Pace Analytical
www.pacelabs.com

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

Section A – Required Client Information:		Section B – Required Project Information:		Section C – 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				Address:	
Email		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates R6	Pace Project Manager:	nicole.d'olec@pacelabs.com
Requested Due Date:		Project #:		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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: TDS	Cl, F, SO4	App III/IV Metals	III/IV + Cations	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)
1	~~YGWA-56~~	WT																	X	X		X	X	X	
2	YGWA-40	WT		9/3/21	1027														X	X		X	X	X	4.25
3	~~YGWC-38~~	WT																	X	X		X	X	X	
4	~~YGWC-41~~	WT																	X	X		X	X	X	
5	~~AMW-DUP-2~~	WT																	X	X			X		
6	~~YGWC-42~~	WT																	X	X		X	X	X	
7	~~YGWC-48~~	WT																	X	X		X	X	X	
8	~~AP-1 EB-1~~	WT																			X				
9	~~AP-1 FB-1~~	WT																			X				
10	~~YGWA-47~~	WT																			X				
11	~~YGWC-52~~	WT																			X				
12	~~YGWC-44~~	WT																			X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] AES	9/3/21	1730	[signature] / [signature]	9/3/21	1735	4.9	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Chost

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 = metrix spike duplicate
UCL = upper control limit

Qualifiers:
J = estimated result

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

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

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
92557070001	**UP-DUP-1**					
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	
92557070002	**GWA-2**					
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	
92557070003	**YGWA-14S**					
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	
92557070004	**UP-DUP-2**					
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
92557070005	**YGWA-1D**					
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	
92557070006	**YGWA-1I**					
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	
92557070007	**YGWA-3D**					
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	
92557070008	**YGWA-47**					
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
92558240003	**YGWA-5I**					
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	
92558240004	**UP-DUP-3**					
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	
92558240005	**YGWA-5D**					
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	
92558240006	**YGWA-17S**					
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
92558240007	**YGWA-18S**					
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	
92558240008	**YGWA-18I**					
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	
92558240009	**YGWA-20S**					
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	
92558240014	**YGWA-21I**					
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
92559523001	**YGWA-40**					
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	
92558238001	**YGWA-2I**					
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	
92558238002	**YGWA-3I**					
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: UP-DUP-1 **Lab ID: 92557070001** Collected: 08/20/21 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	**0.325 ± 0.195 (0.307) C:88% T:NA**	pCi/L	09/20/21 15:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.333 ± 0.342 (0.704) C:73% T:85%**	pCi/L	09/17/21 14:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.658 ± 0.537 (1.01)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.0454 ± 0.104 (0.246) C:86% T:NA**	pCi/L	09/20/21 15:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.483 ± 0.364 (0.713) C:74% T:88%**	pCi/L	09/17/21 14:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.528 ± 0.468 (0.959)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-14S **Lab ID: 92557070003** Collected: 08/19/21 11:00 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	**0.00466 ± 0.157 (0.433) C:93% T:NA**	pCi/L	09/20/21 15:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.781 ± 0.436 (0.776) C:74% T:80%**	pCi/L	09/17/21 14:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.786 ± 0.593 (1.21)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.111 ± 0.167 (0.360) C:99% T:NA**	pCi/L	09/20/21 15:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.08 ± 0.491 (0.804) C:74% T:78%**	pCi/L	09/17/21 14:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.19 ± 0.658 (1.16)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-1D **Lab ID: 92557070005** Collected: 08/19/21 11:10 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	**0.276 ± 0.229 (0.401) C:93% T:NA**	pCi/L	09/20/21 15:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.894 ± 0.489 (0.876) C:74% T:84%**	pCi/L	09/17/21 14:25	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17 ± 0.718 (1.28)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-1I **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	**0.0732 ± 0.237 (0.573) C:99% T:NA**	pCi/L	09/21/21 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.218 ± 0.601 (1.45) C:73% T:84%**	pCi/L	09/17/21 17:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0732 ± 0.838 (2.02)**	pCi/L	09/21/21 16:29	7440-14-4	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**1.67 ± 0.511 (0.447) C:93% T:NA**	pCi/L	09/21/21 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.86 ± 0.774 (1.22) C:70% T:83%**	pCi/L	09/17/21 17:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.53 ± 1.29 (1.67)**	pCi/L	09/21/21 16:29	7440-14-4	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.309 ± 0.197 (0.329) C:88% T:NA**	pCi/L	09/21/21 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.757 ± 0.724 (1.50) C:68% T:81%**	pCi/L	09/17/21 17:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.07 ± 0.921 (1.83)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-30I **Lab ID: 92557070009** Collected: 08/19/21 12:20 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	**0.234 ± 0.232 (0.450) C:95% T:NA**	pCi/L	09/21/21 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0548 ± 0.544 (1.29) C:67% T:77%**	pCi/L	09/17/21 17:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.234 ± 0.776 (1.74)**	pCi/L	09/21/21 16:29	7440-14-4	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.674 ± 0.261 (0.318) C:90% T:NA**	pCi/L	09/21/21 09:36	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0610 ± 0.461 (1.09) C:74% T:82%**	pCi/L	09/17/21 17:18	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.674 ± 0.722 (1.41)**	pCi/L	09/22/21 16:02	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.0312 ± 0.148 (0.376) C:98% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.327 ± 0.417 (0.886) C:79% T:79%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.358 ± 0.565 (1.26)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.752 ± 0.313 (0.359) C:94% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.419 ± 0.429 (0.888) C:82% T:80%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17 ± 0.742 (1.25)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.173 ± 0.181 (0.351) C:91% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.625 ± 0.402 (0.752) C:81% T:80%**	pCi/L	09/20/21 14:36	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.798 ± 0.583 (1.10)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.101 ± 0.197 (0.455) C:96% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.620 ± 0.425 (0.816) C:81% T:80%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.721 ± 0.622 (1.27)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-5D **Lab ID: 92558240005** Collected: 08/26/21 13:35 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	**3.80 ± 0.816 (0.373) C:102% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.883 ± 0.429 (0.726) C:80% T:82%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**4.68 ± 1.25 (1.10)**	pCi/L	09/24/21 14:36	7440-14-4	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-17S **Lab ID: 92558240006** Collected: 08/27/21 10:45 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	**0.438 ± 0.263 (0.394) C:86% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.462 ± 0.373 (0.739) C:81% T:81%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.900 ± 0.636 (1.13)**	pCi/L	09/24/21 14:36	7440-14-4	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.145 ± 0.161 (0.309) C:95% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.541 ± 0.396 (0.768) C:77% T:84%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.686 ± 0.557 (1.08)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-18I **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	**0.104 ± 0.171 (0.381) C:97% T:NA**	pCi/L	09/22/21 08:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.657 ± 0.507 (1.01) C:73% T:84%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.761 ± 0.678 (1.39)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.632 ± 0.313 (0.451) C:95% T:NA**	pCi/L	09/22/21 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.147 ± 0.402 (0.898) C:74% T:84%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.779 ± 0.715 (1.35)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-21I **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	**0.934 ± 0.290 (0.223) C:90% T:NA**	pCi/L	09/22/21 09:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.924 ± 0.466 (0.823) C:76% T:81%**	pCi/L	09/20/21 11:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.86 ± 0.756 (1.05)**	pCi/L	09/27/21 15:44	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**0.350 ± 0.172 (0.206) C:91% T:NA**	pCi/L	09/22/21 09:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.621 ± 0.450 (0.877) C:75% T:74%**	pCi/L	09/20/21 11:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.971 ± 0.622 (1.08)**	pCi/L	09/24/21 14:38	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-2I **Lab ID: 92558238001** Collected: 08/27/21 11:33 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	**0.284 ± 0.258 (0.500) C:96% T:NA**	pCi/L	09/22/21 12:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.125 ± 0.379 (0.851) C:76% T:80%**	pCi/L	09/20/21 11:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.409 ± 0.637 (1.35)**	pCi/L	09/24/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	**1.01 ± 0.368 (0.461) C:97% T:NA**	pCi/L	09/22/21 12:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.328 ± 0.385 (0.811) C:81% T:81%**	pCi/L	09/20/21 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.34 ± 0.753 (1.27)**	pCi/L	09/24/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

QC Batch: 463915
QC Batch Method: EPA 9315
Analysis 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

QC Batch: 463914
QC Batch Method: EPA 9320
Analysis 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

QC Batch: 463398
QC Batch Method: EPA 9320
Analysis 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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		

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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-1I**	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		

Pace Analytical	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# : 92557089

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 cm

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☑ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Type of Ice:

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

Cooler Temp Corrected (°C): 2.0

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?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☐ Yes	☑ No	☐ N/A	9. EB-1 + FB-1 Collection time not listed on COC but containers are on AP2 Work Order
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ 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 : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Georgia Power	Report To: SCS Contacts	Attention: Southern Co.
Address: Atlanta, GA	Copy To: Arcadis Contacts	Company Name:
		Address:
Email To: SCS and Arcadis Contacts	Purchase Order #: UPGRADIENT	Pace Quote:
Phone: Fax:	Project Name: ~~Yates Gypsum Pond Groundwater~~	Pace Project Manager: Kevin Herring/Nicole D'Oleo
Requested Due Date: 10 Day	Project Number:	Pace Profile #: 10840

Regulatory Agency
CCR
State / Location
GA

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: TDS 2450C	Anions Suite 300.0	App III Metals	App IV Metals	Mercury 7470A	Radium 226/228 9315/9320	App I and III Metals 6020B Ca, Ni, Ag, Tl, V, Zn	Residual Chlorine (Y/N)	
1	UP-DUP-1	WT	G	8/20	—														x	x	x	x	x	x	x		pH 5.86
2	GWA-2	WT	G	8/20	1200					5	✓		✓						x	x	x	x	x	x	x		pH 5.36
3		WT	G																								
4		WT	G																								
5		WT	G																								
6		WT	G																								
7		WT	G																								
8		WT	G																								
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/20	1730		8/20/21	1745	5.0	Y	N	Y
App III 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			
PRINT Name of SAMPLER:	Jake Swanson		
SIGNATURE of SAMPLER:		DATE Signed:	8/20/21

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

Pace Analytical

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

Section A	Section B	Section C
Required Client Information:	Required Project Information:	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		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: ~~Yates 316-2~~ UG	Pace Project Manager: nicole.d'oleo@pacelabs.com
Requested Due Date:	Project #:	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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analysis Test: TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1	~~AP-2-EB-1~~	WT		~~8/20~~	1070	8/20			5	✓		✓							X	X	X	X	—
2	~~AP-2-EB-2~~	WT																	X	X	X	X	
3	AP-2-FB-1	WT		8/19	1530	8/20			5	✓		✓							X	X	X	X	—
4	~~AP-2-FB-2~~	WT																	X	X	X	X	
5	~~YGWA-1I~~	WT																	X	X	X	X	
6	~~YGWA-1D~~	WT																	X	X	X	X	
7	~~YGWA-2I~~	WT																	X	X	X	X	
8	~~MGWA-3I~~	WT																	X	X	X	X	
9	~~YGWA-3D~~	WT																	X	X	X	X	
10	YGWA-14S	WT		8/19	~~1332~~		1100		4	✓		✓							X	X	X	X	Ph: 7.32
11	UP-DUP-2	WT		8/19	—				4	✓		✓							X	X	X	X	—
12	~~YGWA-9S~~	WT																	X	X	X	X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		8/20	1730		8/21/12	1732	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

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.

Pace Analytical

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

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~~ UG
Project #:

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

Regulatory Agency:
State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1	~~AP-PEB-1~~	WT		8/20	1020	JS			5	✓		✓						X	X	X	X	—
2	~~AP-2-EB-2~~	WT																X	X	X	X	
3	~~AP-2-FB-1~~	WT		8/17	1530	JS			5	✓		✓						X	X	X	X	—
4	~~PB-2-CC-2~~	WT																X	X	X	X	
5	~~YGWA-1I~~	WT																X	X	X	X	
6	~~YGWA-1D~~	WT																X	X	X	X	
7	~~YGWA-2I~~	WT																X	X	X	X	
8	~~YGWA-3I~~	WT																X	X	X	X	
9	~~YGWA-3D~~	WT																X	X	X	X	
10	YGWA-14S	WT		8/19	~~1532~~		1100		4	✓		✓						X	X	X	X	PH: 7.32
11	UP-DUP-2	WT		8/19	—				4	✓		✓						X	X	X	X	—
12	~~YGWA-~~ JS YGWA-30I	WT		8/19	1220				4	✓		✓						X	X	X	X	PH: 5.43 JS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	8/20	1730	[signature]	8/20/21	1732	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/20/2

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: 3 of 4

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-2~~ ~~CDG~~
- Project Number: Upgradient

Section C – Invoice Information:
- Attention: Southern Co.
- Company Name:
- Address:
- Pace Quote:
- Pace Project Manager: Kevin Herring/Nicole D'oleo
- Pace Profile #: 10840

Regulatory Agency: CCR

State / Location: GA

SAMPLE ID: One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

Preservatives: Unpreserved, H2SO4, HNO3, HCl, NaOH, Na2S2O3, Methanol, Other (all blank)

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	Collected Start DATE	Start TIME	End DATE	End TIME	TDS: 2450C	Anions Suite 300.0	App III Metals	App IV Metals (No Tl) OR Mercury	Radium 226/228 9315/9320	Residual Chlorine (Y/N)
1	~~[illegible]~~	WT	G					x	x	x	x	x	pH
2	~~AP-2-EB-2~~	WT	G					x	x	x	x	x	pH
3	~~[illegible]~~	WT	G					x	x	x	x	x	pH
4	~~[illegible]~~	WT	G					x	x	x	x	x	pH
5	~~[illegible]~~ YGWA-1D	WT	G	8/19	1110			x	x	x	x	x	pH 6.32
6	~~[illegible]~~ YGWA-1I	WT	G	8/19	1249			x	x	x	x	x	pH 6.38
7	~~[illegible]~~ YGWA-3D	WT	G	8/19	1445			x	x	x	x	x	pH 5.34
8	~~[illegible]~~	WT	G					x	x	x	x	x	pH
9	~~[illegible]~~	WT	G					x	x	x	x	x	pH
10	~~YGWC-28S~~	WT	G	~~8/20~~	~~1124~~			x	x	x	x	x	pH
11	~~[illegible]~~	WT	G					x	x	x	x	x	pH
12	~~YGWC-29I~~	WT	G	~~8/20~~	~~938~~			x	x	x	x	x	pH

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	8/20	1730	[signature]	8/20/21	1740	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Chesk

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/20/21

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 : 4 Of 4

Section A – Required Client Information:		Section B – Required Project Information:		Section C – Invoice Information:	
Company:	Georgia Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	[redacted]-1 (upgradient)	Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Requested Due Date:	10 Day	Project Number:		Pace Profile #:	10840

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS 2450C	Anions Suite 300.0	App III Metals (B & Ca)	App IV Metals	Mercury: 7470A	Radium 228/226: 9315/9320	Residual Chlorine (Y/N)	
1	YGWA-47	WT	G	08/19	1005	08/19	1026			X		X							X	X	X	X	X	X		pH 5.50
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Anions Suite 300.0 (Cl, F, Sulfate)	(Arcadis)	8/20	1730		8/20	1730	5.0	Y	N	Y
App III 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

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

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

Pace Analytical	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#: 92557720

PM: NMG Due Date: 09/09/21

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 CAH

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Type of Ice:

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

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 AMA-R6 (downgradient)
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

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: TDS 2450C	Anions Suite 300.0	App III Metals	App IV Metals (No Tl)	Radium 228/226: 9315/9320	Alkalinity (2320B)	Cations (Na, K, Mg, Ca)	Mercury (7470A)	Residual Chlorine (Y/N)
1	~~YGWA-24~~	WT	G																							
2	YGWA-39	WT	G	8-26-21	1235					2		3						x	x	x	x	x			x	pH:
3	~~YGWA-40~~	WT	G															x	x	x	x	x			x	pH 6.91
4		WT	G															x	x	x	x	x			x	pH:
5		WT	G																							
6		WT	G																							
7		WT	G																							
8		WT	G																							
9		WT	G																							
10		WT	G																							
11		WT	G																							
12		WT	G																							

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Anions Suite 300.0 (Cl, F, Ssulfate)	Kate Pipkiewicz / Arcadis	8.26.21	1410		8/26	1410
App III Metals: Boron 6020B, Ca 6010D		8/27	1640	Charlie Hunter	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)						

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Kate Pipkiewicz				
SIGNATURE of SAMPLER:		DATE Signed:	8-26-21		

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

Pace Analytical	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

92558251

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ Other: ☐ USPS ☑ Client

Custody Seal Present? ☐ Yes ☑ ~~No~~ Seals Intact? ☐ Yes ☐ No

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 083

☑ Wet ☐ Blue ☐ None

Type of Ice:

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

Cooler Temp Corrected (°C): 3.0

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

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-2 (upgradient)
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

Regulatory Agency	
	CCR
State / Location	
	GA

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS: 2450C	Anions Suite 300.0	App III Metals	App IV Metals (No Tl)	Radium 226/228: 9315/9320	Residual Chlorine (Y/N)
	YGWA-2I	WT	G	8/27/14	1133				4	X		X							X	X	X	X	X	pH 7.14
	YGWA-3I	WT	G	8/27/14	0955				4	X		X							X	X	X	X	X	pH 7.39

		DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/27/14	1440		8/27	1440	
App III Metals: Boron 6020B, Ca 6010D		8/27	1640		8/27	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:

DATE Signed:

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

Pace Analytical	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# : 92558254

92558254

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 CAH

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Type of Ice:

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

Pace Analytical
www.pacelabs.com

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

Section A Required Client Information:	Section B Required Project Information:	Section C 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		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates AMA	Pace Project Manager: nicole.d'oleo@pacelabs.com
Requested Due Date:	Project #:	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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
1	AMA-EB-1	WT																	X	X	X	X			
2	AMA EB-2	WT																	X	X	X	X			
3	AMA-FB-1	WT																	X	X	X	X			
4	AMA-FB-2	WT																	X	X	X	X			
5	UP-EB-1	WT																	X	X	X	X			
6	UP-FB-1	WT		8/26/21	1710				5	X		X							X	X	X	X			
7	~~UP-EB-2~~	WT																	X	X	X	X			
8	UP-FB-2	WT																	X	X	X	X			
9	YGWA-4I	WT		8/26/21	1124				5	X		X							X	X	X	X		5.82	
10	YGWA-5I	WT		8/26/21	1628				5	X		X							X	X	X	X		5.51 SU	
11	UP-DUP-3	WT		8/26/21	-				5	X		X							X	X	X	X		-	
12	YGWA-5D	WT		8/26/21	1355				5	X		X							X	X	X	X		7.16 SU	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] / Arc	8/27/21	1640	[signature]	8/27/21	1640	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Chest

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

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

Pace Analytical
www.pacelabs.com

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 2

Section A	Section B	Section C
Required Client Information:	**Required Project Information:**	**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		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates AMA	Pace Project Manager: nicole.d'olac@pacelabs.com,
Requested Due Date:	Project #:	Pace Profile #: 10840

Regulatory Agency

State / Location: GA

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWA-17S	WT		8/27	1045				5	✓		✓							X	X	X	X			Ph: 5.27
14	~~YGWA-18S~~ JS YGWA-18S	WT		8/26	1535				5	✓		✓							X	X	X	X			Ph: 4.40
15	YGWA-18I	WT		8/27	0935				5	✓		✓							X	X	X	X			Ph: 5.40
16	YGWA-20S	WT		8/27	1310				5	✓		✓							X	X	X	X			Ph: 5.37
17	YGWA-21I	WT																	X	X	X	X			
18	YGWC-23S	WT																	X	X	X	X	X		
19	YGWC-24SA	WT																	X	X	X	X			
20	AMA-DUP-1	WT																	X	X	X	X			
21	YGWC-36A	WT																	X	X	X	X	X		
22	YGWC-49	WT																	X	X	X	X			
23	AMA-EB-1			8/26	1600				5										X	X	X	X			
24	AMA-EB-2			8/27	1340				5										X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Arcadis	8/27			8/27/24	1640	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: DATE Signed: 8/27/24

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

Pace Analytical	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# : 92558254

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: 9/2/21 KeW

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

Cooler Temp Corrected (°C): 4.0

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

Section A — Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	~~SCS Contacts~~ Becky Steelet
Copy To:	~~Arcadis Contacts~~
Purchase Order #:	
Project Name:	Yates AMA-[redacted]
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

Regulatory Agency	CCR
State / Location	GA

Requested Analysis Filtered (Y/N)

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: TDS 2450C	Anions Suite 300.0	App III Metals	App. IV Metals (No Ti)	Radium 226/228: 9315/9320	Alkalinity	Cations (Na, K, Mg, Ca)	Residual Chlorine (Y/N)
1	~~UP-EB-1~~ JD	WT	G															x	x	x	x	x			--
2	~~UP-FB-1~~ JS	WT	G															x	x	x	x	x			--
3	~~UP-EB-2~~ JS	WT	G															x	x	x	x	x			--
4	~~UP-FB-2~~ JS	WT	G															x	x	x	x	x			--
5	~~YGWA-4I~~ JS	WT	G															x	x	x	x	x	x		pH:
6	~~YGWA-5I~~ JS	WT	G															x	x	x	x	x			pH:
7	~~UP-DUP-3~~ JS	WT	G		--													x	x	x	x	x			pH:
8	~~YGWA-6D~~ JS	WT	G															x	x	x	x	x	x		pH:
9	~~YGWA-17S~~ JS	WT	G															x	x	x	x	x			pH:
10	~~YGWA-18S~~ JS AMA-DUP-1	WT	G	9/1	←				5	✓		✓						x	x	x	x	x	BS/JS		pH:
11	~~YGWA-16I~~ JS YGWC-245A	WT	G	9/1	1025				5	✓		✓						x	x	x	x	x	BS/JS		pH: 5.22
12	~~YGWA-20S~~ YGWA-21I	WT	G	9/1	1440				5	✓		✓						x	x	x	x	x			pH: 6.65

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl,F, sulfate)	/Arcadis	9/2/21	1530	/Arcadis	9/2/21	1530	
App III Metals: Boron 6020B Ca 6010D		9/2/21	1702	/Pace	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

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 9/2/21

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

Pace Analytical	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: ARCADIS - GA Power **Project:**

WO# : 92559527

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 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

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

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?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	(pH) 9/3/21 DW W			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ 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:** _____

Pace Analytical
www.pacelabs.com

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

Section A – Required Client Information:		Section B – Required Project Information:		Section C – 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				Address:	
Email		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates R6	Pace Project Manager:	nicole.d'olec@pacelabs.com
Requested Due Date:		Project #:		Pace Profile #:	10840

Regulatory Agency: GA

State / Location

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: TDS	Cl, F, SO4	App III/IV Metals	III/IV + Cations	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)
1	~~YGWA-39~~	WT																	X	X		X	X	X	
2	YGWA-40	WT		9/3/21	1027														X	X		X	X	X	4.25
3	~~YGWC-38~~	WT																	X	X		X	X	X	
4	~~YGWC-41~~	WT																	X	X		X	X	X	
5	~~AMW-DUP-2~~	WT																	X	X			X		
6	~~YGWC-42~~	WT																	X	X		X	X	X	
7	~~YGWC-43~~	WT																	X	X		X	X	X	
8	~~AP-1-EB-1~~	WT																			X				
9	~~AP-1-FB-1~~	WT																			X				
10	~~YGWA-47~~	WT																			X				
11	~~YGWC-52~~	WT																			X				
12	~~YGWC-44~~	WT																			X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	[signature] AMS	9/3/21	1730	[signature] / [signature]	9/3/21	1735	4.9	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Chost

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

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JC2
Date:	9/15/2021
Worklist:	62588
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2237303
MB concentration:	0.384
M/B 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 N)?	y
	LCS62588	LCSD62588
Count Date:	9/17/2021	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):	4.687	4.757
Uncertainty (Calculated):	0.230	0.233
Result (pCi/L, g, F):	5.454	4.993
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.212	1.116
Numerical Performance Indicator:	1.22	0.41
Percent Recovery:	116.37%	104.96%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS62588	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD62588	
Sample Result (pCi/L, g, F):	5.454	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.212	
Sample Duplicate Result (pCi/L, g, F):	4.993	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.116	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.549	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.31%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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:		

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

Comments:

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	CLA
Date:	9/13/2021
Worklist:	62589
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	Y
	LCS62589	LCSD62589
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):	0.586	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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS62589	92557070001
Duplicate Sample I.D.	LCSD62589	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%

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 Counting Uncertainty (pCi/L, g, F):		
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:		

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.~~ N/A

LAM 9/21/21

LAM 9/21/21

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Pace Analytical Services Charlotte
9800 Kincey 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557720005	**YGWA-39**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558251001	**YGWA-2I**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558251002	**YGWA-3I**	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT
Pace Project No.: 92557089

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

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557089001	**UP-DUP-1**					
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	
92557089002	**GWA-2**					
	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	
92557089003	**YGWA-14S**					
	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	
92557089004	**UP-DUP-2**					
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557089005	**YGWA-1D**					
	Performed by	CUSTOMER			08/23/21 17:46	
	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	
92557089006	**YGWA-1I**					
	Performed by	CUSTOMER			08/23/21 17:46	
	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	
92557089007	**YGWA-3D**					
	Performed by	CUSTOMER			08/23/21 17:46	
	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	
92557089008	**YGWA-47**					
	Performed by	CUSTOMER			08/23/21 17:46	
	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557089008	**YGWA-47**					
EPA 300.0 Rev 2.1 1993	Sulfate	52.6	mg/L	1.0	08/31/21 04:39	
92557089009	**YGWA-30I**					
	Performed by	CUSTOMER			09/07/21 08:26	
	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	
92557720005	**YGWA-39**					
	Performed by	CUSTOMER			08/30/21 09:54	
	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	
92558251001	**YGWA-2I**					
	Performed by	CUSTOMER			08/30/21 09:57	
	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
92558251002	**YGWA-3I**					
	Performed by	CUSTOMER			08/30/21 09:57	
	pH	7.39	Std. Units		08/30/21 09:57	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558251002	**YGWA-3I**					
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	
92558254002	**YGWA-4I**					
	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	
92558254003	**YGWA-5I**					
	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	
92558254004	**UP-DUP-3**					
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	
92558254005	**YGWA-5D**					
	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	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558254005	**YGWA-5D**					
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	
92558254006	**YGWA-17S**					
	Performed by	CUSTOMER			08/30/21 10:07	
	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	
92558254007	**YGWA-18S**					
	Performed by	CUSTOMER			08/30/21 10:07	
	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	
92558254008	**YGWA-18I**					
	Performed by	CUSTOMER			08/30/21 10:07	
	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	
92558254009	**YGWA-20S**					
	Performed by	CUSTOMER			08/30/21 10:07	
	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558254014	**YGWA-21I**					
	Performed by	CUSTOMER			09/03/21 11:11	
	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	
92559527001	**YGWA-40**					
	Performed by	CUSTOMER			09/03/21 17:47	
	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	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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 Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**26.0**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 16:52	7440-70-2	
6020 MET ICPMS	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	**0.033**	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	**0.065**	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 16:38	7440-48-4	
Copper	**0.00087J**	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	**0.0027J**	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	**0.013**	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	**0.012**	mg/L	0.010	0.0070	1	08/31/21 09:25	08/31/21 16:38	7440-66-6	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**245**	mg/L	10.0	10.0	1		08/27/21 14:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.2**	mg/L	1.0	0.60	1		08/31/21 01:54	16887-00-6	
Fluoride	**0.079J**	mg/L	0.10	0.050	1		08/31/21 01:54	16984-48-8	
Sulfate	**120**	mg/L	3.0	1.5	3		08/31/21 15:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:45		
pH	**5.86**	Std. Units			1		08/23/21 17:45		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**26.5**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 16:56	7440-70-2	
6020 MET ICPMS	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	**0.036**	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	**0.074**	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 16:44	7440-48-4	
Copper	**0.0012J**	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	**0.0028J**	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	**0.014**	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	**0.014**	mg/L	0.010	0.0070	1	08/31/21 09:25	08/31/21 16:44	7440-66-6	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**254**	mg/L	10.0	10.0	1		08/27/21 14:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.2**	mg/L	1.0	0.60	1		08/31/21 02:08	16887-00-6	
Fluoride	**0.060J**	mg/L	0.10	0.050	1		08/31/21 02:08	16984-48-8	
Sulfate	**121**	mg/L	3.0	1.5	3		08/31/21 15:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:45		
pH	**7.32**	Std. Units			1		08/23/21 17:45		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.2**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:01	7440-70-2	
6020 MET ICPMS	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	**0.0077**	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 16:49	7440-39-3	
Beryllium	**0.00022J**	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 16:49	7440-41-7	
Boron	**0.018J**	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**54.0**	mg/L	10.0	10.0	1		08/26/21 19:23		
300.0 IC Anions 28 Days	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 02:24	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/31/21 02:24	16984-48-8	
Sulfate	**6.7**	mg/L	1.0	0.50	1		08/31/21 02:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
6010D ATL ICP	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	
6020 MET ICPMS	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	
2540C Total Dissolved Solids	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		
300.0 IC Anions 28 Days	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:46		
pH	**6.32**	Std. Units			1		08/23/21 17:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**14.2**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:11	7440-70-2	
6020 MET ICPMS	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	**0.0065**	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	**0.00055J**	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	**0.013J**	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:01	7439-93-2	
Molybdenum	**0.0083J**	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**105**	mg/L	10.0	10.0	1		08/26/21 19:23		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.1**	mg/L	1.0	0.60	1		08/31/21 03:24	16887-00-6	
Fluoride	**0.074J**	mg/L	0.10	0.050	1		08/31/21 03:24	16984-48-8	
Sulfate	**8.9**	mg/L	1.0	0.50	1		08/31/21 03:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-1I **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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:46		
pH	**6.38**	Std. Units			1		08/23/21 17:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.0**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:16	7440-70-2	
6020 MET ICPMS	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	**0.0079**	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	**0.0017J**	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	**0.0023J**	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:07	7439-93-2	
Molybdenum	**0.0050J**	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**44.0**	mg/L	10.0	10.0	1		08/26/21 19:24		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.3**	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	**4.9**	mg/L	1.0	0.50	1		08/31/21 03:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:46		
pH	**5.34**	Std. Units			1		08/23/21 17:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**28.1**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:20	7440-70-2	
6020 MET ICPMS	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	**0.0052**	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	**0.023J**	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:38	7439-93-2	
Molybdenum	**0.013**	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**144**	mg/L	10.0	10.0	1		08/26/21 19:24		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.1**	mg/L	1.0	0.60	1		08/31/21 03:54	16887-00-6	
Fluoride	**0.47**	mg/L	0.10	0.050	1		08/31/21 03:54	16984-48-8	
Sulfate	**7.5**	mg/L	1.0	0.50	1		08/31/21 03:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:46		
pH	**5.50**	Std. Units			1		08/23/21 17:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**9.6**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 18:00	7440-70-2	
6020 MET ICPMS	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	**0.029**	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	**0.011J**	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	**0.00099J**	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	**0.0038J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**134**	mg/L	10.0	10.0	1		08/26/21 19:24		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.5**	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	**52.6**	mg/L	1.0	0.50	1		08/31/21 04:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-30I **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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/07/21 08:26		
Collected Time	**5.43**				1		09/07/21 08:26		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.2**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 18:05	7440-70-2	
6020 MET ICPMS	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	**0.0071**	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	**0.0052**	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	**0.0012J**	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**50.0**	mg/L	10.0	10.0	1		08/26/21 19:24		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.6**	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	**1.0**	mg/L	1.0	0.50	1		08/31/21 04:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 09:54		
pH	**6.91**	Std. Units			1		08/30/21 09:54		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**6.6**	mg/L	0.20	0.15	1	09/09/21 11:30	09/09/21 15:23	7440-09-7	
Sodium	**29.6**	mg/L	1.0	0.58	1	09/09/21 11:30	09/09/21 15:23	7440-23-5	
Calcium	**14.1**	mg/L	1.0	0.12	1	09/09/21 11:30	09/09/21 15:23	7440-70-2	
Magnesium	**19.1**	mg/L	0.050	0.012	1	09/09/21 11:30	09/09/21 15:23	7439-95-4	
6020 MET ICPMS	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	**0.038**	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	**0.095**	mg/L	0.040	0.0086	1	09/09/21 11:00	09/09/21 19:44	7440-42-8	
Cadmium	**0.00049J**	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	**0.0011J**	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	**0.0082J**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:44	7439-93-2	
Molybdenum	**0.0027J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**249**	mg/L	10.0	10.0	1		08/31/21 16:26		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.2**	mg/L	1.0	0.60	1		09/06/21 03:00	16887-00-6	
Fluoride	**0.063J**	mg/L	0.10	0.050	1		09/06/21 03:00	16984-48-8	
Sulfate	**19.2**	mg/L	1.0	0.50	1		09/06/21 03:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 09:57		
pH	**7.14**	Std. Units			1		08/30/21 09:57		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**22.6**	mg/L	1.0	0.12	1	09/01/21 10:48	09/01/21 14:45	7440-70-2	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	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	**0.0030J**	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	**0.0058J**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:50	7439-93-2	
Molybdenum	**0.0048J**	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**150**	mg/L	10.0	10.0	1		08/31/21 16:51		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**0.99J**	mg/L	1.0	0.60	1		09/06/21 03:16	16887-00-6	M1
Fluoride	**0.12**	mg/L	0.10	0.050	1		09/06/21 03:16	16984-48-8	M1
Sulfate	**16.7**	mg/L	1.0	0.50	1		09/06/21 03:16	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 09:57		
pH	**7.39**	Std. Units			1		08/30/21 09:57		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**24.7**	mg/L	1.0	0.12	1	09/01/21 10:48	09/01/21 15:04	7440-70-2	
6020 MET ICPMS	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	**0.0039J**	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	**0.026J**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:55	7439-93-2	
Molybdenum	**0.0099J**	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**155**	mg/L	10.0	10.0	1		08/31/21 16:51		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.1**	mg/L	1.0	0.60	1		09/06/21 04:03	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		09/06/21 04:03	16984-48-8	
Sulfate	**18.2**	mg/L	1.0	0.50	1		09/06/21 04:03	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
6010D ATL ICP	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	
6020 MET ICPMS	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	
7470 Mercury	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	
2540C Total Dissolved Solids	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		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:06		
pH	**5.82**	Std. Units			1		08/30/21 10:06		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**7.6**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 17:43	7440-70-2	
6020 MET ICPMS	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	**0.012**	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	**0.00042J**	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	**0.0094J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**93.0**	mg/L	10.0	10.0	1		08/31/21 16:26		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.4**	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	**8.5**	mg/L	1.0	0.50	1		09/06/21 04:35	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:06		
pH	**5.51**	Std. Units			1		08/30/21 10:06		
6010D ATL ICP	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 18:13	7440-70-2	
6020 MET ICPMS	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	**0.019**	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	**0.0032J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**86.0**	mg/L	10.0	10.0	1		08/31/21 16:27		
300.0 IC Anions 28 Days	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 05:23	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 05:23	16984-48-8	
Sulfate	**2.4**	mg/L	1.0	0.50	1		09/06/21 05:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
6010D ATL ICP	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	
6020 MET ICPMS	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	
7470 Mercury	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	
2540C Total Dissolved Solids	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		
300.0 IC Anions 28 Days	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:06		
pH	**7.16**	Std. Units			1		08/30/21 10:06		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**25.2**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:22	7440-70-2	
6020 MET ICPMS	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	**0.0016J**	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:55	7440-38-2	
Barium	**0.0092**	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	**0.0090J**	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	**0.0075J**	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 09:55	7439-93-2	
Molybdenum	**0.0010J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**123**	mg/L	10.0	10.0	1		08/31/21 16:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.4**	mg/L	1.0	0.60	1		09/06/21 05:55	16887-00-6	
Fluoride	**0.061J**	mg/L	0.10	0.050	1		09/06/21 05:55	16984-48-8	
Sulfate	**6.0**	mg/L	1.0	0.50	1		09/06/21 05:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:07		
pH	**5.27**	Std. Units			1		08/30/21 10:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.7**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:27	7440-70-2	
6020 MET ICPMS	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	**0.016**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:36	7440-39-3	
Beryllium	**0.00010J**	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 10:36	7440-41-7	
Boron	**0.011J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**93.0**	mg/L	10.0	10.0	1		08/31/21 16:52		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.5**	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	**5.3**	mg/L	1.0	0.50	1		09/06/21 06:11	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:07		
pH	**4.40**	Std. Units			1		08/30/21 10:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**0.98J**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:32	7440-70-2	
6020 MET ICPMS	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	**0.015**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:41	7440-39-3	
Beryllium	**0.000093J**	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	**0.0019J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**31.0**	mg/L	10.0	10.0	1		08/31/21 16:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.3**	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	**1.2**	mg/L	1.0	0.50	1		09/06/21 06:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-18I **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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:07		
pH	**5.40**	Std. Units			1		08/30/21 10:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**5.1**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:36	7440-70-2	
6020 MET ICPMS	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	**0.020**	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	**0.0032J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**112**	mg/L	10.0	10.0	1		08/31/21 16:52		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.4**	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	**0.59J**	mg/L	1.0	0.50	1		09/06/21 06:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:07		
pH	**5.57**	Std. Units			1		08/30/21 10:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.4**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:41	7440-70-2	
6020 MET ICPMS	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	**0.013**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:53	7440-39-3	
Beryllium	**0.000059J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**67.0**	mg/L	10.0	10.0	1		08/31/21 16:52		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.8**	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-21I **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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 11:11		
pH	**6.65**	Std. Units			1		09/03/21 11:11		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**9.5**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 19:15	7440-70-2	
6020 MET ICPMS	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	**0.0099**	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	**0.0068**	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	**0.0057J**	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	
7470 Mercury	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**137**	mg/L	10.0	10.0	1		09/07/21 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.8**	mg/L	1.0	0.60	1		09/08/21 07:26	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		09/08/21 07:26	16984-48-8	
Sulfate	**5.0**	mg/L	1.0	0.50	1		09/08/21 07:26	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 17:47		
pH	**4.75**	Std. Units			1		09/03/21 17:47		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**5.6**	mg/L	1.0	0.12	1	09/11/21 09:00	09/13/21 16:20	7440-70-2	
6020 MET ICPMS	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	**0.035**	mg/L	0.0050	0.00067	1	09/11/21 09:00	09/14/21 19:02	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.00050	0.000054	1	09/11/21 09:00	09/14/21 19:02	7440-41-7	
Boron	**0.077**	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	**3.1**	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	**2.0**	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	**9.1**	mg/L	0.10	0.022	1	09/11/21 09:00	09/14/21 19:02	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00012J**	mg/L	0.00020	0.000078	1	09/21/21 07:00	09/21/21 10:46	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**88.0**	mg/L	10.0	10.0	1		09/08/21 14:23		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**13.8**	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	**13.8**	mg/L	5.0	5.0	1		09/13/21 17:45		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.5**	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**21.3**	mg/L	1.0	0.50	1		09/10/21 09:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 644090
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
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	92555948008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 644451
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
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	92558251001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	22.6	1	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645799
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
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	92557720001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

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

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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	1.4	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 647011
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 647336
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 644091
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	92555948009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645800
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
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	92557720004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387413 3387414

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 646612
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391829 3391830

Parameter	Units	92559417001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 647371
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
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	92558254005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3395599 3395600

Parameter	Units	92558254005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 643872
QC Batch Method: EPA 7470A
Analysis 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 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	0.0020	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 646057
QC Batch Method: EPA 7470A
Analysis 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	92557720001 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	0.0025	0.0022	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 647249
QC Batch Method: EPA 7470A
Analysis 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 648334
QC Batch Method: EPA 7470A
Analysis 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	92560635001 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	0.0023	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 643454
QC Batch Method: SM 2540C-2011
Analysis 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645434
QC Batch Method: SM 2540C-2011
Analysis 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645665
QC Batch Method: SM 2540C-2011
Analysis 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 646359
QC Batch Method: SM 2320B-2011
Analysis 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	92559892005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	<5.0	50	50	51.8	50.2	104	100	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3390352 3390353

Parameter	Units	92559527001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	13.8	50	50	69.9	70.0	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 644028
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis 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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645268
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis 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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645269
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis 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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.8	50	50	68.7	69.4	132	133	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	3.3	3.3	130	130	90-110	0	10	M1
Sulfate	mg/L	ND	50	50	69.3	69.9	138	140	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385188 3385189

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645412
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis 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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9	50	50	57.8	55.9	110	106	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.8	2.7	109	105	90-110	3	10	
Sulfate	mg/L	ND	50	50	54.9	54.2	108	107	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385552 3385553

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 646087
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis 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	92560111002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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	92559452001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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		

Pace Analytical	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# : 92557089

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 cm

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☑ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Type of Ice:

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

Cooler Temp Corrected (°C): 2.0

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?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☐ Yes	☑ No	☐ N/A	9. EB-1 + FB-1 Collection time not listed on COC but containers are on AP2 Work Order
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ 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 : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	
Company: Georgia Power	Report To: SCS Contacts	Attention: Southern Co.	
Address: Atlanta, GA	Copy To: Arcadis Contacts	Company Name:	Regulatory Agency
		Address:	CCR
Email To: SCS and Arcadis Contacts	Purchase Order #: UPGRADIENT	Pace Quote:	
Phone: Fax:	Project Name: ~~Yates Gypsum Pond Groundwater~~	Pace Project Manager: Kevin Herring/Nicole D'Oleo	State / Location: GA
Requested Due Date: 10 Day	Project Number:	Pace 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)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS 2450C	Anions Suite 300.0	App III Metals	App IV Metals	Mercury 7470A	Radium 226/228 9315/9320	App I and III Metals 6020B Ca, Ni, Ag, Tl, V, Zn	Residual Chlorine (Y/N)	
	Requested Analysis Filtered (Y/N)																	Y/N									
1	UP-DUP-1	WT	G	8/20	—														x	x	x	x	x	x	x		pH 5.86
2	GWA-2	WT	G	8/20	1200				5	✓		✓							x	x	x	x	x	x	x		pH 5.36
3		WT	G																								
4		WT	G																								
5		WT	G																								
6		WT	G																								
7		WT	G																								
8		WT	G																								
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] /Arcadis	8/20	1730	[signature]	8/20/21	1745	5.0	Y	N	Y
App III 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

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature]

DATE Signed: 8/20/21

Pace Analytical

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

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	
Company: Arcadis (GA Power)	Report To: Becky Steever	Attention:	Regulatory Agency
Address: 2839 Paces Ferry Rd	Copy To:	Company Name:	
Suite 900 Atlanta, GA 30339		Address:	
Email:	Purchase Order #:	Pace Quote:	
Phone: Fax:	Project Name: ~~Yates 316-2~~ UG	Pace Project Manager: nicole.d'oleo@pacelabs.com	State / Location
Requested Due Date:	Project #:	Pace Profile #: 10840	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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1	~~AP-2-EB-1~~	WT		~~8/20~~	1070	35			5	✓		✓							X	X	X	X	
2	~~AP-2-EB-2~~	WT																	X	X	X	X	
3	AP-2-FB-1	WT		8/19	1530	35			5	✓		✓							X	X	X	X	
4	~~AP-2-FB-2~~	WT																	X	X	X	X	
5	YGWA-1I	WT																	X	X	X	X	
6	YGWA-1D	WT																	X	X	X	X	
7	~~YGWA-2I~~	WT																	X	X	X	X	
8	~~MGWA-3I~~	WT																	X	X	X	X	
9	YGWA-3D	WT																	X	X	X	X	
10	YGWA-14S	WT		8/19	~~1332~~	100			4	✓		✓							X	X	X	X	Ph: 7.32
11	UP-DUP-2	WT		8/19	—				4	✓		✓							X	X	X	X	—
12	~~YGWA-9I~~	WT																	X	X	X	X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		8/20	1730		8/21/12	1732	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

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.

Pace Analytical

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

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 AP-2~~ UG
Project #:

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

Regulatory Agency:
State / Location: GA

Matrix codes: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

SAMPLE ID: One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	Collected Start DATE	Collected Start TIME	Collected End DATE	Collected End TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1	~~[illegible]~~	WT		8/20	1020	JS			5	✓		✓						X	X	X	X	—
2	~~AP-2-EB-2~~	WT																X	X	X	X	
3	~~AP-2-FB-1~~	WT		8/17	1530	JS			5	✓		✓						X	X	X	X	—
4	~~AP-2-CCR-2~~	WT																X	X	X	X	
5	~~YGWA-1I~~	WT																X	X	X	X	
6	~~YGWA-1D~~	WT																X	X	X	X	
7	~~YGWA-2I~~	WT																X	X	X	X	
8	~~YGWA-3I~~	WT																X	X	X	X	
9	~~YGWA-3D~~	WT																X	X	X	X	
10	YGWA-14S	WT		8/19	~~1300~~		1100		4	✓		✓						X	X	X	X	PH: 7.32
11	UP-DUP-2	WT		8/19	—				4	✓		✓						X	X	X	X	—
12	~~YGWA-~~ JS YGWA-30I	WT		8/19	1220				4	✓		✓						X	X	X	X	PH: 5.43 JS

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)
	[signature]	8/20	1730	[signature]	8/24/21	1732	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER: [signature]
DATE Signed: 8/20/2

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
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-2~~ ~~[illegible]~~
Project Number	[illegible]

Section C — Invoice Information:

Attention	Southern Co.
Company Name	
Address	
Pace Quote	
Pace Project Manager	Kevin Herring/Nicole D'oleo
Pace Profile #	10840

Regulatory Agency	State / Location
CCR	GA

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

Collected (Start DATE / TIME, End DATE / TIME); Sample Temp at Collection; # of Containers; Preservatives: Unpreserved, H2SO4, HNO3, HCl, NaOH, Na2S2O3, Methanol, Other; Analyses Test Y/N; Requested Analysis Filtered (Y/N); Residual Chlorine (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	TDS: 2450C	Anions Suite 300.0	App III Metals	App IV Metals (No Tl) ~~[illegible]~~	Radium 226/228 9315/9320	pH
1	~~[illegible]~~	WT	G			x	x	x	x	x	pH
2	~~AP-2-EB-2~~	WT	G			x	x	x	x	x	pH
3	~~[illegible]~~	WT	G			x	x	x	x	x	pH
4	~~[illegible]~~	WT	G			x	x	x	x	x	pH
5	~~[illegible]~~ YGWA-1D	WT	G	8/19	1110	x	x	x	x	x	pH 6.32
6	~~YGWC-28I~~ YGWA-1I	WT	G	8/19	1249	x	x	x	x	x	pH 6.38
7	~~[illegible]~~ YGWA-3D	WT	G	8/19	1445	x	1x	x	x	x	pH 5.34
8	~~[illegible]~~	WT	G			x	x	x	x	x	pH
9	~~[illegible]~~	WT	G			x	x	x	x	x	pH
10	~~YGWC-28S~~	WT	G	~~8/20~~	~~1124~~	x	x	x	x	x	pH
11	~~[illegible]~~	WT	G			x	x	x	x	x	pH
12	~~YGWC-29I~~	WT	G	~~8/20~~	~~938~~	x	x	x	x	x	pH

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	8/20	1730	[signature]	8/20/21	1740	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Chest

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/20/21

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 : 4 Of 4

Section A – Required Client Information:		Section B – Required Project Information:		Section C – Invoice Information:	
Company:	Georgia Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	[redacted]-1 (upgradient)	Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Requested Due Date:	10 Day	Project Number:		Pace Profile #:	10840

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS 2450C	Anions Suite 300.0	App III Metals (B & Ca)	App IV Metals	Mercury 7470A	Radium 228/226 9015/9320	Residual Chlorine (Y/N)	
1	YGWA-47	WT	G	08/19	1005	08/19	1026			X		X							X	X	X	X	X	X		pH ~~4.50~~ 5.50
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Anions Suite 300.0 (Cl, F, Sulfate)	(Arcadis)	8/20	1730				5.0	Y	N	Y
App III 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

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

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

Pace Analytical	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#: 92557720

PM: NMG Due Date: 09/09/21

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 CAH

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Type of Ice:

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

Cooler Temp Corrected (°C): 3.0

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

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 AMA-R6 (downgradient)
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

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: TDS 2450C	Anions Suite 300.0	App III Metals	App IV Metals (No Tl)	Radium 228/226: 9315/9320	Alkalinity (2320B)	Cations (Na, K, Mg, Ca)	Mercury (7470A)	Residual Chlorine (Y/N)
1	~~YGWA-24~~	WT	G															x	x	x	x	x			x	pH:
2	YGWA-39	WT	G	8-26-21	1235					2		3						x	x	x	x	x			x	pH 6.91
3	~~YGWA-40~~	WT	G															x	x	x	x	x			x	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																							

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Ssulfate)	Kate Pipkiewicz Arcadis	8-26-21	1410		8/26	1410	
App III Metals: Boron 6020B, Ca 6010D		8/27	1640	Charlie Hunter	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)							

SAMPLER NAME AND SIGNATURE							
PRINT Name of SAMPLER:	Kate Pipkiewicz						
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)

Pace Analytical	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

92558251

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ Other: ☐ USPS ☑ Client

Custody Seal Present? ☐ Yes ☑ ~~No~~ Seals Intact? ☐ Yes ☐ No

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 083

☑ Wet ☐ Blue ☐ None

Type of Ice:

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

Cooler Temp Corrected (°C): 3.0

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

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-2 (upgradient)
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

Regulatory Agency	
	CCR
State / Location	
	GA

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS: 2450C	Anions Suite 300.0	App III Metals	App IV Metals (No Tl)	Radium 226/228: 9315/9320	Residual Chlorine (Y/N)	
	YGWA-2I	WT	G	8/27/24	1133				4	X		X							X	X	X	X	X		pH 7.14
	YGWA-3I	WT	G	8/27/24	0955				4	X		X							X	X	X	X	X		pH 7.39

		DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/27/24	1440		8/27	1440	
App III Metals: Boron 6020B, Ca 6010D		8/27	1640		8/27	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:

DATE Signed:

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

Pace Analytical	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# : 92558254

92558254

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 CAH

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Type of Ice:

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

Cooler Temp Corrected (°C): 3.0

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

Pace Analytical
www.pacelabs.com

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

Section A Required Client Information:	Section B Required Project Information:	Section C 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		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates AMA	Pace Project Manager: nicole.d'oleo@pacelabs.com
Requested Due Date:	Project #:	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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
1	AMA-EB-1	WT																	X	X	X	X			
2	AMA EB-2	WT																	X	X	X	X			
3	AMA-FB-1	WT																	X	X	X	X			
4	AMA-FB-2	WT																	X	X	X	X			
5	UP-EB-1	WT																	X	X	X	X			
6	UP-FB-1	WT		8/26/21	1710				5	X		X							X	X	X	X			
7	~~UP-EB-2~~	WT																	X	X	X	X			
8	UP-FB-2	WT																	X	X	X	X			
9	YGWA-4I	WT		8/26/21	1124				5	X		X							X	X	X	X			5.82
10	YGWA-5I	WT		8/26/21	1628				5	X		X							X	X	X	X			5.51 SU
11	UP-DUP-3	WT		8/26/21	-				5	X		X							X	X	X	X			-
12	YGWA-5D	WT		8/26/21	1355				5	X		X							X	X	X	X			7.16 SU

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	8/27/21	1640	[signature]	8/27/21	1640	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Chest

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

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

Pace Analytical
www.pacelabs.com

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 2

Section A Required Client Information:		Section B Required Project Information:		Section C 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				Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates AMA	Pace Project Manager:	nicole.d'olac@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	10840

Regulatory Agency

State / Location: GA

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

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 START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWA-17S	WT		8/27	1045				5	✓		✓								x	x	x	x			Ph: 5.27
14	~~YGWA-18S~~ JS YGWA-18S	WT		8/26	1535				5	✓		✓								x	x	x	x			Ph: 4.40
15	YGWA-18I	WT		8/27	0935				5	✓		✓								x	x	x	x			Ph: 5.40
16	YGWA-20S	WT		8/27	1310				5	✓		✓								x	x	x	x			Ph: 5.37
17	YGWA-21I	WT																		x	x	x	x			
18	YGWC-23S	WT																		x	x	x	x	x		
19	YGWC-24SA	WT																		x	x	x	x			
20	AMA-DUP-1	WT																		x	x	x	x			
21	YGWC-36A	WT																		x	x	x	x	x		
22	YGWC-49	WT																		x	x	x	x			
23	AMA-EB-1			8/26	1600				5											x	x	x	x			
24	AMA-EB-2			8/27	1340				5											x	x	x	x			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Arcadis	8/27			8/27/24	1640	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/24

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

Pace Analytical	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# : 92558254

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: 9/2/21 KeW

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

Section A — Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	~~SCS Contacts~~ Becky Steed
Copy To:	~~Arcadis Contacts~~
Purchase Order #:	
Project Name:	Yates AMA-[redacted]
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

Regulatory Agency	
	CCR
State / Location	
	GA

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analyses Test: TDS 2450C	Anions Suite 300.0	App III Metals	App. IV Metals (No Ti)	Radium 226/228: 9315/9320	Alkalinity	Cations (Na, K, Mg, Ca)	Residual Chlorine (Y/N)
1	~~UP-EB-1~~ JJ	WT	G																x	x	x	x	x			--
2	~~UP-FB-1~~ JS	WT	G																x	x	x	x	x			--
3	~~UP-EB-2~~ JS	WT	G																x	x	x	x	x			--
4	~~UP-FB-2~~ JS	WT	G																x	x	x	x	x			--
5	~~YGWA-4I~~ JS	WT	G																x	x	x	x	x	x		pH:
6	~~YGWA-5I~~ JS	WT	G																x	x	x	x	x			pH:
7	~~UP-DUP-3~~ JS	WT	G		--														x	x	x	x	x			pH:
8	~~YGWA-6D~~ JS	WT	G																x	x	x	x	x	x		pH:
9	~~YGWA-17S~~ JS	WT	G																x	x	x	x	x			pH:
10	~~YGWA-18S~~ JS AMA-DUP-1	WT	G	9/1	--				5	✓		✓							x	x	x	x	x	6020B		pH:
11	~~YGWA-18I~~ JS YGWC-245A	WT	G	9/1	1025				5	✓		✓							x	x	x	x	x	6020B		pH: 5.22
12	~~YGWA-20S~~ YGWA-21I	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 (Cl,F, sulfate)	/Arcadis	9/2/21	1530	/Arcadis	9/2/21	1530	
App III Metals: Boron 6020B Ca 6010D		9/2/21	1702	/Pace	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

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 9/2/21

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

Pace Analytical	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: ARCADIS - GA Power **Project:**

WO# : 92559527

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 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

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

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?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	(pH) 9/3/21 DW W			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ 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:** _____

Pace Analytical® www.pacelabs.com

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

Section A Required Client Information:		Section B Required Project Information:		Section C 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				Address:	
Email		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates R6	Pace Project Manager:	nicole.d'oleo@pacelabs.com
Requested Due Date:		Project #:		Pace Profile #:	10840

Regulatory Agency:

State / Location: GA

MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III/IV Metals	III/IV + Cations	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
1	~~YGWA-50~~	WT																	x	x		x	x	x		
2	YGWA-40	WT		9/3/21	1020														x	x		x	x	x		475
3	~~YGWC-38~~	WT																	x	x		x	x	x		
4	~~YGWC-41~~	WT																	x	x		x	x	x		
5	~~AMA-DUP-2~~	WT																	x	x			x			
6	~~YGWC-42~~	WT																	x	x		x	x	x		
7	~~YGWC-43~~	WT																	x	x		x	x	x		
8	~~AP-1-EB-1~~	WT																			x					
9	~~AP-1-FB-1~~	WT																			x					
10	~~YGWA-47~~	WT																			x					
11	~~YGWC-52~~	WT																			x					
12	~~YGWC-44~~	WT																			x					

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / Acs	9/3/21	1730	[signature] / Pace	9/3/21	1735	4.9	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark 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)

Appendix B

Field Sampling Report

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AP-1
Date:	8/16/2021
Sampler:	Jake Swanson
Equipment:	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	73.8	--
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 - Nphelometric 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 - Nphelometric 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 - Nphelometric 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

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052923	**Well ID**	YGWC-46A			**Date**	08/27/2021
Project Location	AP-1		**Weather(°F)**	It is Mostly Cloudy. The wind is blowing E at 6.9 mph. 85F			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	69.22	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	37.57	**Total Depth (ft-bmp)**	79.22	**Water Column(ft)**	41.65	**Gallons in Well**	6.77
MP Elevation	733.04	**Pump Intake (ft-bmp)**		**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:01	**Well Volumes Purged**	0.22	**Sample ID**	YGWC-46A	**Sampled by**	Mark Chest
Purge Start	12:31	**Gallons Purged**	1.52	**Replicate/ Code No.**	AP-1-DUP-1	**Color**	Clear
Purge End	12:56						

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	144.78	0.11	21.1	-87.9
12:41:25	10:00	250	43.48	6.75	1163.94	558.59	0.15	21.4	-58.95
12:46:25	15:00	200	44.2	6.75	1151.78	1079.03	0.17	21.8	-51.32
12:51:25	20:00	200	44.14	6.75	1162.62	1156.7	0.22	23.3	-45.3
12:56:25	25:00	200	44.12	6.83	1146.61	1470.81	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: LaMotte turbidity meter readings (Time:NTU) 1236:32.09; 1241:0.68; 1246:0.12; 1251:0.86; 1256:0.36

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

ARCADIS Design & Consultancy for natural and built assets

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	3.26	8.08	22	181.17
09:38:02	05:00	100	35.02	5.51	208.8	2.38	6.41	21.3	165.83
09:43:02	10:00	100	35.35	5.48	203.5	2.23	4.92	20.6	155.38
09:48:02	15:00	75	35.23	5.48	202.03	2.1	4.9	20.2	150.82
09:53:02	20:00	75	35.25	5.49	202.51	2.1	5.19	20.8	147.87
09:58:02	25:00	75	35.25	5.51	206.63	2.11	5.15	21.1	143.89
10:03:02	30:00	75	35.25	5.5	202.27	2.1	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: LaMotte turbidity meter readings (Time: NTU) 0933: 2.25; 0938: 0.99; 0943: 0.94; 0948: 0.72; 0953: 0.69; 0958: 0.90; 1003: 0.83

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

ARCADIS Design & Consultancy for natural and built assets

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	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	20.7	**Total Depth (ft-bmp)**	73.8	**Water Column(ft)**	53.1	**Gallons in Well**	8.63
MP Elevation	719.36	**Pump Intake (ft-bmp)**	69	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:50	**Well Volumes Purged**	0.11	**Sample ID**	YGWC-45	**Sampled by**	Ash Willis
Purge Start	09:09	**Gallons Purged**	0.92	**Replicate/ Code No.**	AP-1-FB-1	**Color**	Clear
Purge End	09:44						

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: LaMotte turbidity meter readings (Time: NTU) 0909: 5.9; 0914: 4.90; 0919: 3.07; 0924: 2.88; 0929: 2.32; 0934: 2.11; 0939: 1.87; 0944: 1.99

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

ARCADIS Design & Consultancy for natural and built assets

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	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	49.99	**Total Depth (ft-bmp)**	89.85	**Water Column(ft)**	39.86	**Gallons in Well**	6.48
MP Elevation	758.35	**Pump Intake (ft-bmp)**	83	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:22	**Well Volumes Purged**	0.15	**Sample ID**	YGWC-44	**Sampled by**	Ash Willis
Purge Start	12:07	**Gallons Purged**	0.99	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:17						

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	5.16	7.57	38.9	69.94
12:12:16	05:00	50	50.4	7.35	471.93	4.98	7.66	39	74.71
12:17:16	10:00	50	50.4	7.29	480.06	5.05	8.28	38.7	67.45
12:22:16	15:00	50	50.43	6.72	468.96	5.13	8.2	38.9	-65.41
12:27:16	20:00	50	50.45	6.54	465.13	5.4	7.75	39.3	-86.22
12:32:16	25:00	50	50.45	6.3	461.38	5.72	6.96	39.6	-105.64
12:37:16	30:00	50	50.45	6.15	460.44	6.03	5.9	40.1	-111.1
12:42:16	35:00	50	50.45	6.04	461.18	6.12	4.32	39.3	-109.59
12:47:16	40:00	50	50.45	5.94	462.15	6.28	4.16	40.2	-105.76
12:52:16	45:00	50	50.45	5.88	462.88	6.31	3.93	40.4	-102.35
12:57:16	50:00	50	50.45	5.82	463.04	6.39	3.65	40.4	-93.52
13:02:16	55:00	50	50.45	5.78	462.42	6.43	3.52	40.5	-84.4
13:07:16	00:00	50	50.45	5.78	463.72	6.49	3.16	40.9	-80.22
13:12:16	05:00	50	50.45	5.77	464.89	6.48	2.86	41.3	-80.79
13:17:16	10:00	50	50.45	5.75	465.73	6.46	3.01	41.4	-76.86
13:22:16	15:00	50	50.45	5.73	466.52	6.44	3.09	41.5	-72.35

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: LaMotte turbidity meter readings (Time: NTU) 1207: 1.27; 1212: 1.08; 1217: 1.05; 1222: 1.12; 1227: 1.04; 1232: 1.44; 1237: 1.67; 1242: 1.93; 1247: 2.41; 1252: 1.13; 1257: 2.59; 1302: 1.31; 1307: 1.47; 1312: 2.55; 1317: 1.87

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

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	YGWC-52			**Date**	08/20/2021
Project Location	AP-1		**Weather(°F)**	77.7 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	60.79	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	38.38	**Total Depth (ft-bmp)**	70.79	**Water Column(ft)**	32.41	**Gallons in Well**	5.27
MP Elevation	755.86	**Pump Intake (ft-bmp)**	65	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:15	**Well Volumes Purged**	0.07	**Sample ID**	YGWC-52	**Sampled by**	Ash Willis
Purge Start	12:39	**Gallons Purged**	0.36	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:10						

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	49.6	1.87	21.8	21.47
12:44:49	05:00	150	38.38	6.81	435.23	19.44	1.58	22.1	24.23
12:49:49	10:00	150	38.38	5.87	429.96	7.91	1.58	22.1	122.33
12:54:49	15:00	150	38.38	6.81	425.88	13.5	1.58	21.6	24.09
12:59:49	20:00	150	38.38	6.46	423.88	12	1.57	21.5	58.15
13:04:49	25:00	150	38.38	6.71	421.43	11.27	1.62	21.3	33.91
13:09:49	30:00	150	38.38	6.75	421.71	4.16	1.61	21.2	28.54
13:14:49	35:00	150	38.38	5.52	421.14	14.26	1.67	21.2	35.51
13:19:49	40:00	150	38.38	5.73	419.32	11.18	1.68	21.2	132.3
13:24:49	45:00	150	38.38	5.47	420.18	9.82	1.68	21	159.67
13:29:49	50:00	150	38.38	5.51	419.73	2.42	1.69	21	160.37
13:34:49	55:00	150	38.38	6.66	420.63	14.46	1.74	21	41.49
13:39:49	00:00	150	38.38	5.55	420.47	12.63	1.69	21.6	24.72
13:44:49	05:00	150	38.38	6.13	419.22	11.19	1.77	21.3	145.81
13:49:49	10:00	150	38.38	5.52	419.98	2.53	1.72	21.6	165.07
13:54:49	15:00	150	38.38	5.61	419.82	11.53	1.69	21.4	147.63
13:59:49	20:00	150	38.38	6.74	419.61	10.23	1.69	21.8	32.01
14:04:49	25:00	150	39.07	6.74	419.95	8.47	1.69	21.4	28.28
14:09:49	30:00	150	39.12	6.71	419.95	1.49	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: LaMotte turbidity meter readings (Time: NTU) 1240: 12.73; 1245: 8.73; 1250: 7.02; 1255: 6.55; 1300: 6.25; 1305: 6.00; 1310: 5.76 ;1315: 4.05; 1320: 3.61; 1325: 4.23; 1330: 4.5; 1335: 3.49; 1340: 4.11; 1345: 3.06; 1350: 2.93; 1355: 2.55; 1400: 2.44; 1405: 2.43; 1410: 2.75

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 Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-1
Permit Number:	
Well ID:	YGWC-52
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	13:24:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☐	☑	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☐	☐	☑
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☑	☐	☐
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☑	☐	☐
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
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

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-1
Permit Number:	
Well ID:	YGWC-44
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	13:35:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☐	☑	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☐	☐	☑
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☑	☐	☐
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☑	☐	☐
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
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

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-1
Permit Number:	
Well ID:	PZ-09S
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	13:53:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☐	☑	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☐	☐	☑
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
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

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-1
Permit Number:	
Well ID:	YGWA-47
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	13:16:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☐	☑	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☐	☐	☑
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☑	☐	☐
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☑	☐	☐
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
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

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-1
Permit Number:	
Well ID:	PZ-09I
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	13:59:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☐	☑	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☐	☐	☑
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
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

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-1
Permit Number:	
Well ID:	YGWC-45
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	14:01:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☐	☐	☑
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☑	☐	☐
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☑	☐	☐
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
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

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-1
Permit Number:	
Well ID:	PZ-10I
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	14:09:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☐	☑	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☐	☐	☑
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
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

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-1
Permit Number:	
Well ID:	PZ-10S
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	14:18:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☐	☐	☑
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-1
Permit Number:	
Well ID:	YGWC-46A
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	14:39:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☐	☑	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☐	☐	☑
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☑	☐	☐
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☑	☐	☐
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
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

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-1
Permit Number:	
Well ID:	PZ-53
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	14:43:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☐	☐	☑
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
	Trim grass around well pad				
8	Date by when corrective actions are needed:				

Appendix C

Statistical Analysis

Appendix III Statistically Significant Increase Summary (August 2021)

Appendix III Parameter	Monitoring Wells
Boron	YGWC-44, YGWC-45, YGWC-46A
Calcium	YGWC-45, YGWC-46A, YGWC-52
Chloride	YGWC-44, YGWC-46A
Sulfate	YGWC-46A
Total Dissolved Solids	YGWC-44, YGWC-45, YGWC-46A, YGWC-52

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
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**
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
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-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
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**
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
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**
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
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 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-21I (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-1I (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
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)	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
Boron, total (mg/L)	**YGWA-40 (bg)**	**-0.01963**	**-52**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
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
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)	YGWC-45	-0.04198	-5	-48	No	14	0	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-18I (bg)	0.02122	10	63	No	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-20S (bg)	0.06963	56	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-21I (bg)**	**1.218**	**82**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
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
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)	YGWA-5I (bg)	0.07389	58	63	No	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-14S (bg)	-0.01957	-45	-63	No	17	0	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-1I (bg)**	**-0.1058**	**-73**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
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
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)	YGWC-44	0.2235	31	48	No	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-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
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-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
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-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-1I (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
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**
Chloride, Total (mg/L)	YGWC-46A	-1.396	-49	-68	No	18	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-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
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-4I (bg)	0.1495	44	63	No	17	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-14S (bg)	0.08247	21	63	No	17	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-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
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)	YGWA-3I (bg)	1.181	61	63	No	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)	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
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-4I (bg)	0.3992	4	63	No	17	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**
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)

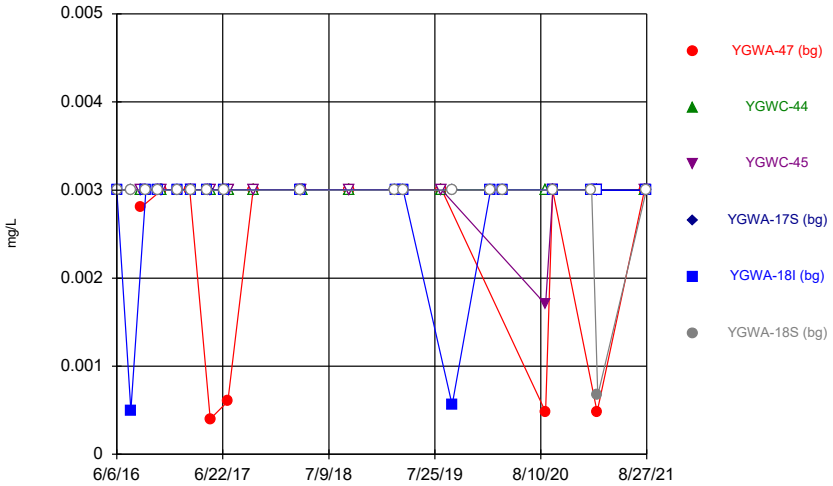
Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 11/2/2021, 5:25 PM

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.

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

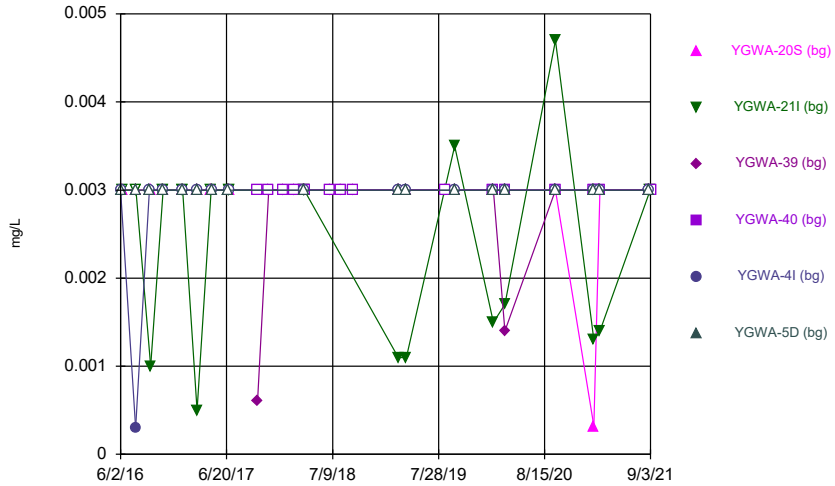
Time Series



Constituent: Antimony Analysis Run 11/2/2021 4:35 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

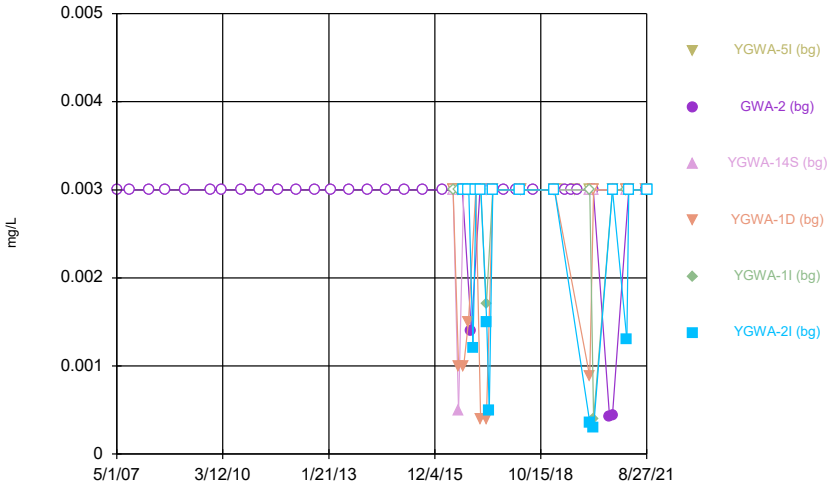
Time Series



Constituent: Antimony Analysis Run 11/2/2021 4:35 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

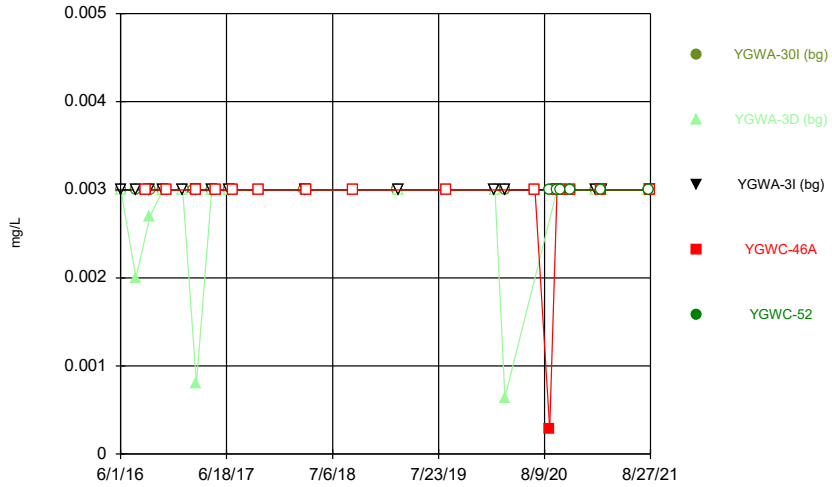
Time Series



Constituent: Antimony Analysis Run 11/2/2021 4:35 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

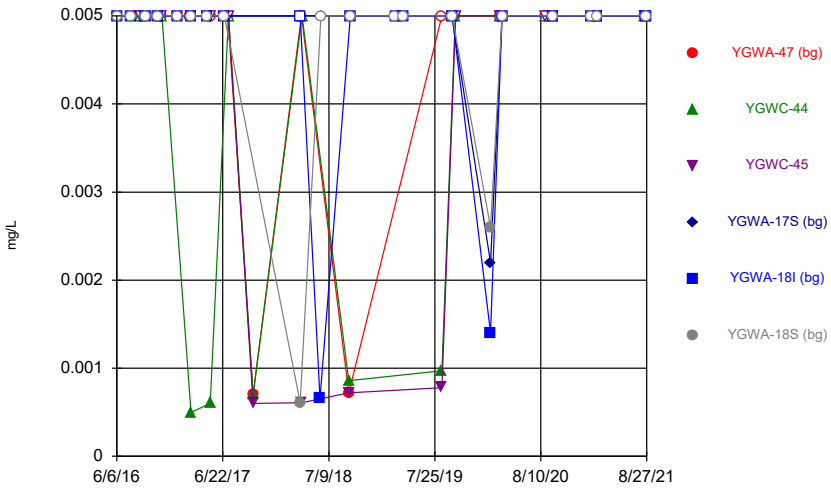
Time Series



Constituent: Antimony Analysis Run 11/2/2021 4:35 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

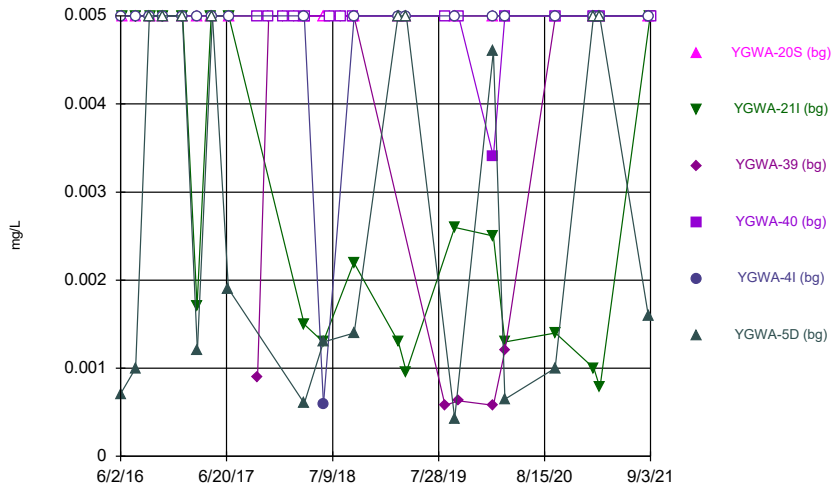
Time Series



Constituent: Arsenic Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

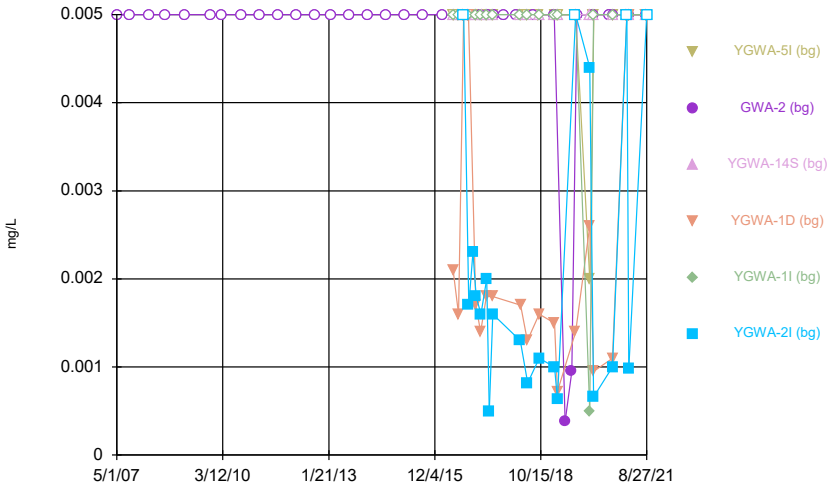
Time Series



Constituent: Arsenic Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

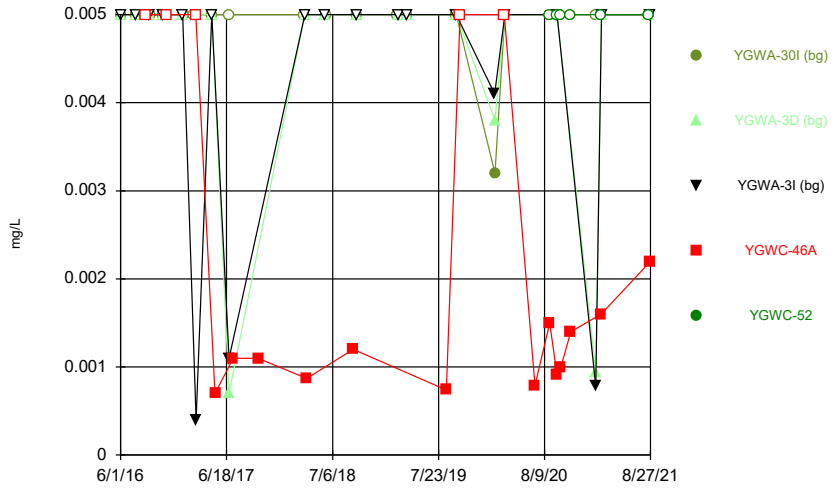
Time Series



Constituent: Arsenic Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

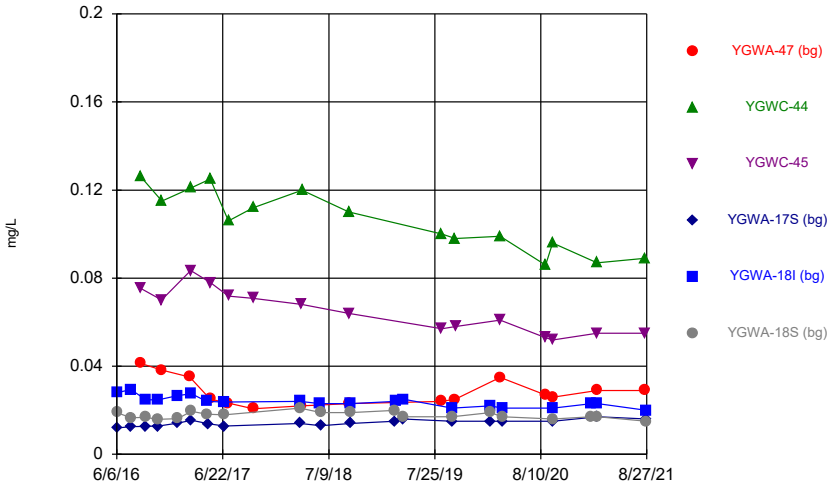
Time Series



Constituent: Arsenic Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

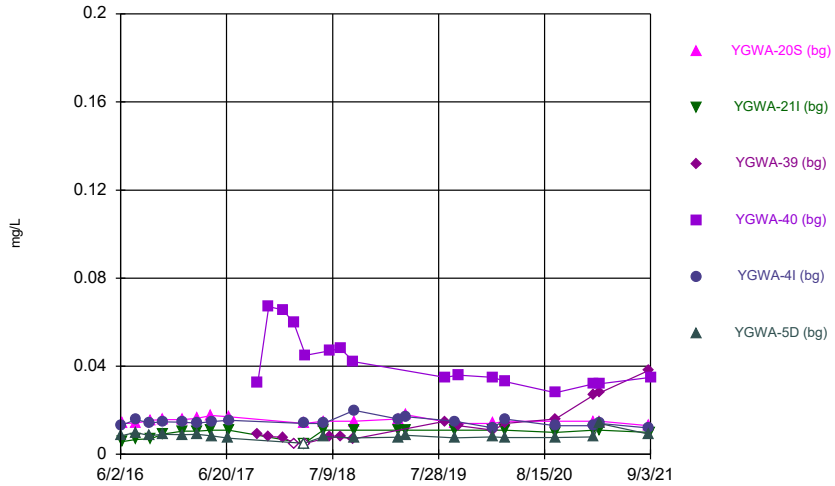


Constituent: Barium Analysis Run 11/2/2021 4:36 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

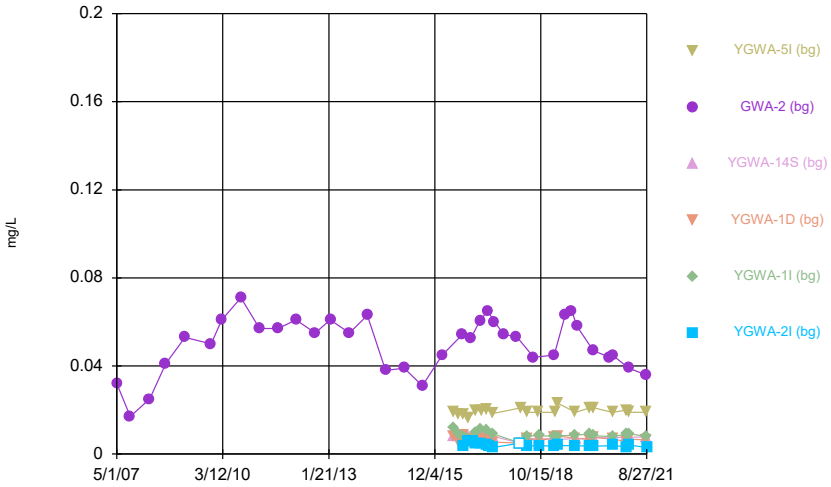


Constituent: Barium Analysis Run 11/2/2021 4:36 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

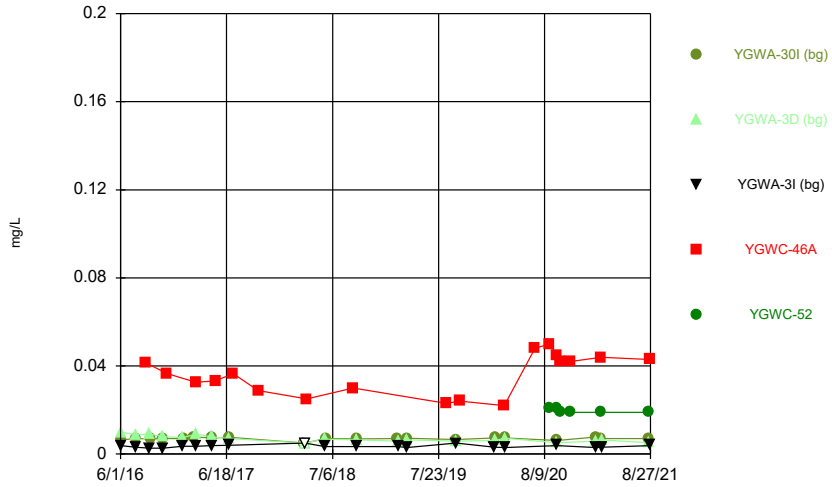


Constituent: Barium Analysis Run 11/2/2021 4:36 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

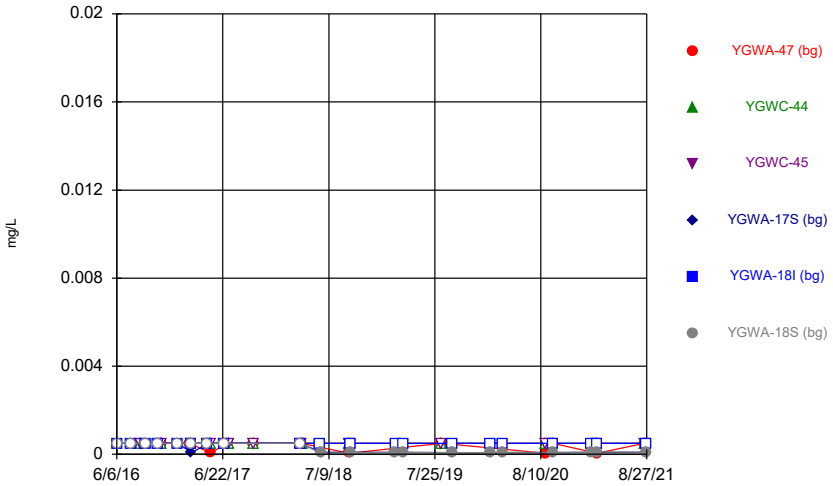


Constituent: Barium Analysis Run 11/2/2021 4:36 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

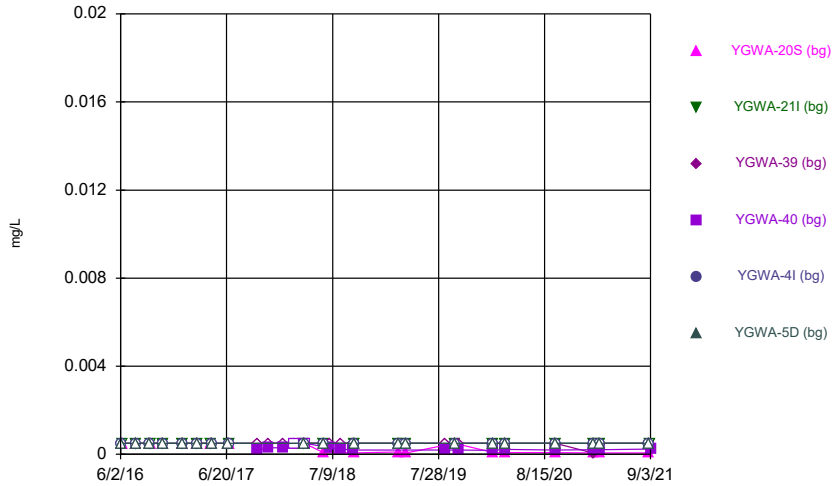
Time Series



Constituent: Beryllium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

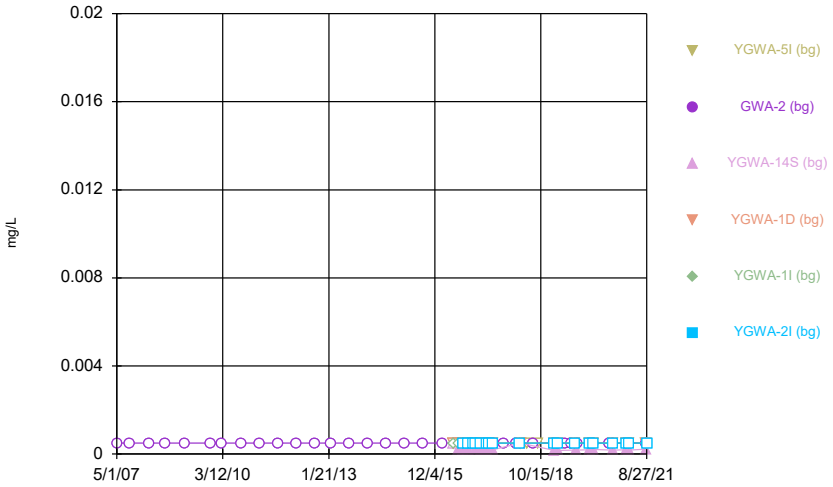
Time Series



Constituent: Beryllium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

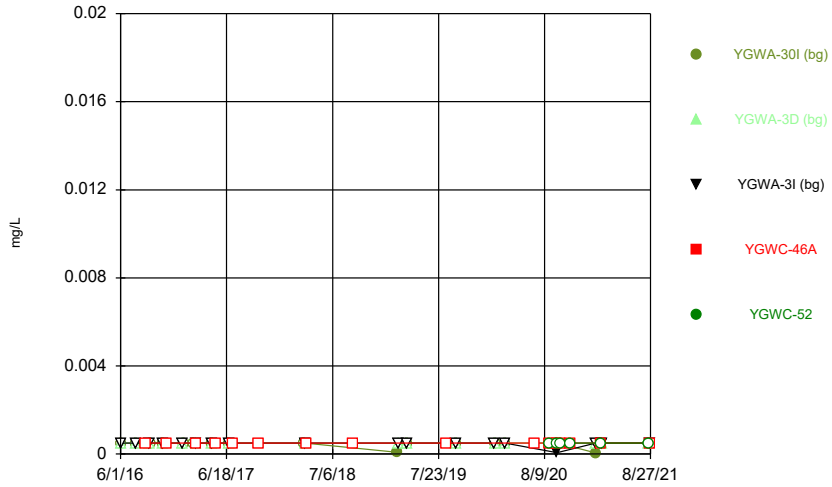
Time Series



Constituent: Beryllium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

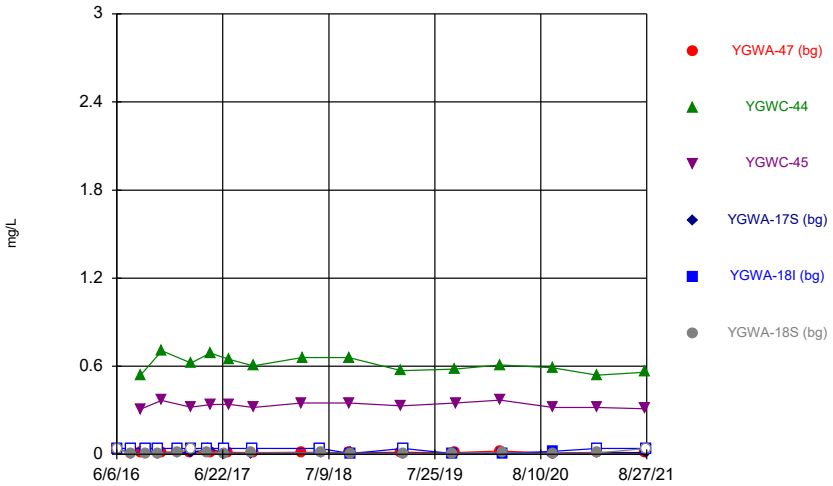
Time Series



Constituent: Beryllium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

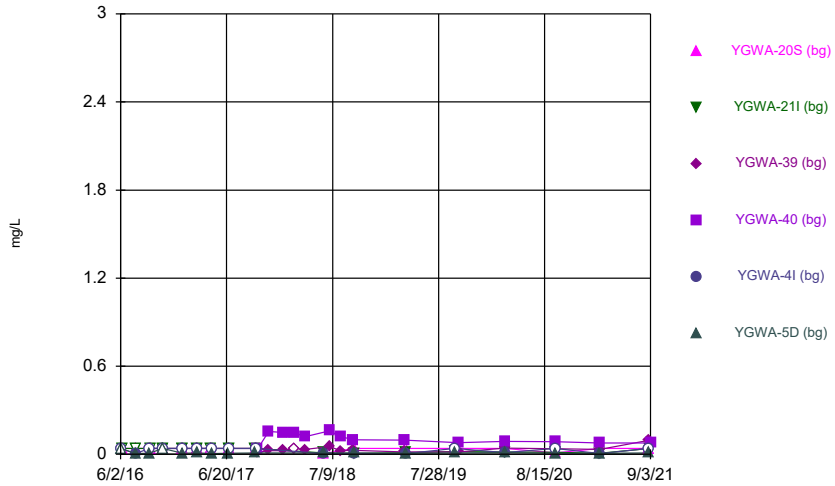
Time Series



Constituent: Boron, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

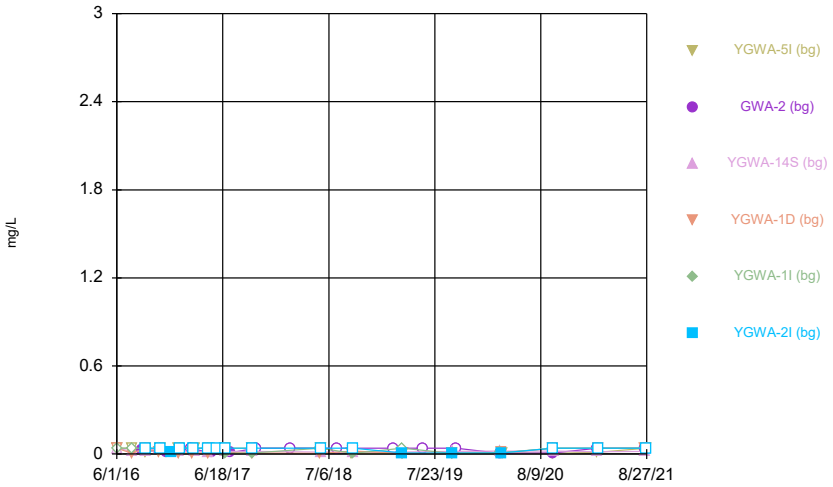
Time Series



Constituent: Boron, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

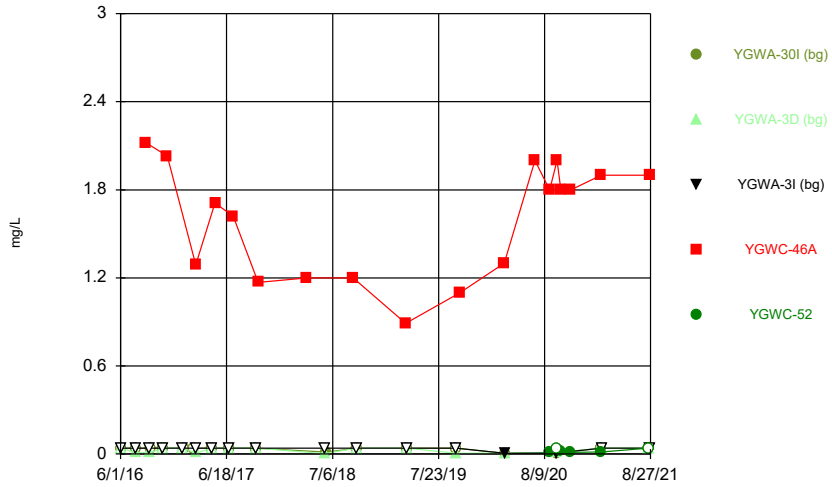
Time Series



Constituent: Boron, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

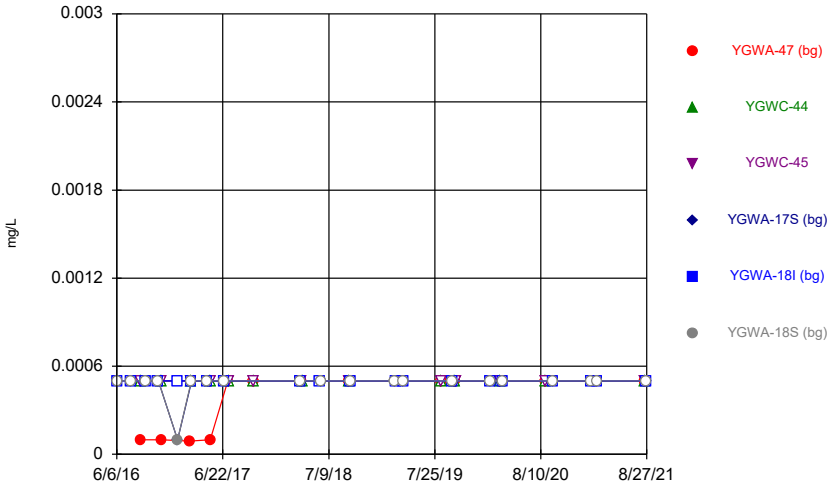
Time Series



Constituent: Boron, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

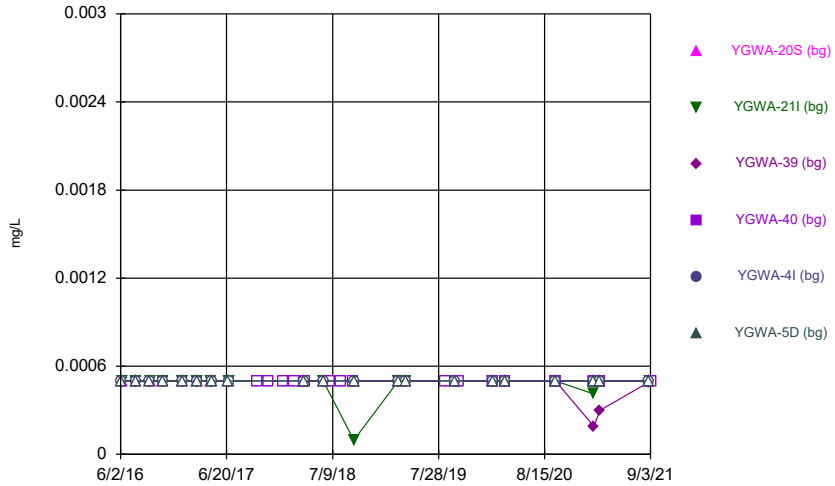
Time Series



Constituent: Cadmium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

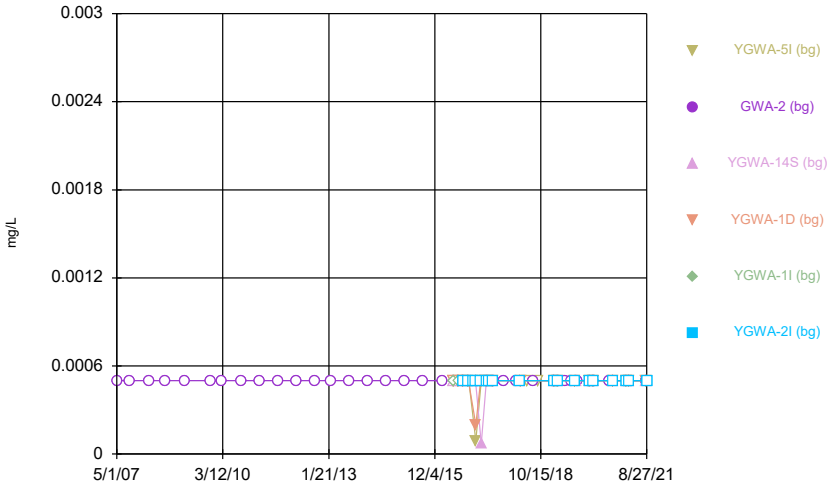
Time Series



Constituent: Cadmium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

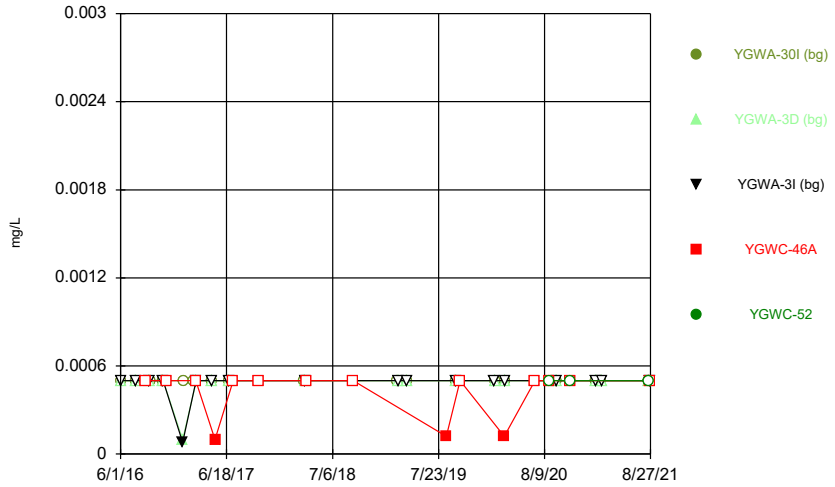
Time Series



Constituent: Cadmium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

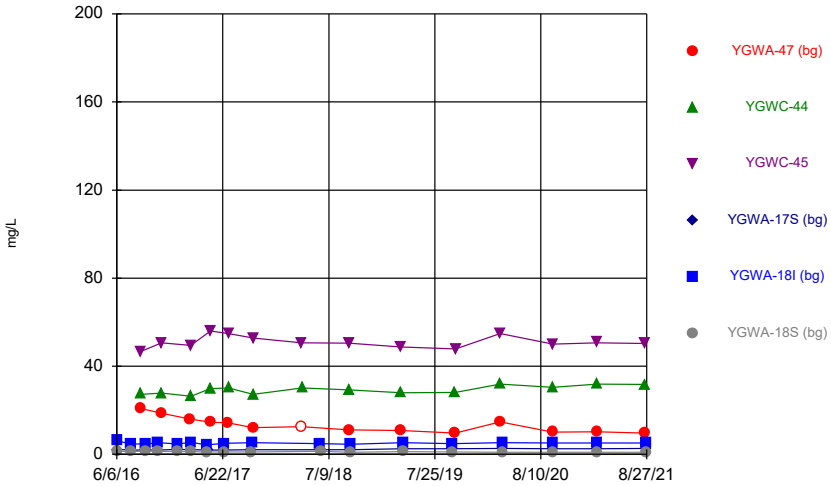
Time Series



Constituent: Cadmium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

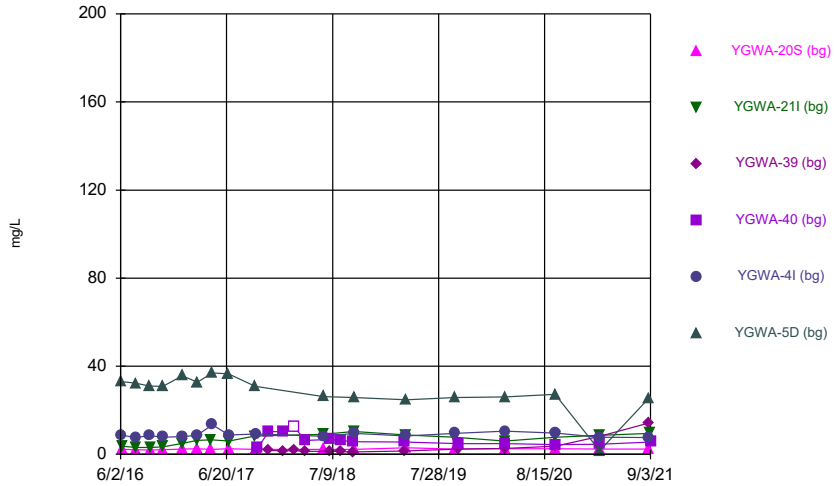
Time Series



Constituent: Calcium, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

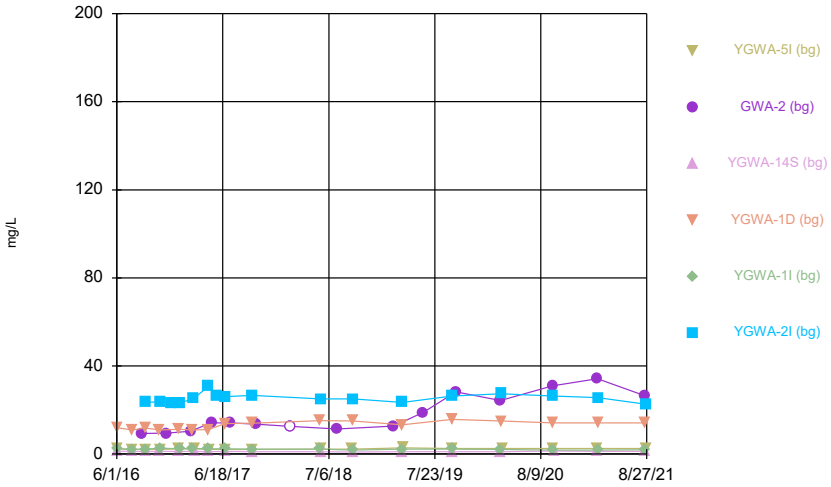
Time Series



Constituent: Calcium, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

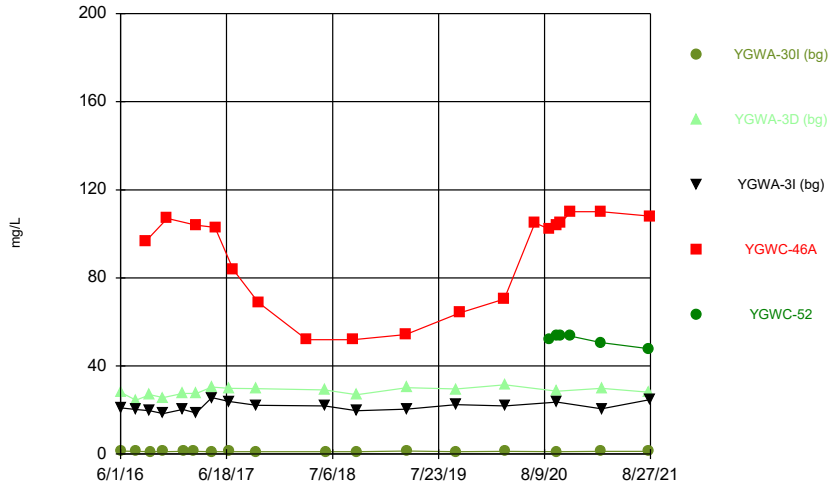
Time Series



Constituent: Calcium, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

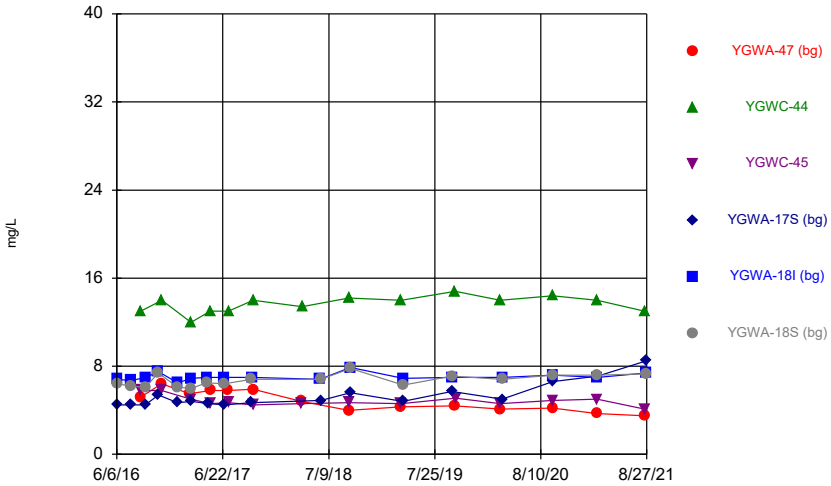
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series



Constituent: Calcium, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

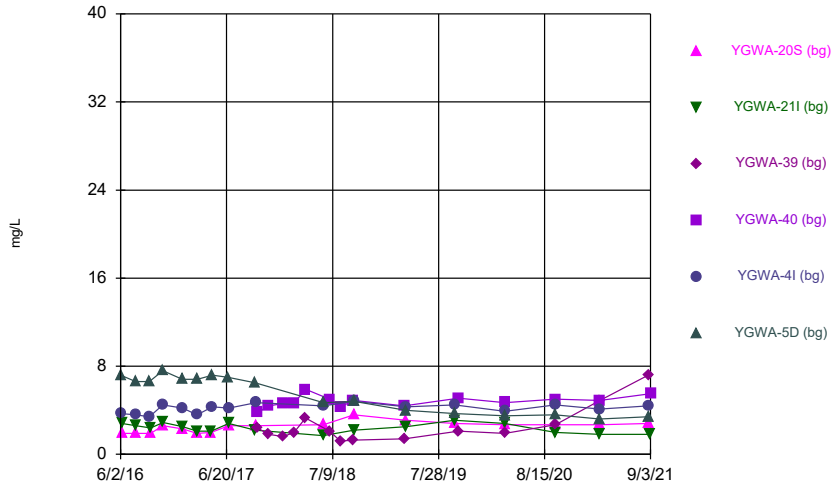
Time Series



Constituent: Chloride, Total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

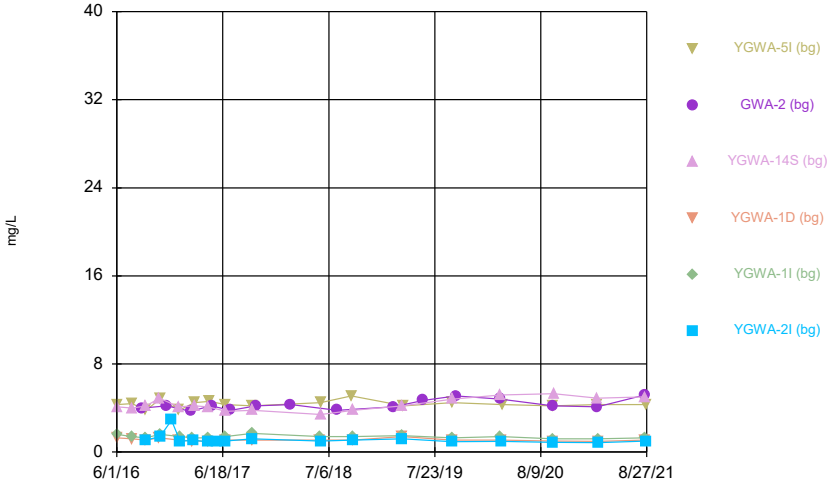
Time Series



Constituent: Chloride, Total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

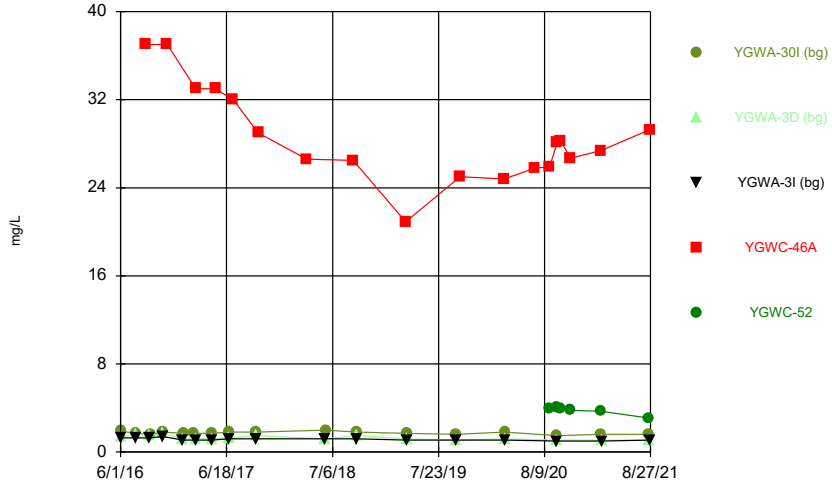
Time Series



Constituent: Chloride, Total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

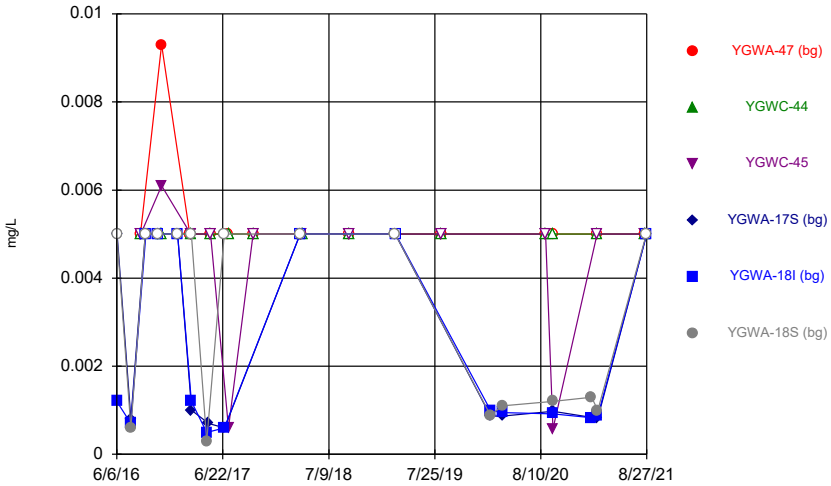
Time Series



Constituent: Chloride, Total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

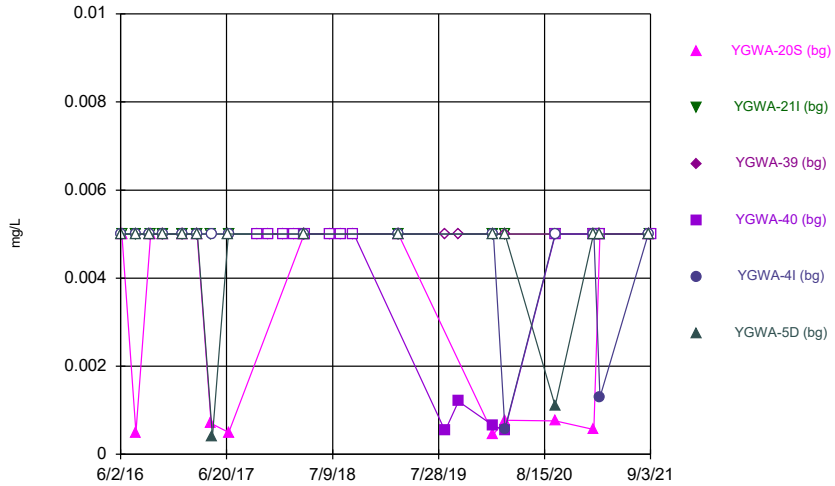
Time Series



Constituent: Chromium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

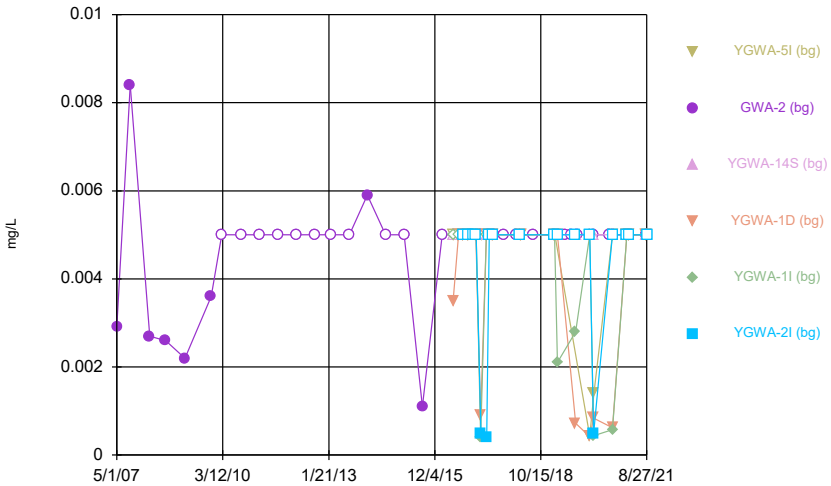
Time Series



Constituent: Chromium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

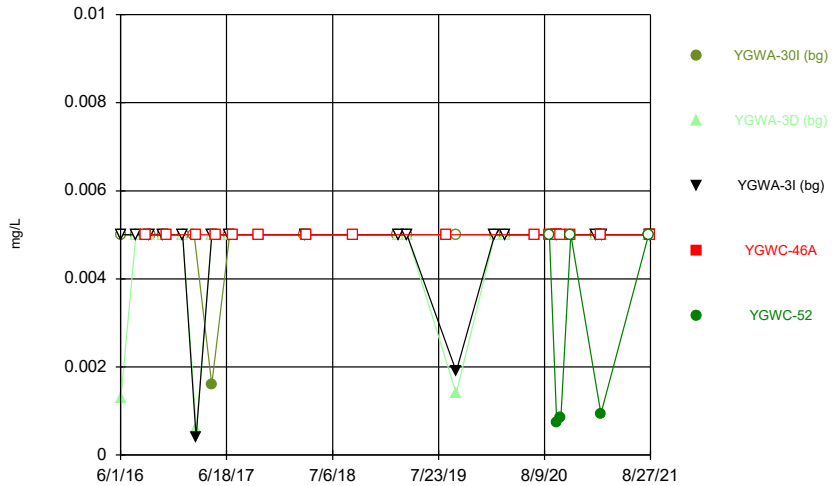
Time Series



Constituent: Chromium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

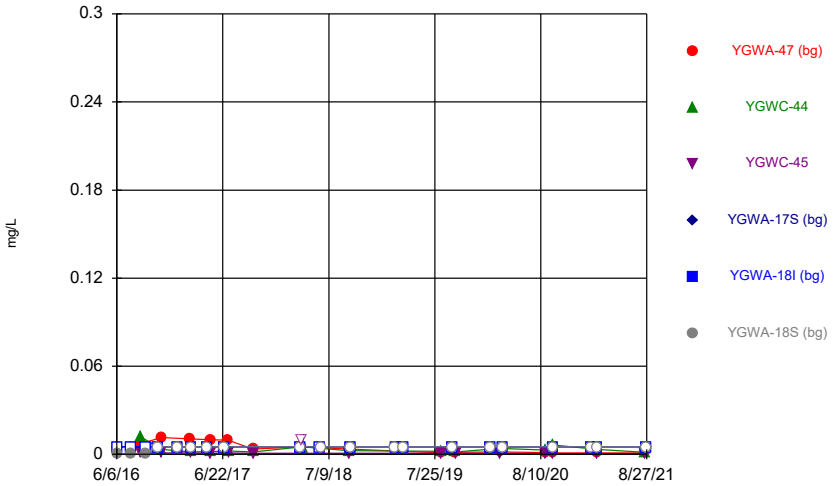
Time Series



Constituent: Chromium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

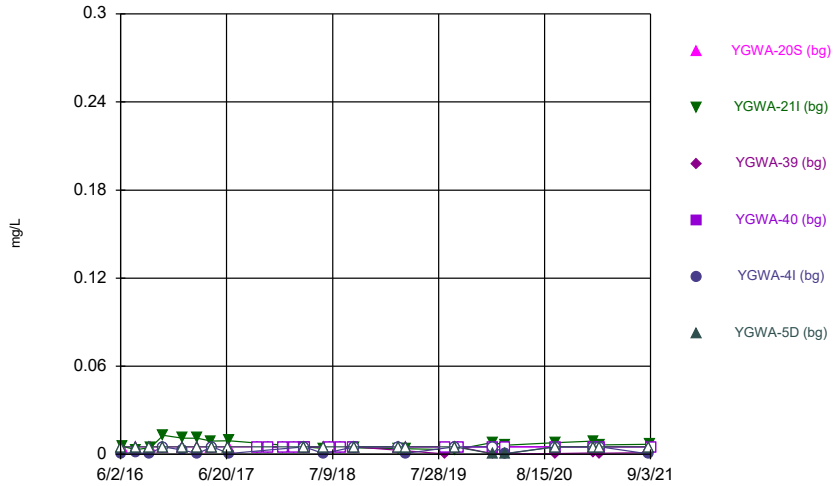
Time Series



Constituent: Cobalt Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

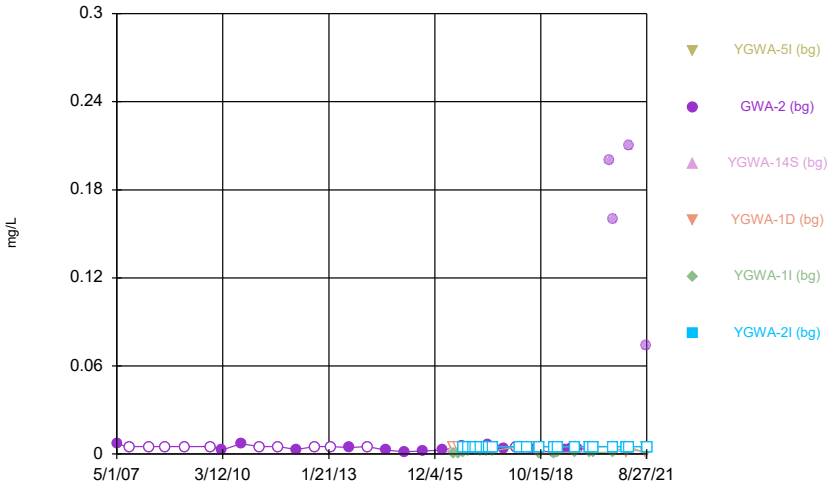
Time Series



Constituent: Cobalt Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

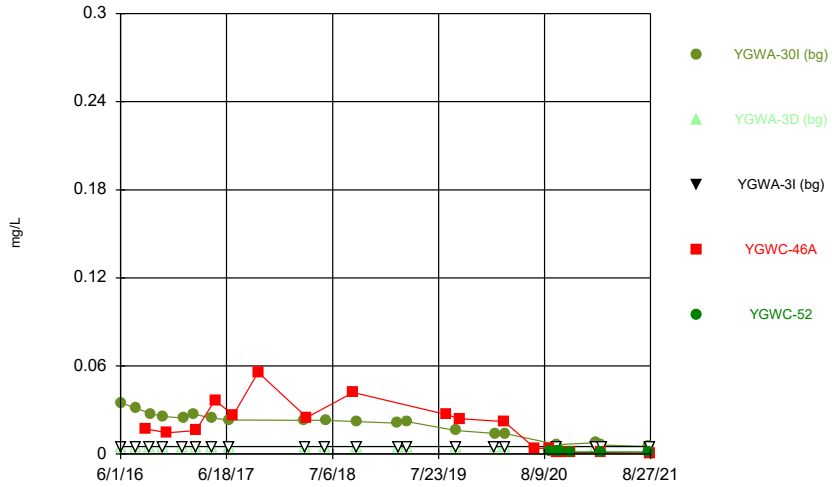
Time Series



Constituent: Cobalt Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

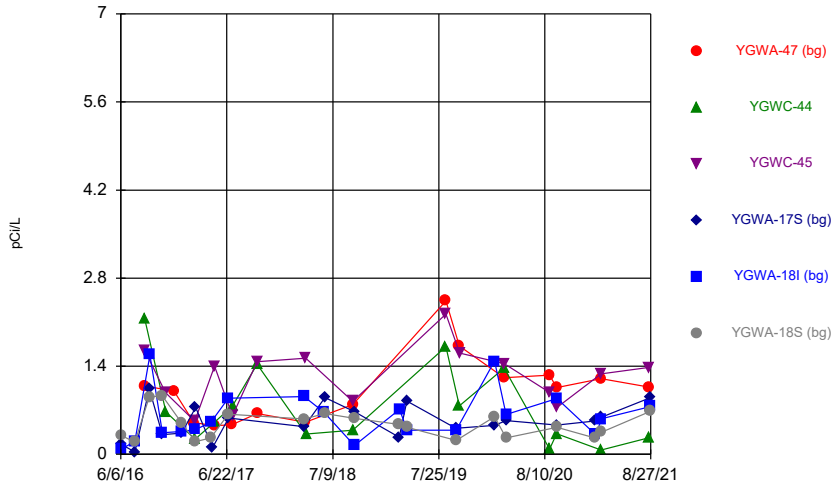
Time Series



Constituent: Cobalt Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

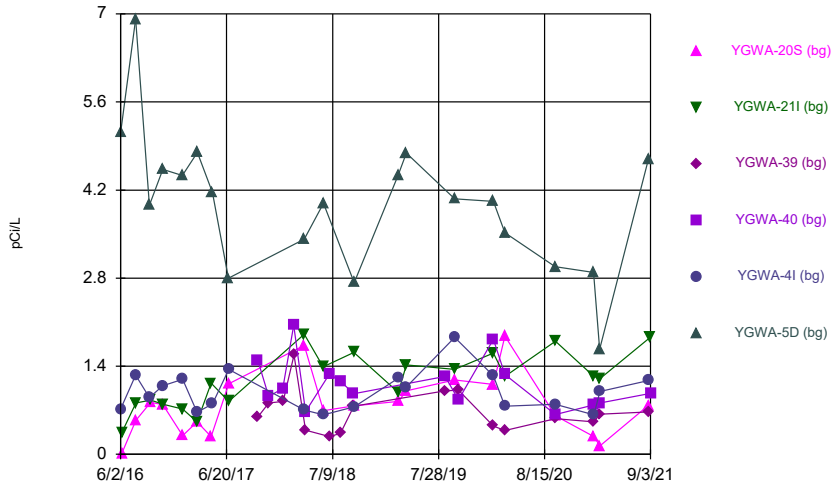


Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:36 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

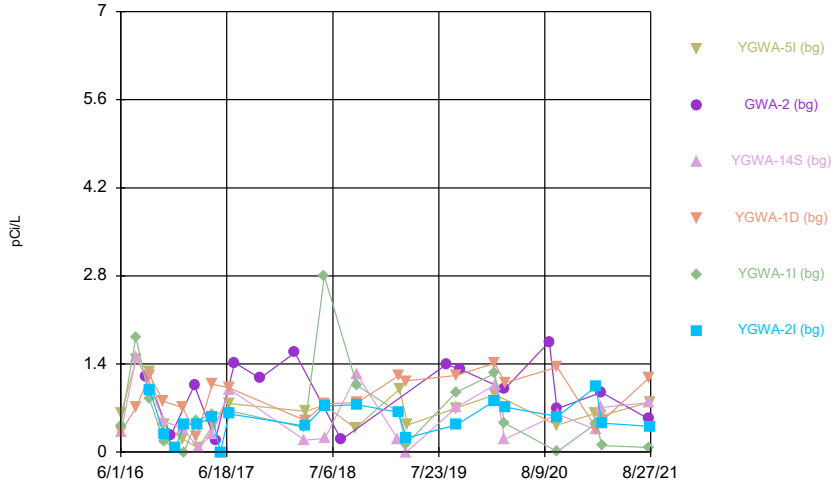


Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:36 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

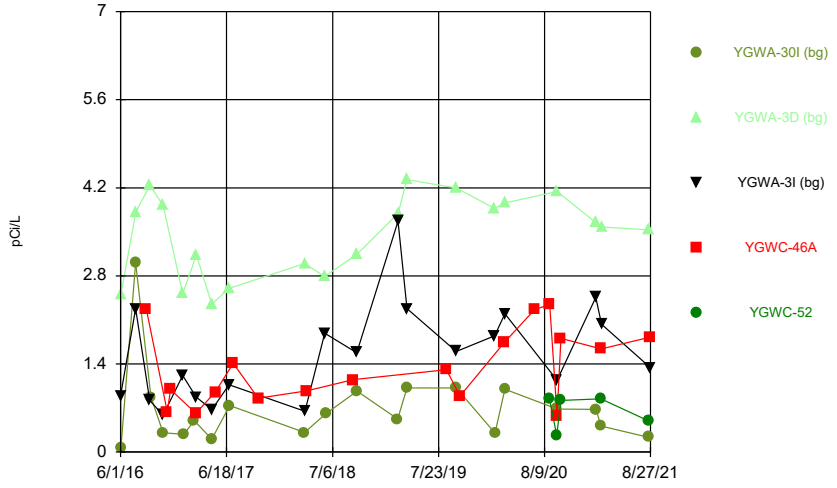


Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:36 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

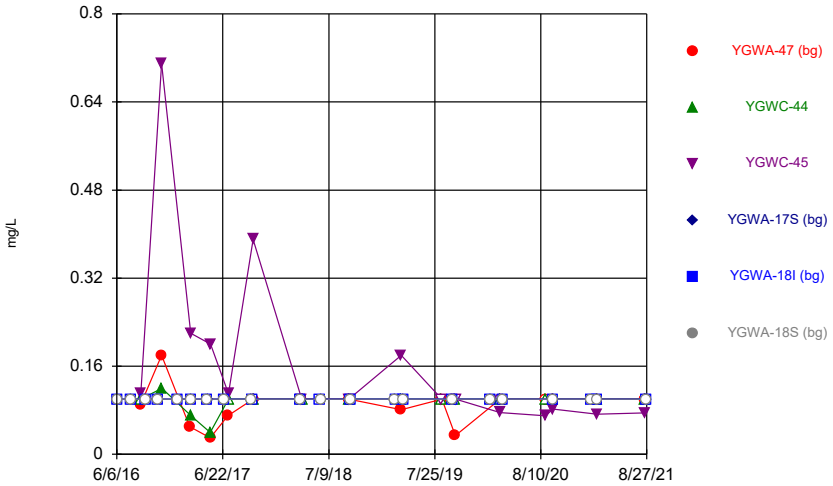


Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:36 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

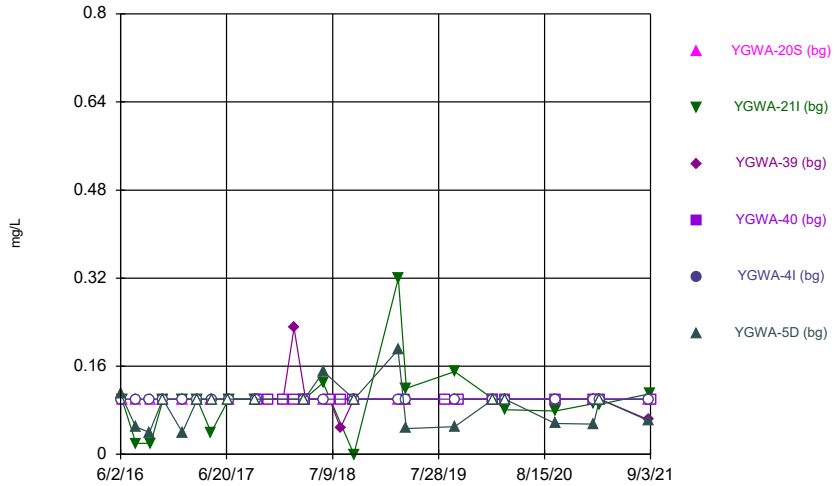
Time Series



Constituent: Fluoride, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

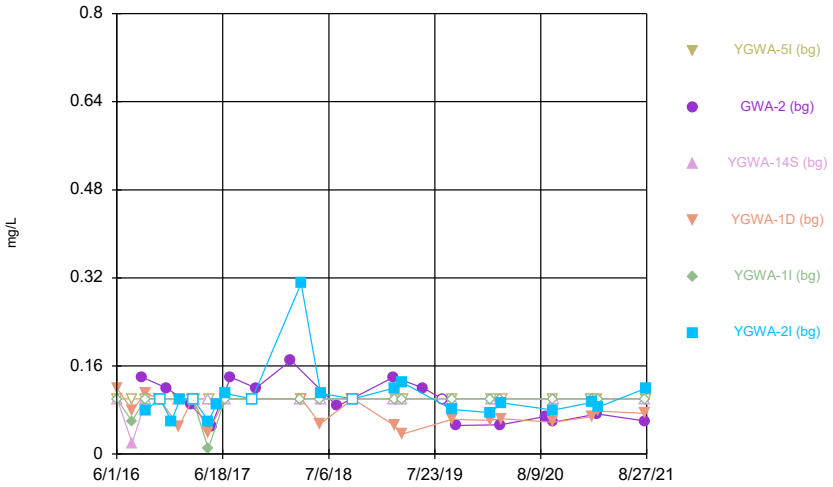
Time Series



Constituent: Fluoride, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

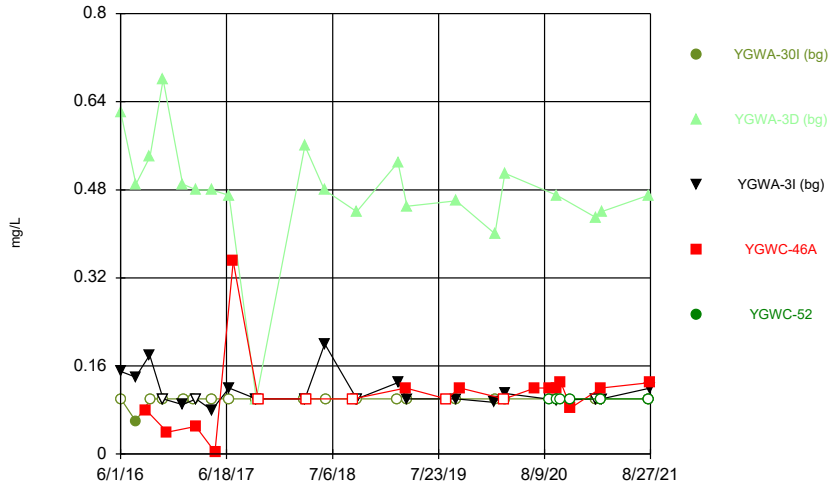
Time Series



Constituent: Fluoride, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

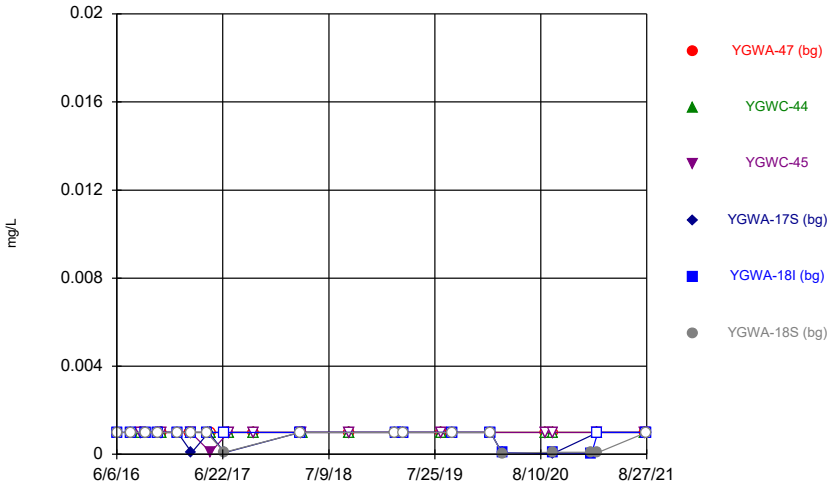
Time Series



Constituent: Fluoride, total Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

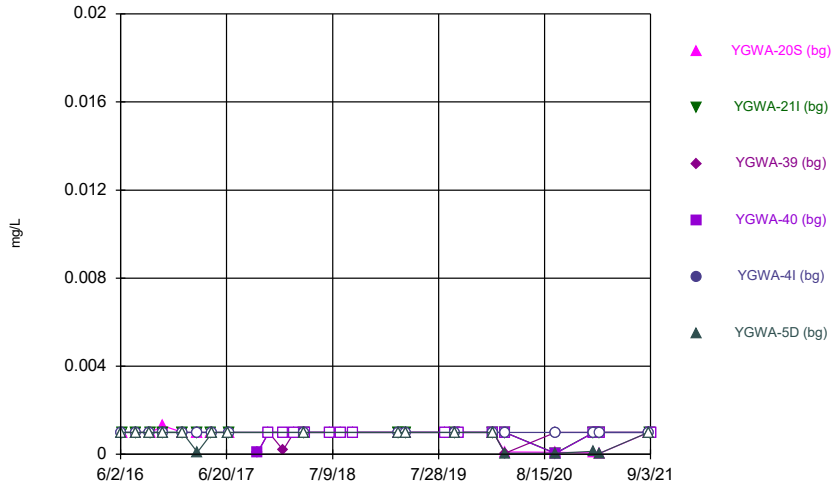
Time Series



Constituent: Lead Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

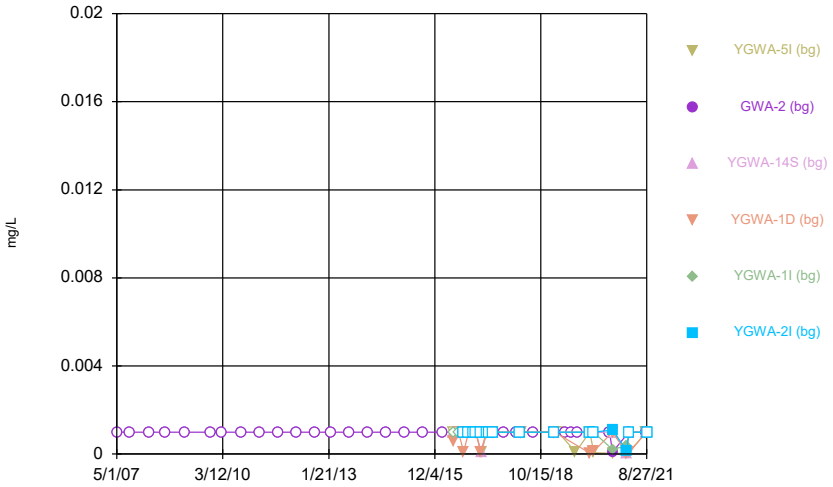
Time Series



Constituent: Lead Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

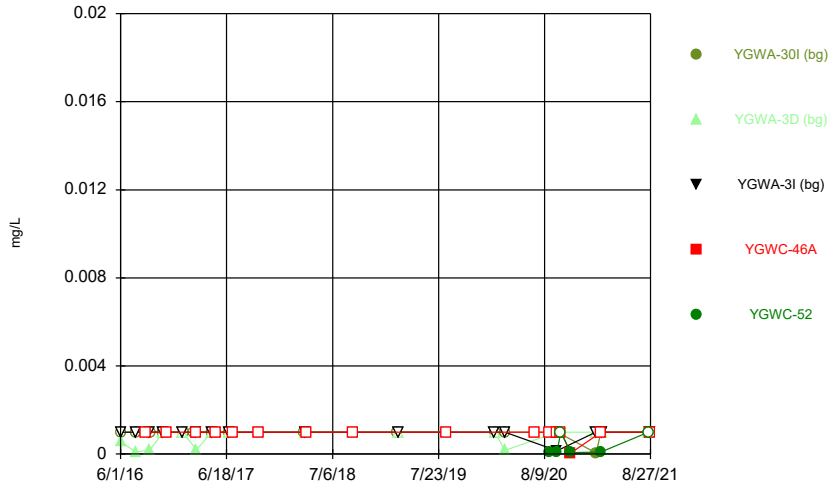
Time Series



Constituent: Lead Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

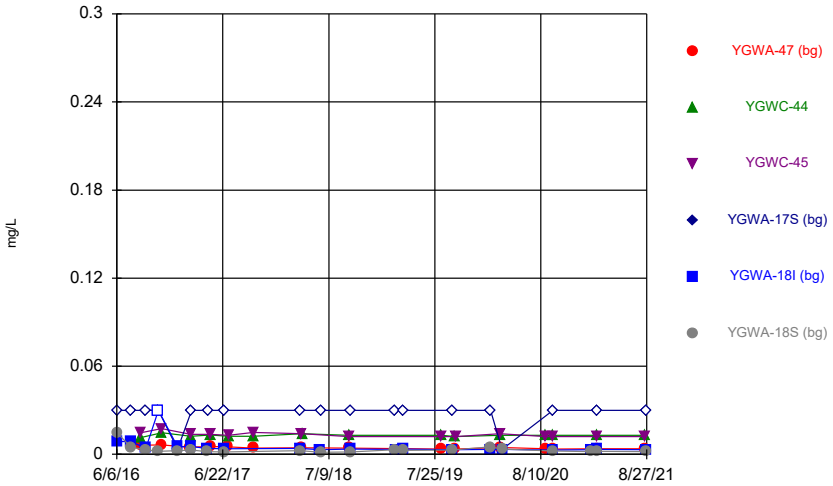
Time Series



Constituent: Lead Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

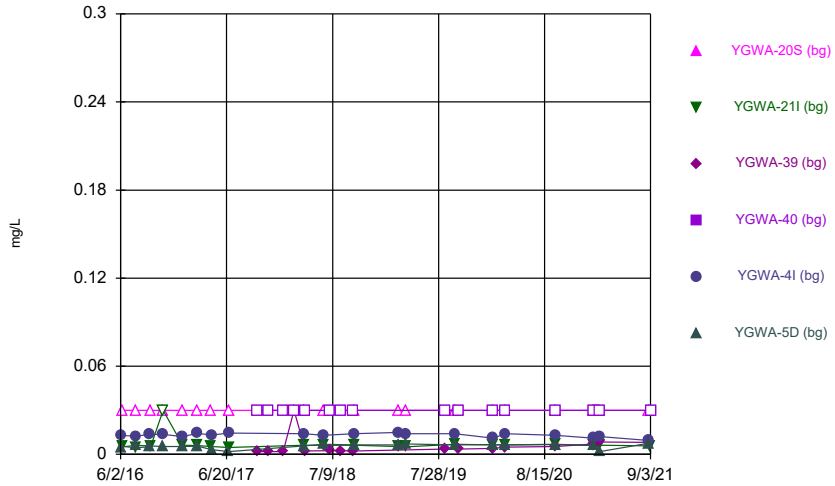
Time Series



Constituent: Lithium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

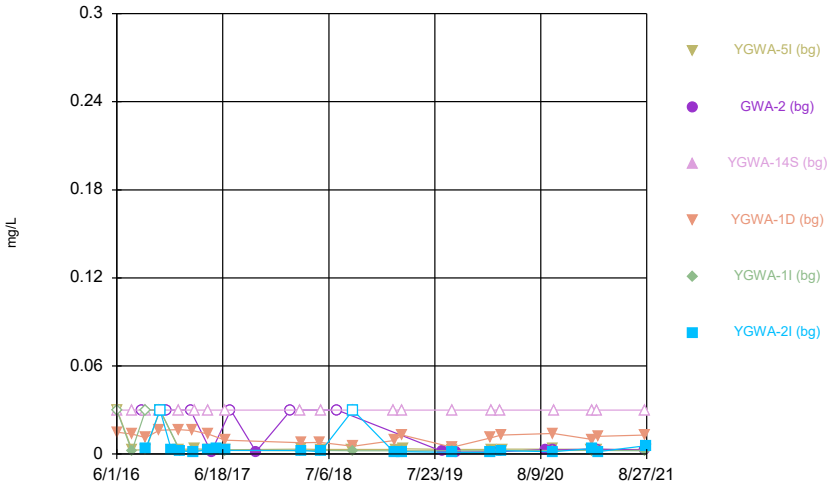
Time Series



Constituent: Lithium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

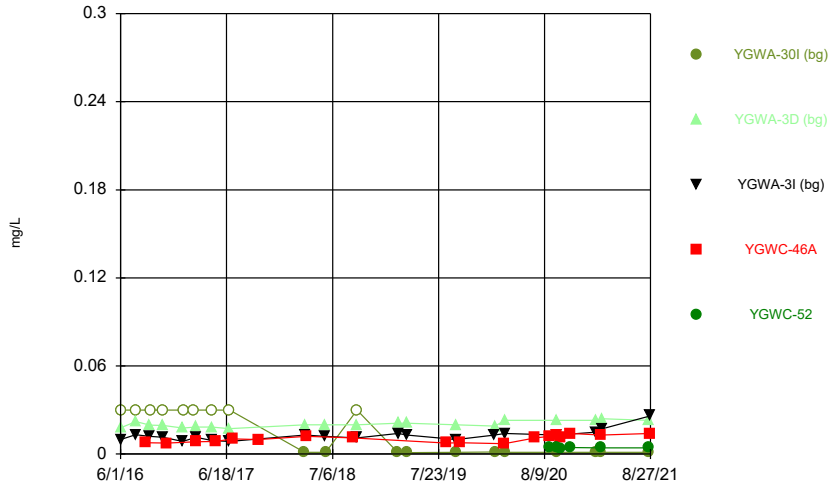
Time Series



Constituent: Lithium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

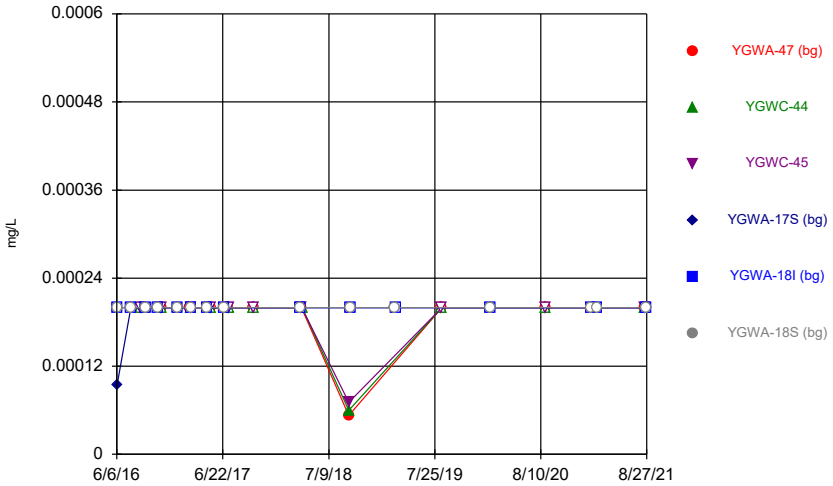
Time Series



Constituent: Lithium Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

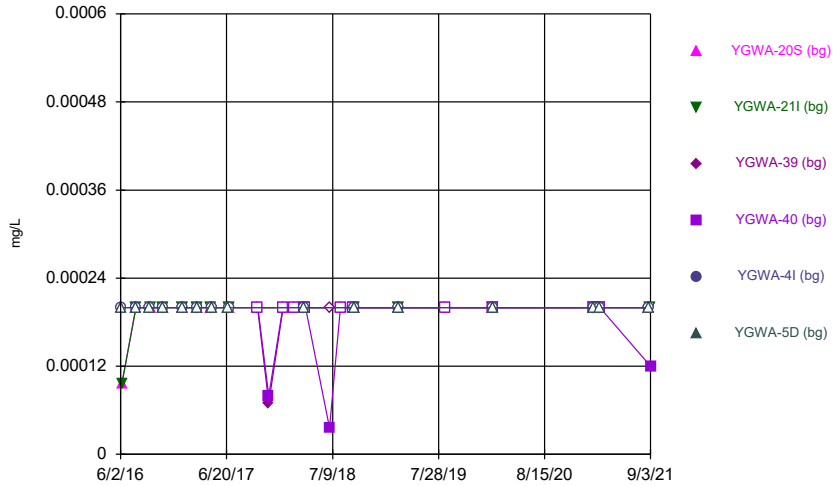
Time Series



Constituent: Mercury Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

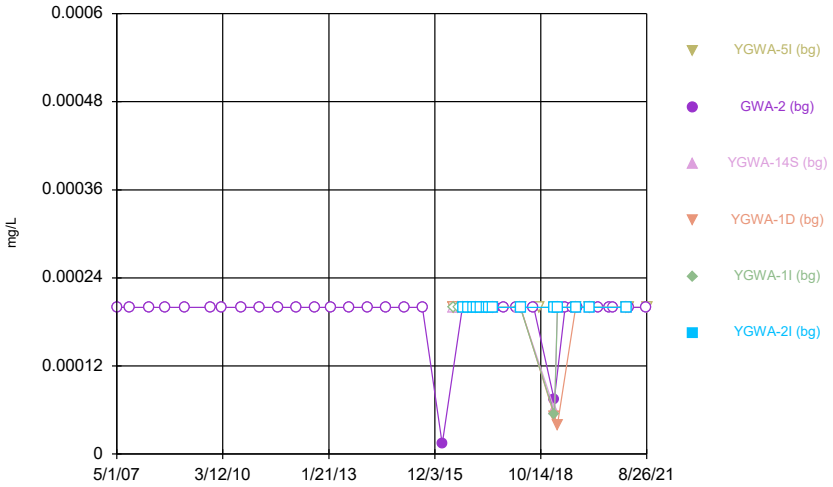
Time Series



Constituent: Mercury Analysis Run 11/2/2021 4:36 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

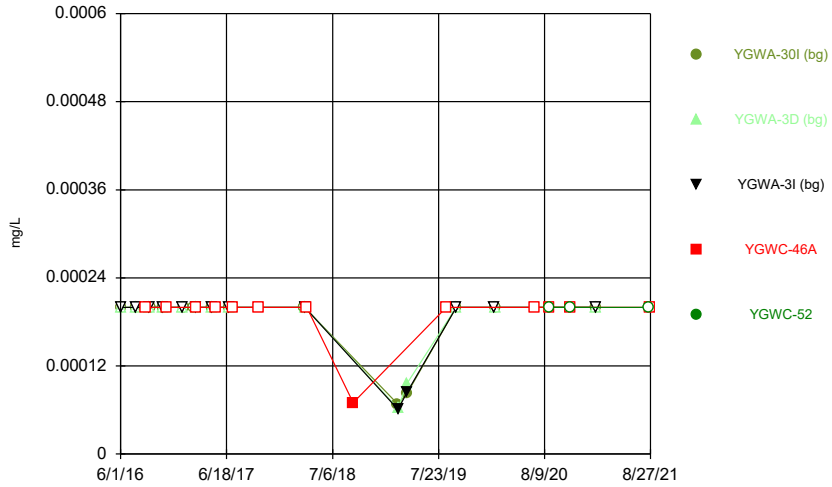
Time Series



Constituent: Mercury Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

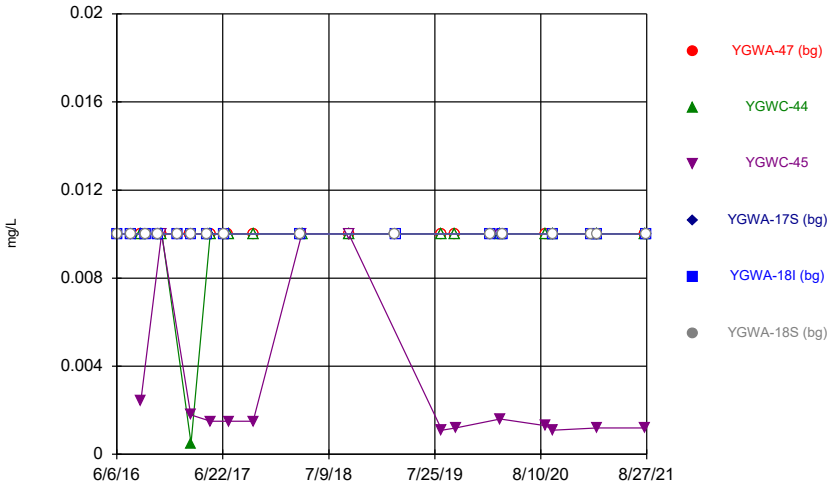
Time Series



Constituent: Mercury Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

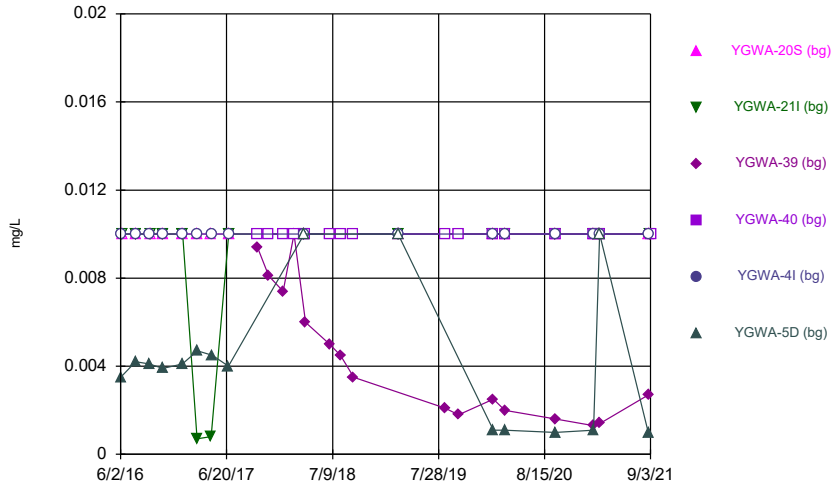
Time Series



Constituent: Molybdenum Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

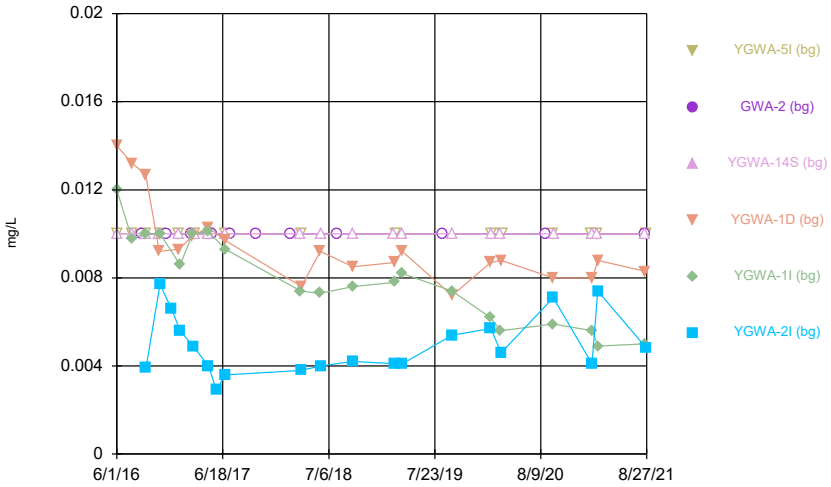
Time Series



Constituent: Molybdenum Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

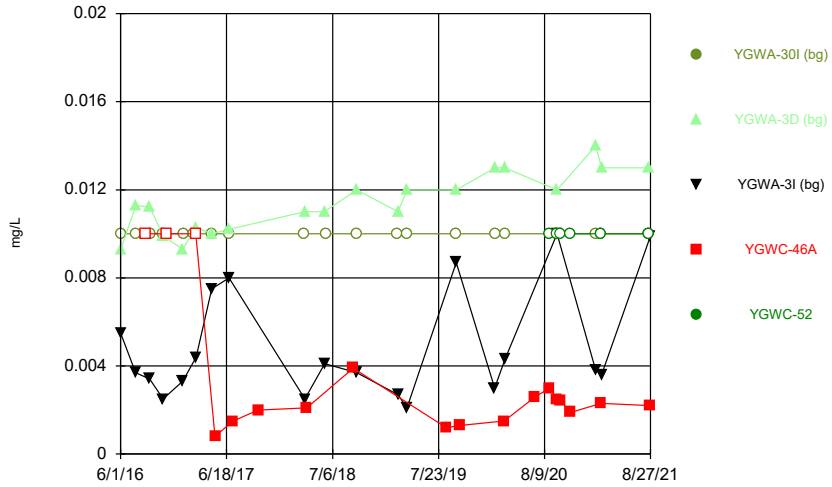
Time Series



Constituent: Molybdenum Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

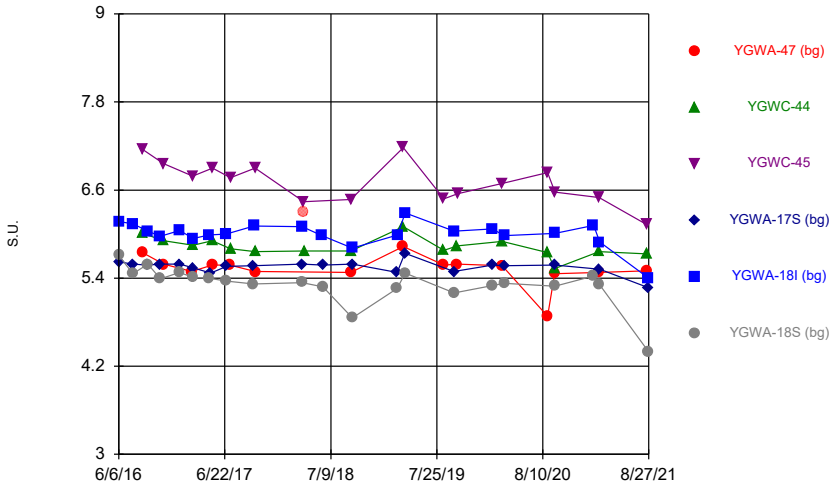
Time Series



Constituent: Molybdenum Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

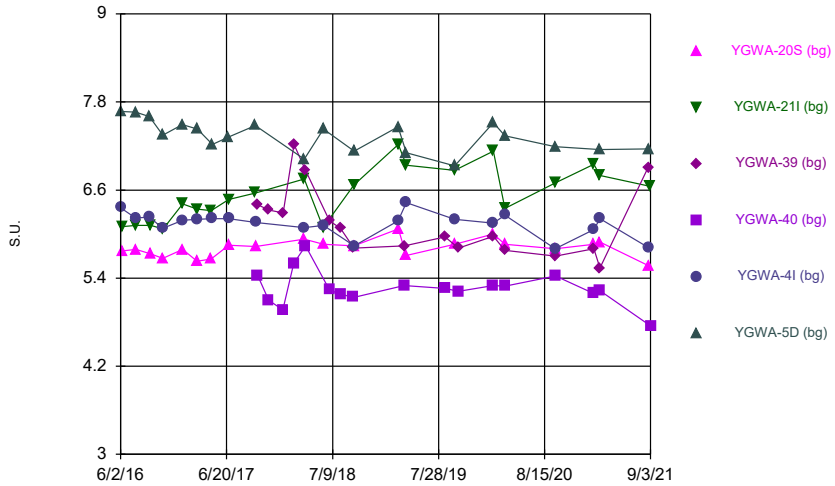


Constituent: pH, Field Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

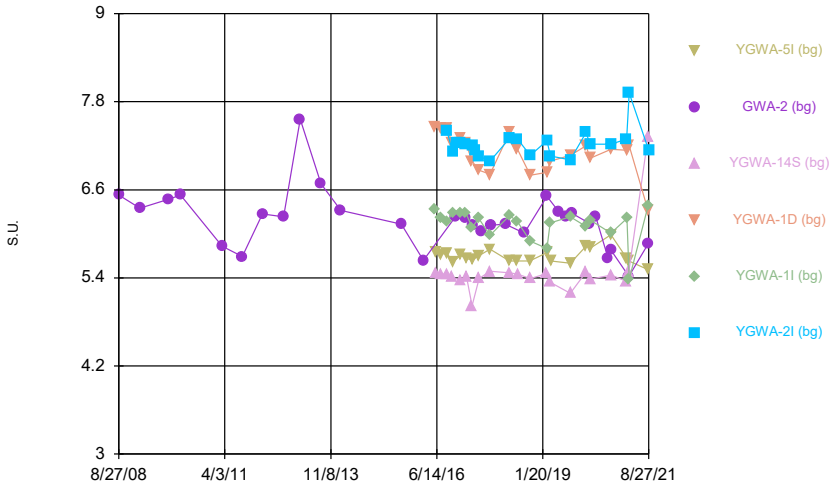


Constituent: pH, Field Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

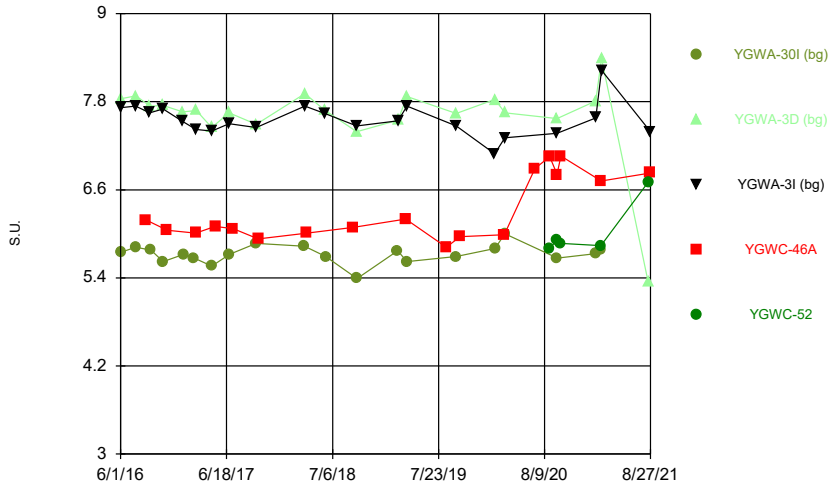


Constituent: pH, Field Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

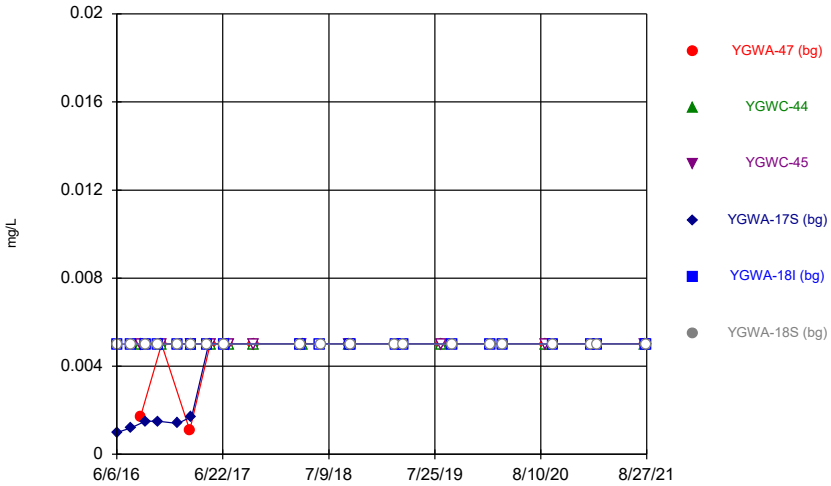


Constituent: pH, Field Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

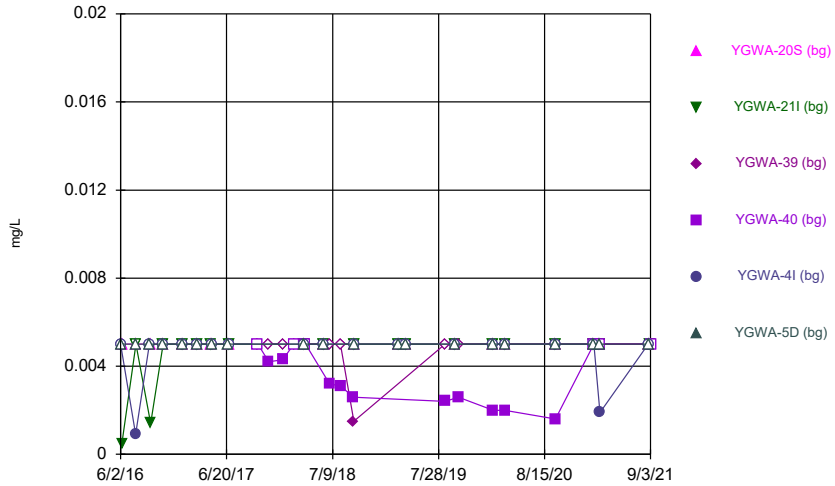
Time Series



Constituent: Selenium Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

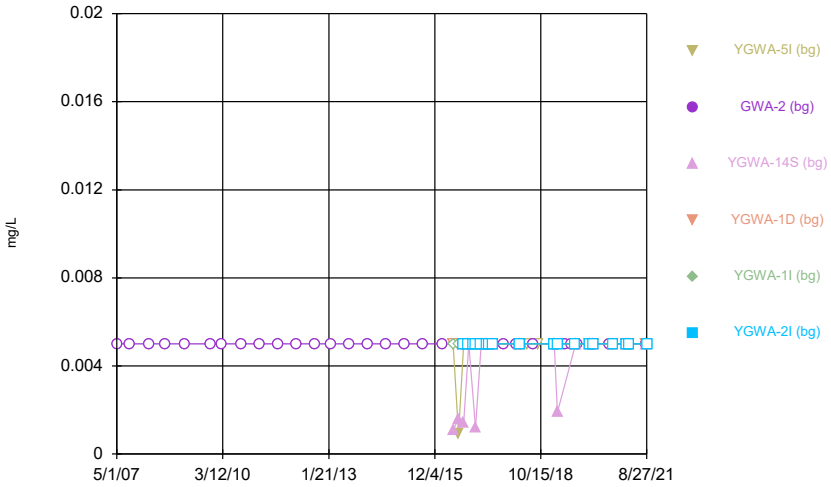
Time Series



Constituent: Selenium Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

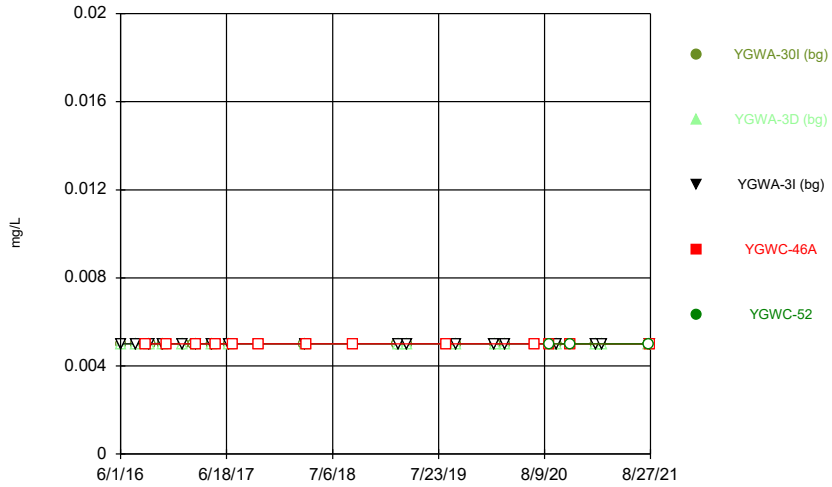
Time Series



Constituent: Selenium Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

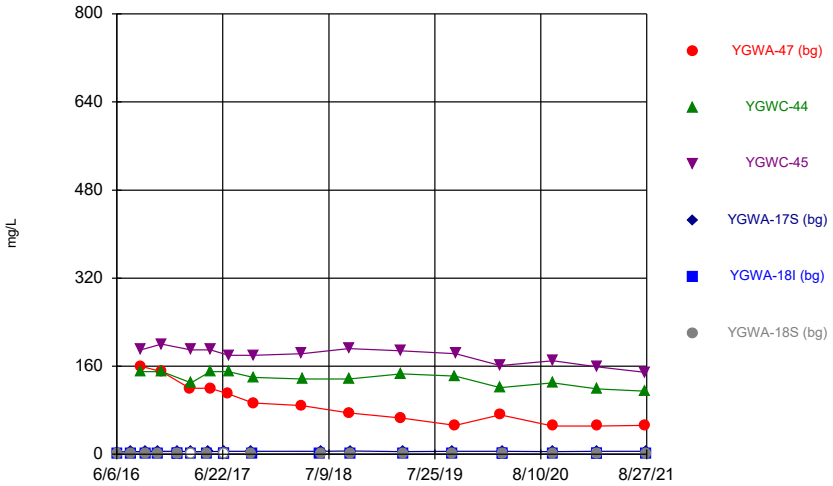
Time Series



Constituent: Selenium Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

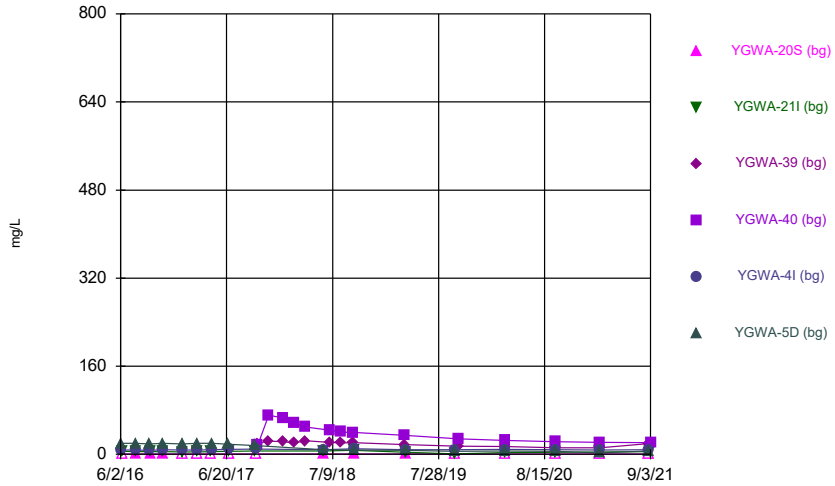
Time Series



Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

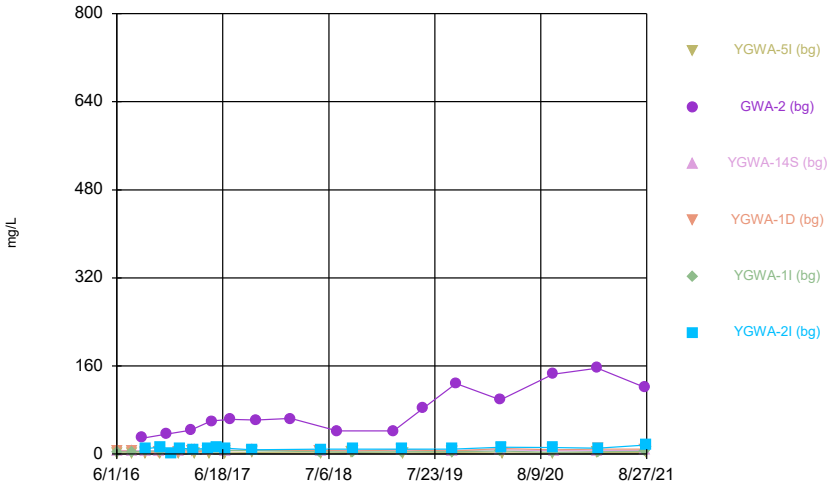
Time Series



Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

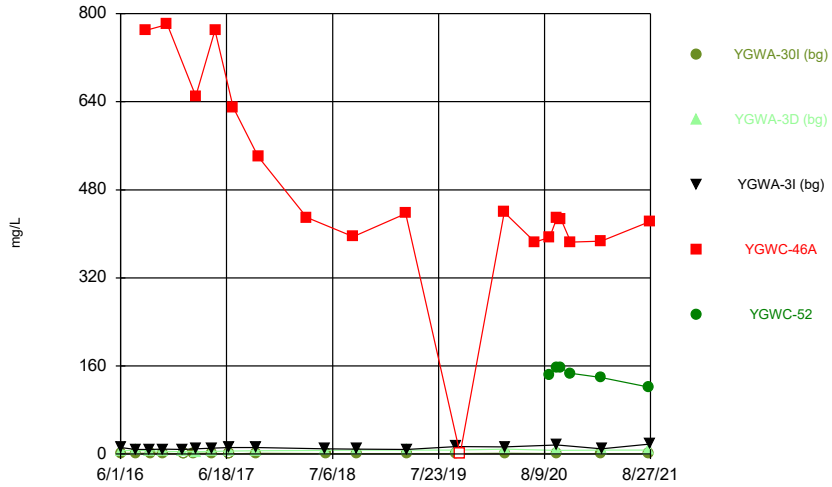
Time Series



Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

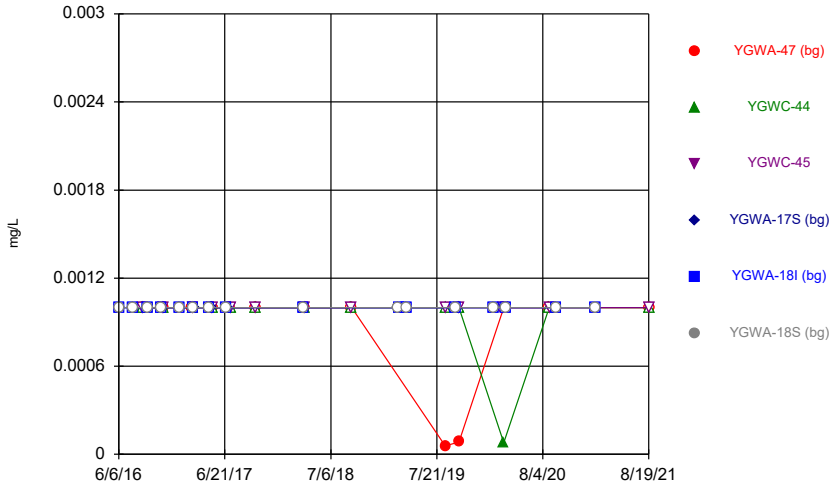
Time Series



Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

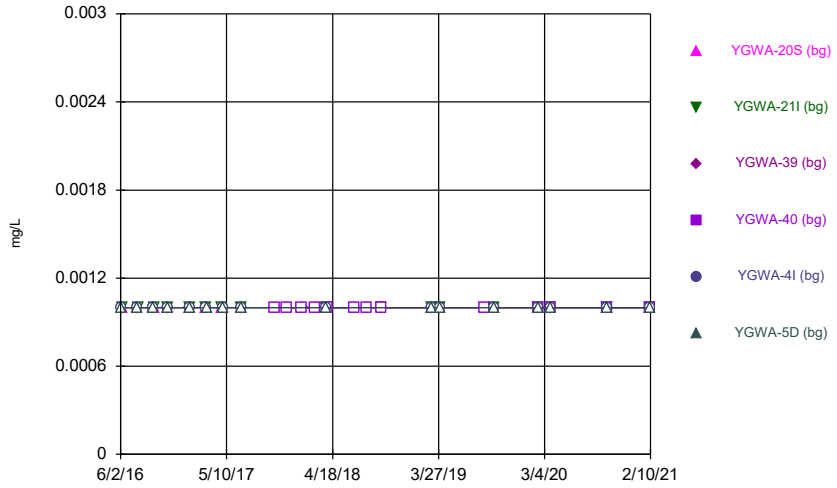
Time Series



Constituent: Thallium Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

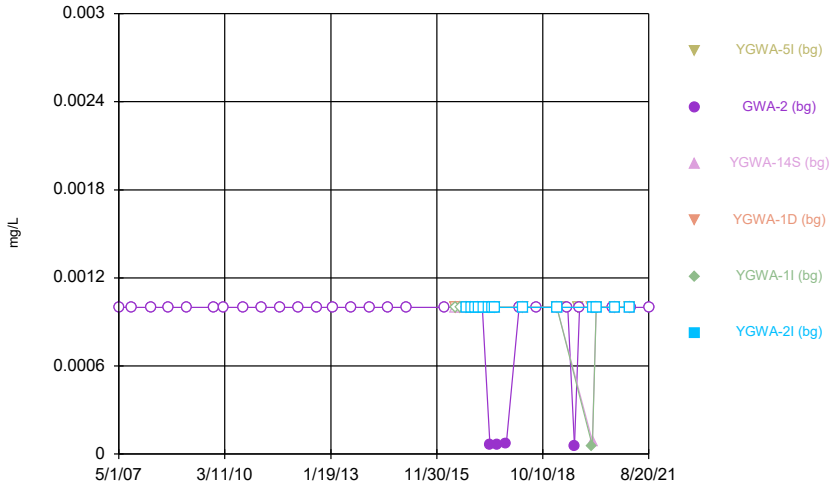
Time Series



Constituent: Thallium Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

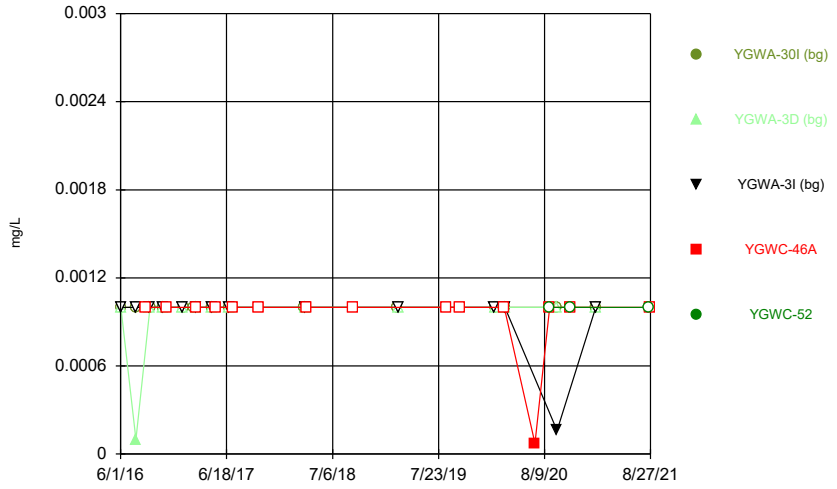
Time Series



Constituent: Thallium Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

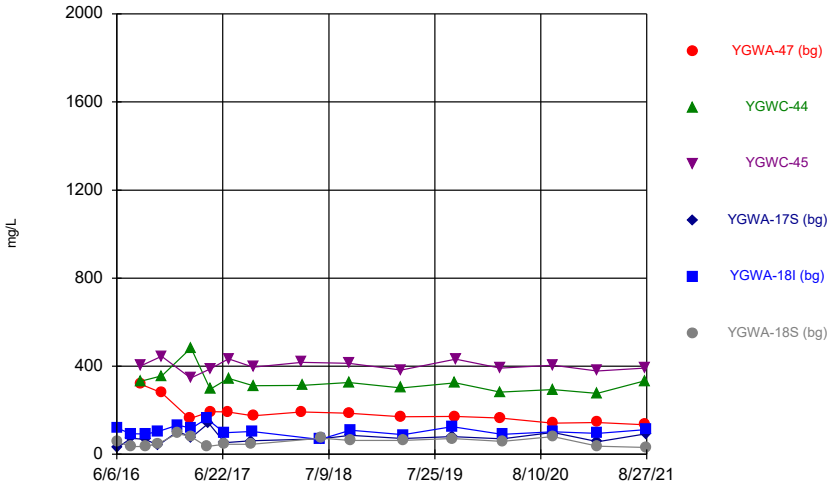
Time Series



Constituent: Thallium Analysis Run 11/2/2021 4:37 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

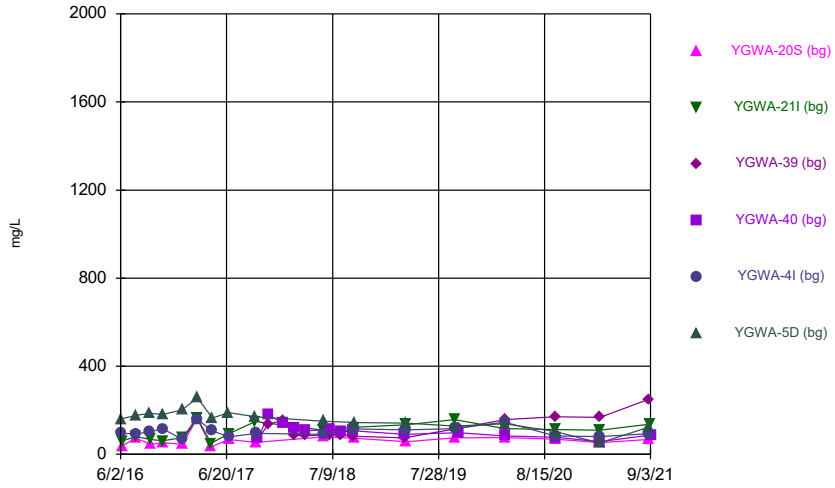


Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

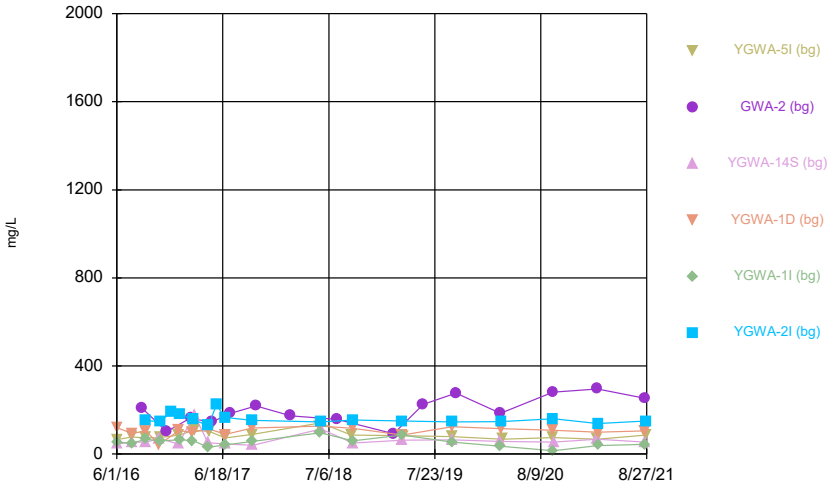


Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

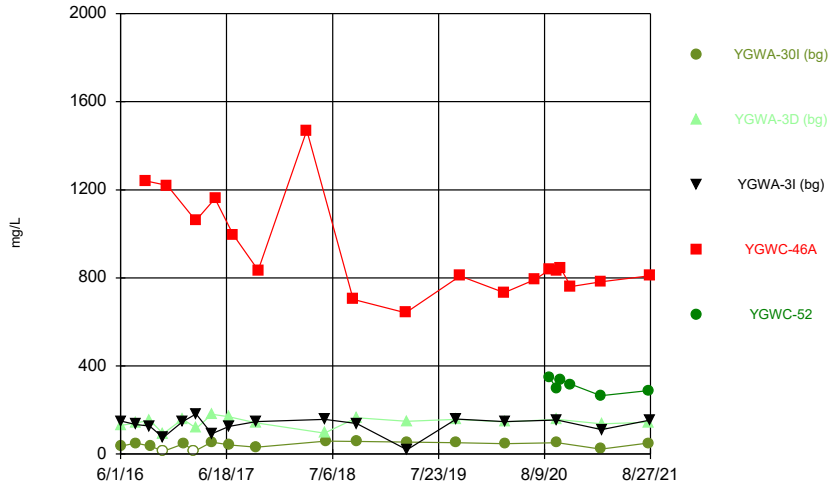


Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:37 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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					
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		
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

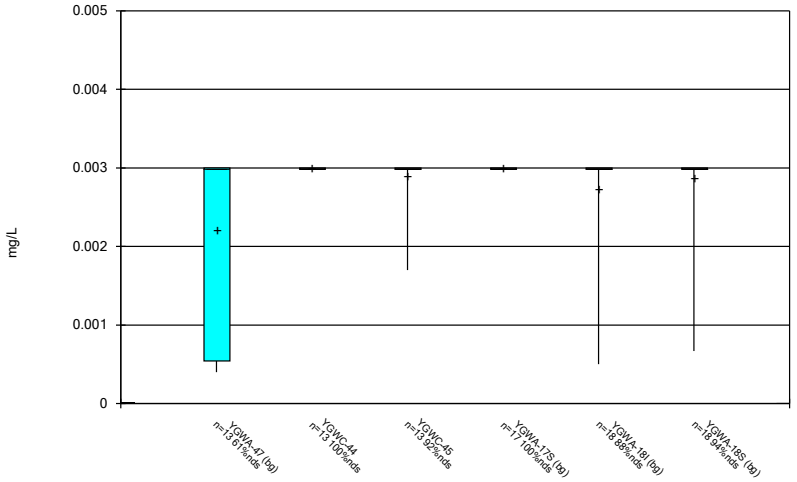
Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/2/2021 4:37 PM

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

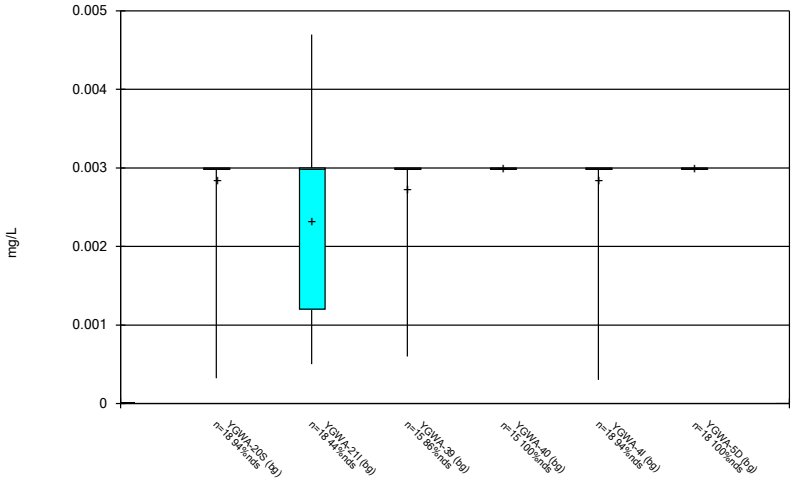


Constituent: Antimony Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

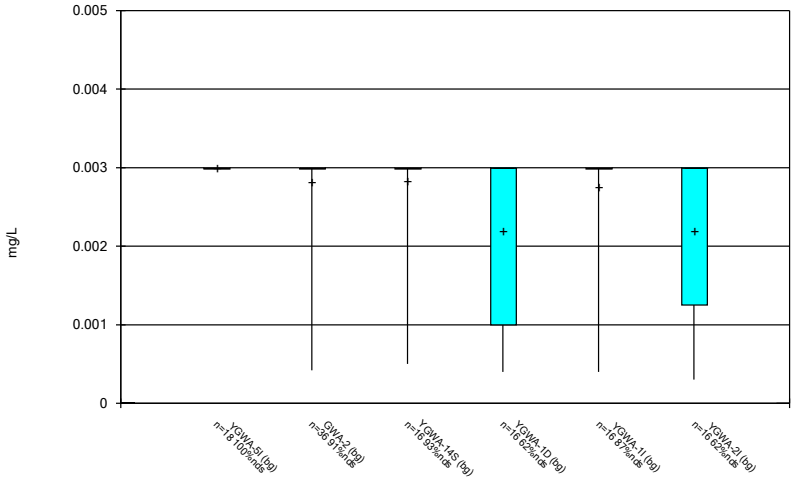


Constituent: Antimony Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

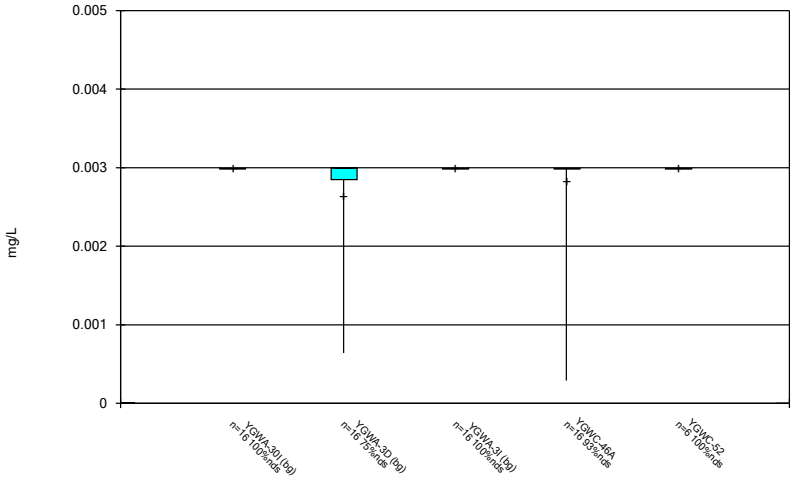


Constituent: Antimony Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

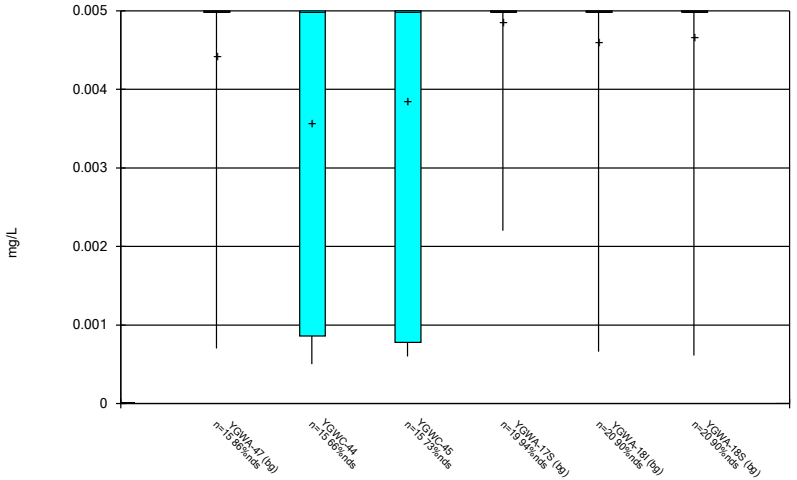
Box & Whiskers Plot



Constituent: Antimony Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot

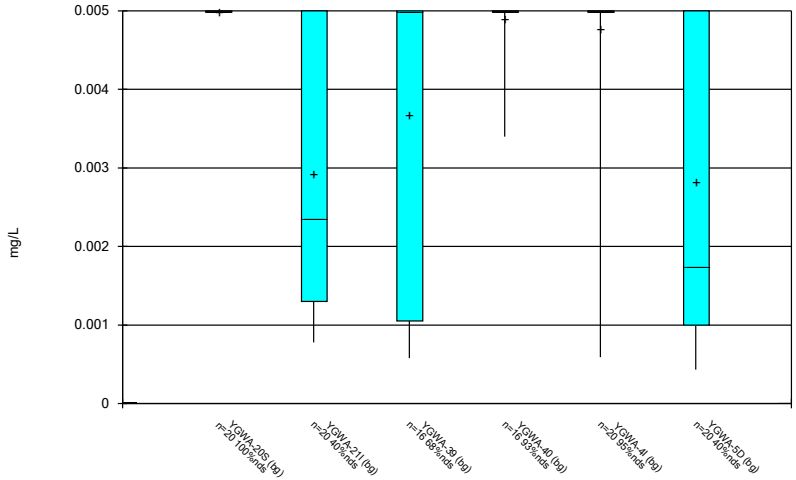


Constituent: Arsenic Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

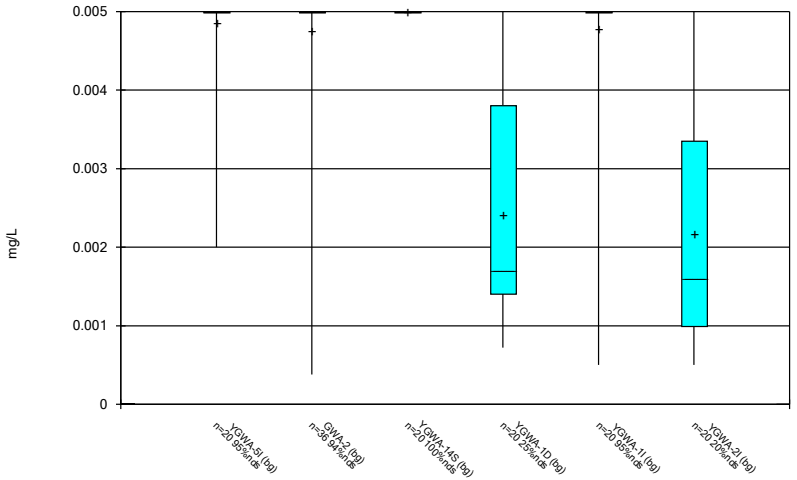


Constituent: Arsenic Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

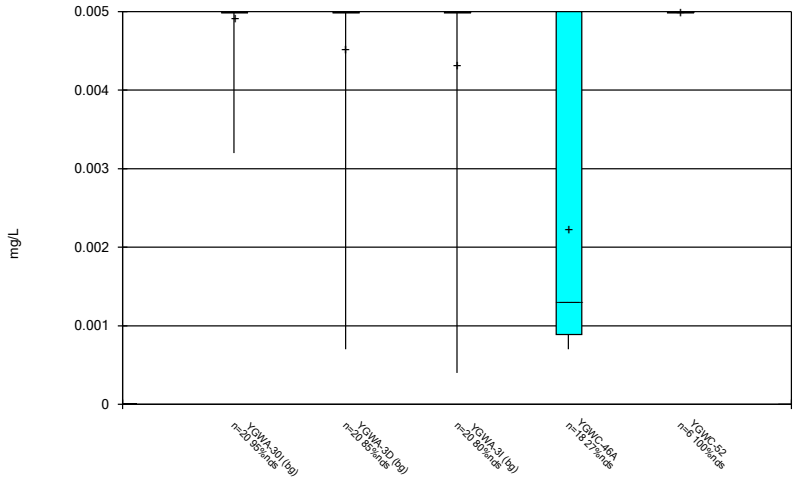


Constituent: Arsenic Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

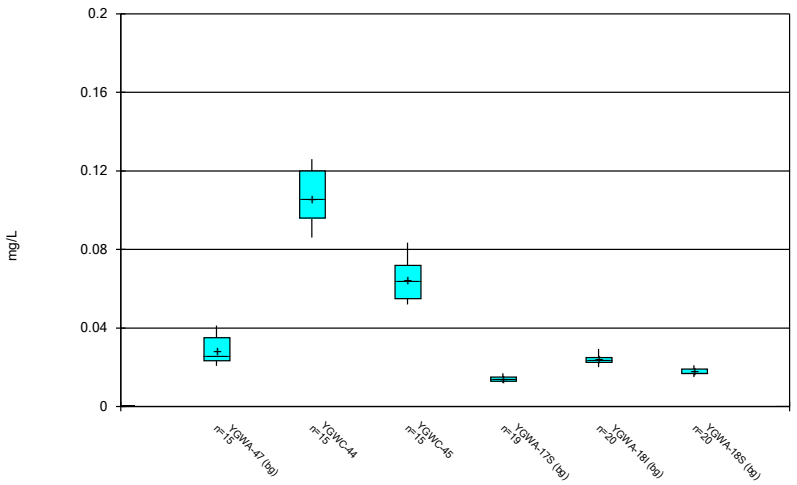
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

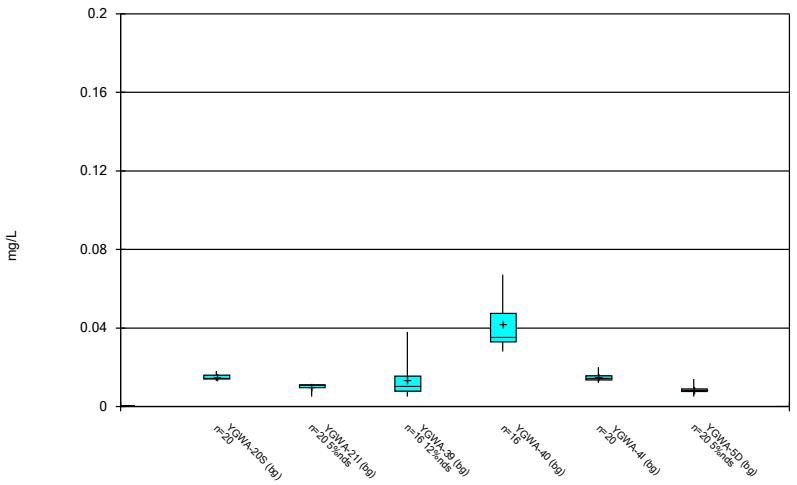
Box & Whiskers Plot



Constituent: Barium Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

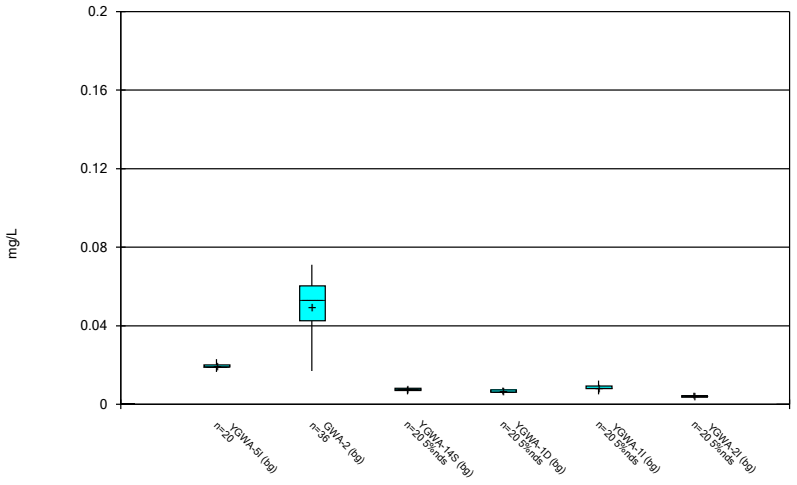
Box & Whiskers Plot



Constituent: Barium Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

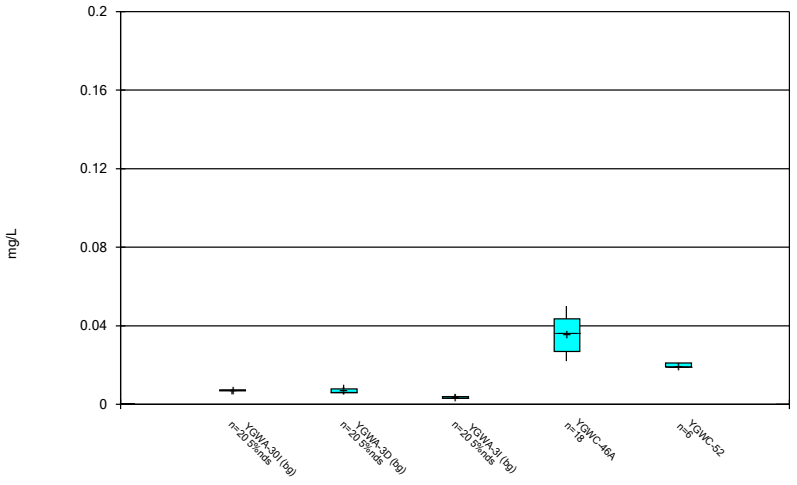
Box & Whiskers Plot



Constituent: Barium Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

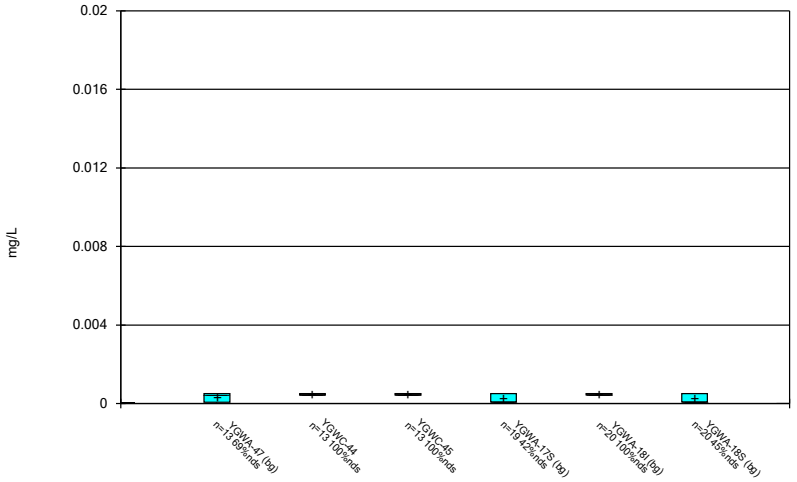
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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

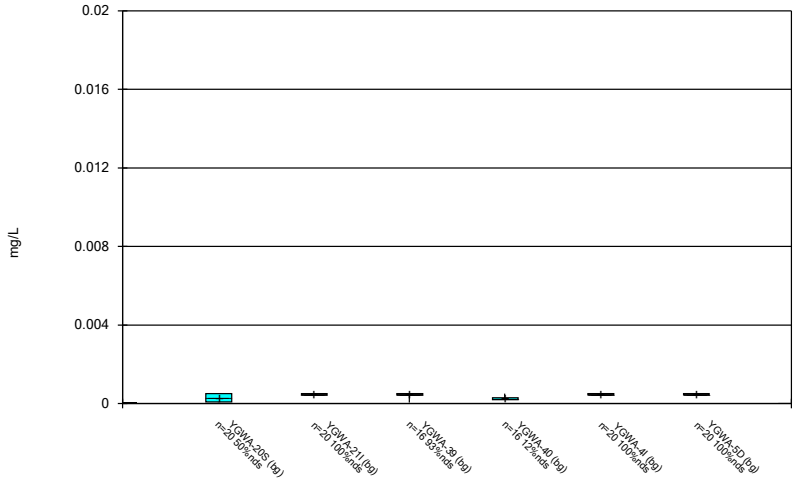


Constituent: Beryllium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

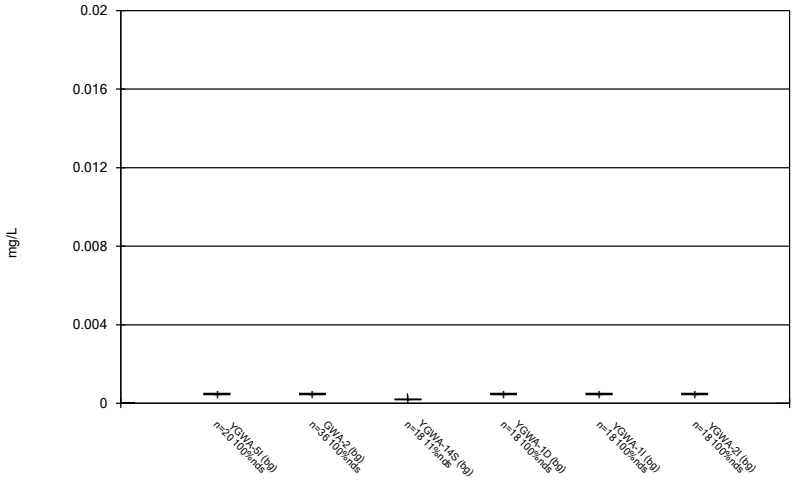


Constituent: Beryllium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

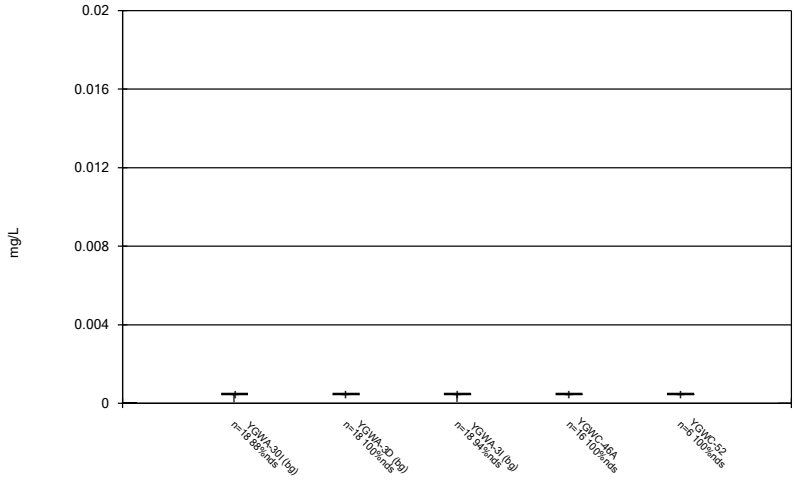


Constituent: Beryllium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

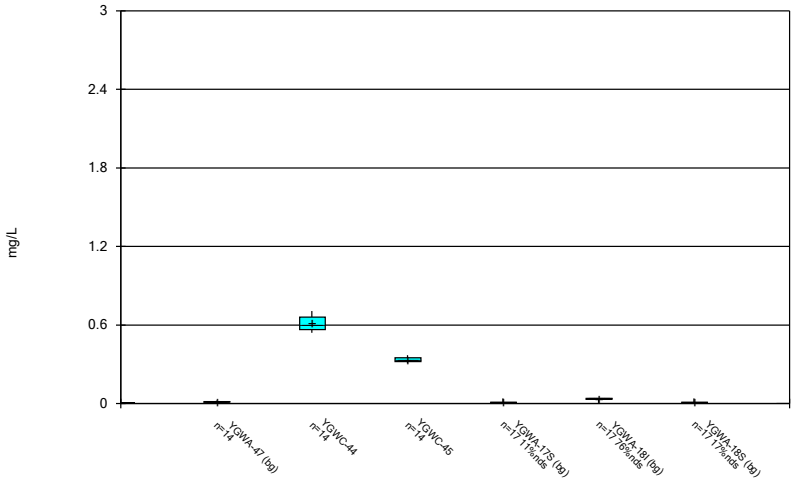
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot

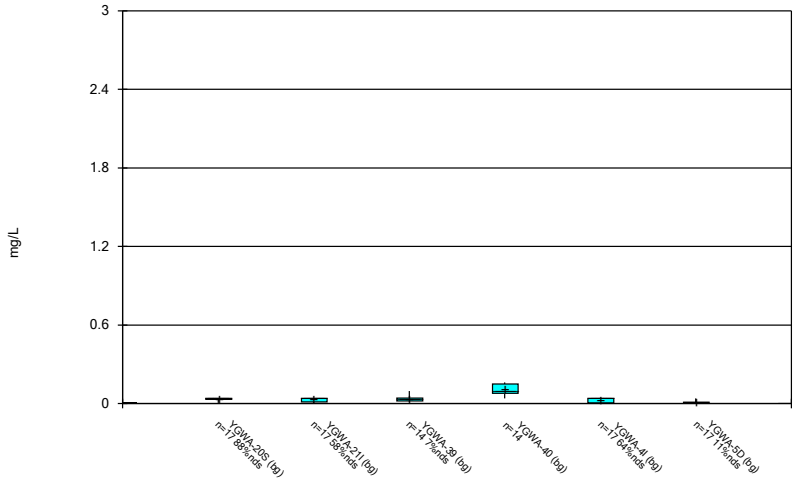


Constituent: Boron, total Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

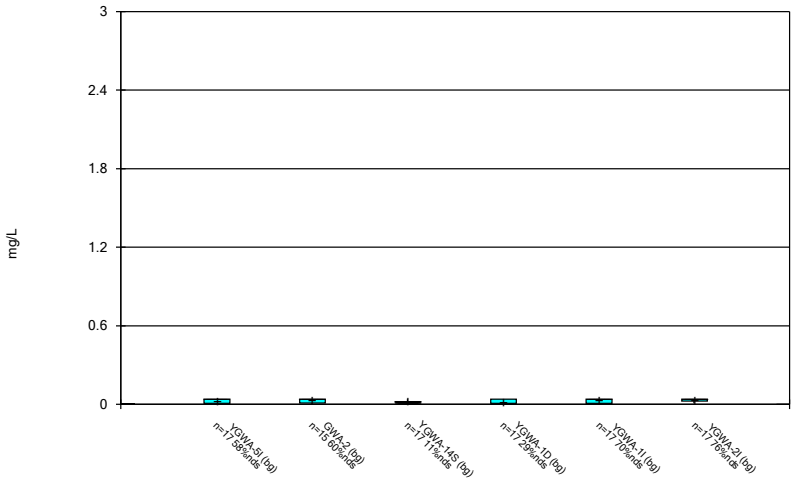


Constituent: Boron, total Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

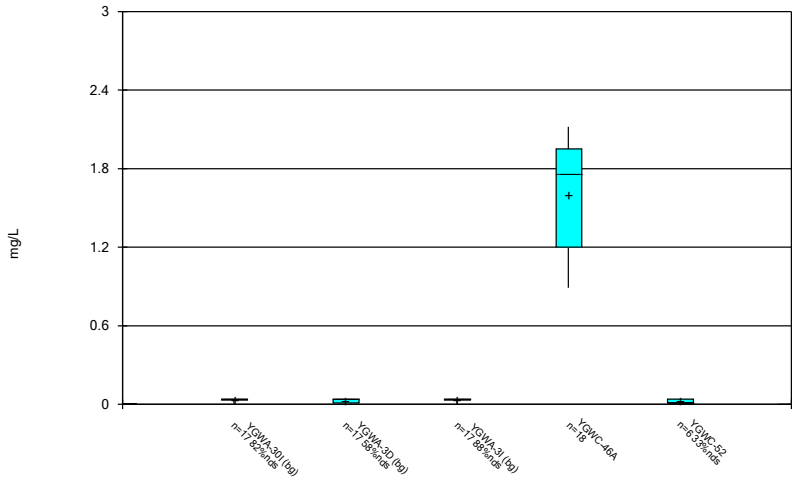


Constituent: Boron, total Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

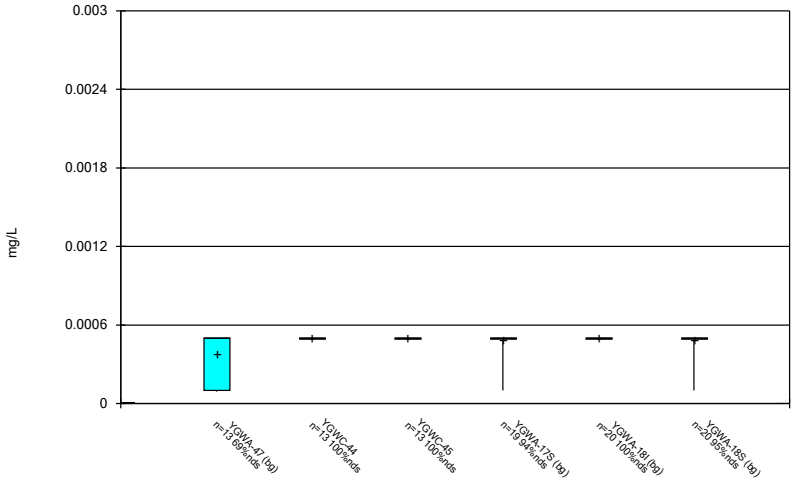
Box & Whiskers Plot



Constituent: Boron, total Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot

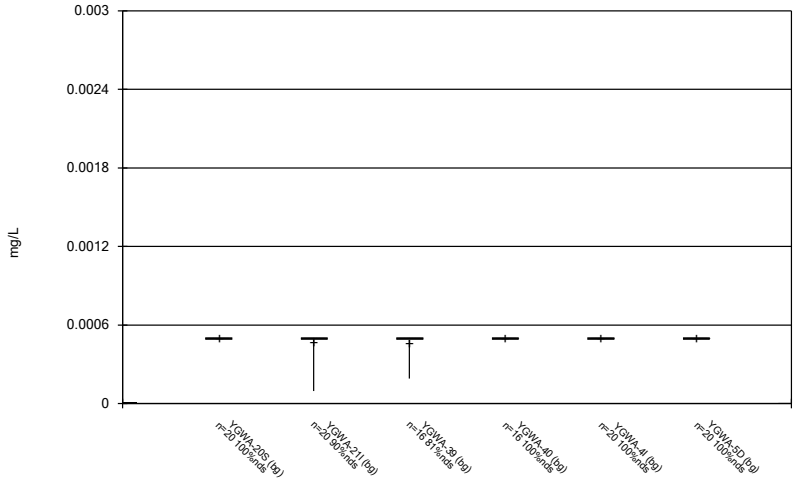


Constituent: Cadmium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

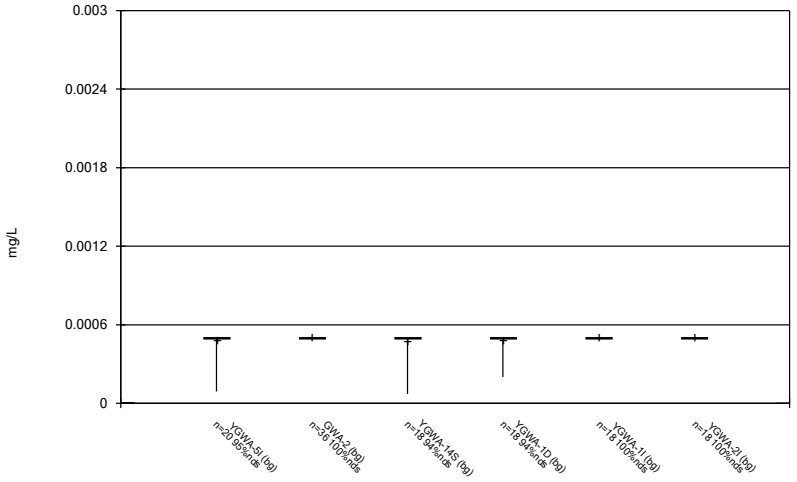


Constituent: Cadmium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

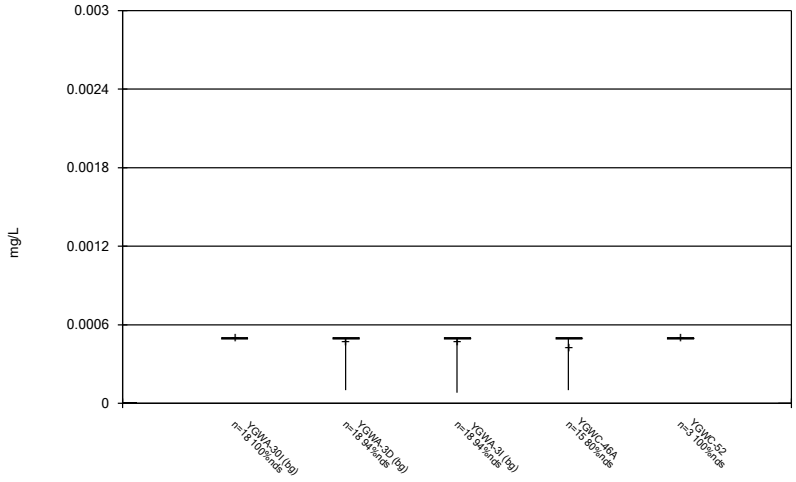


Constituent: Cadmium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

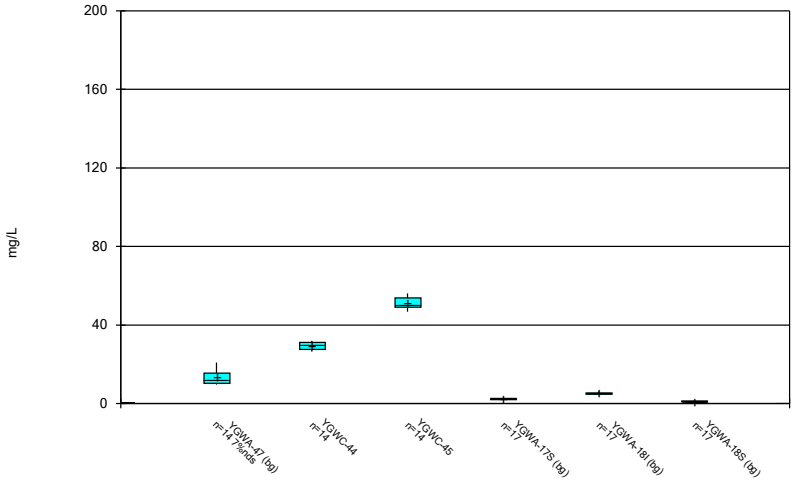
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

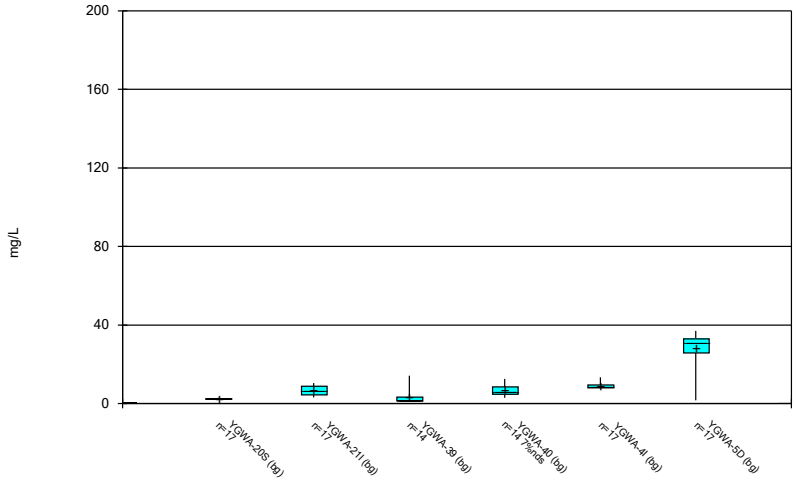
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

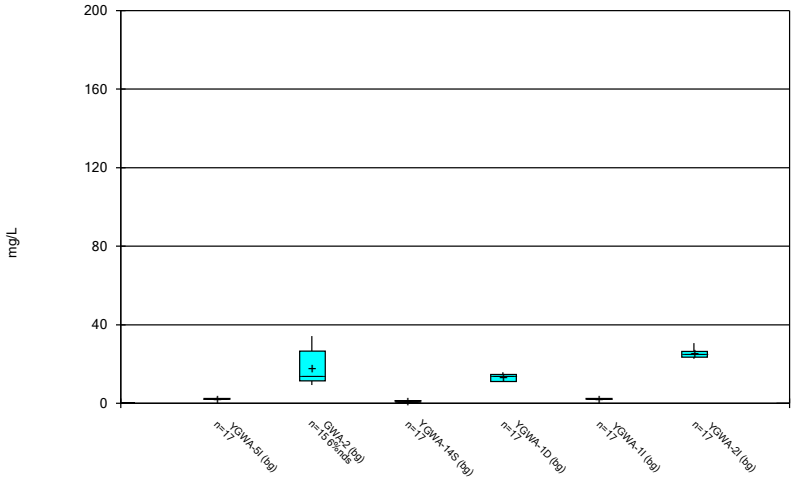
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

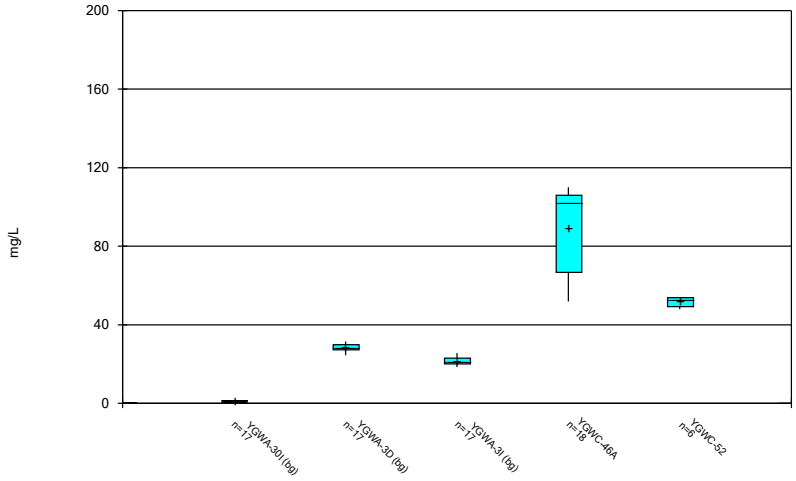
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

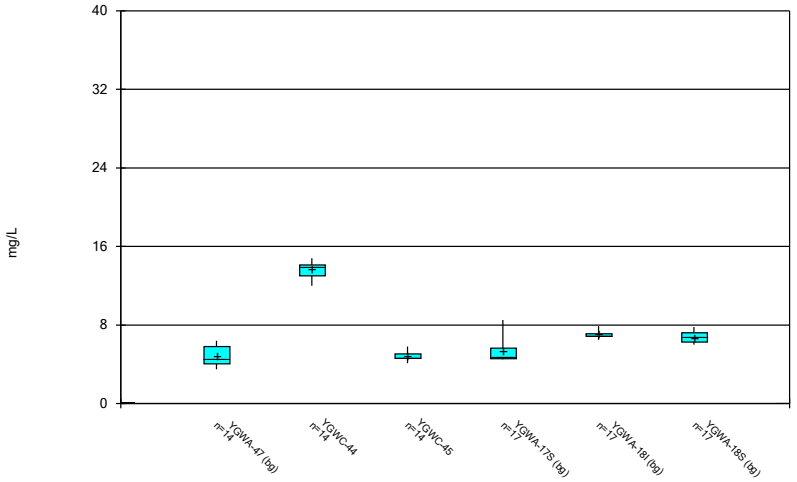
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

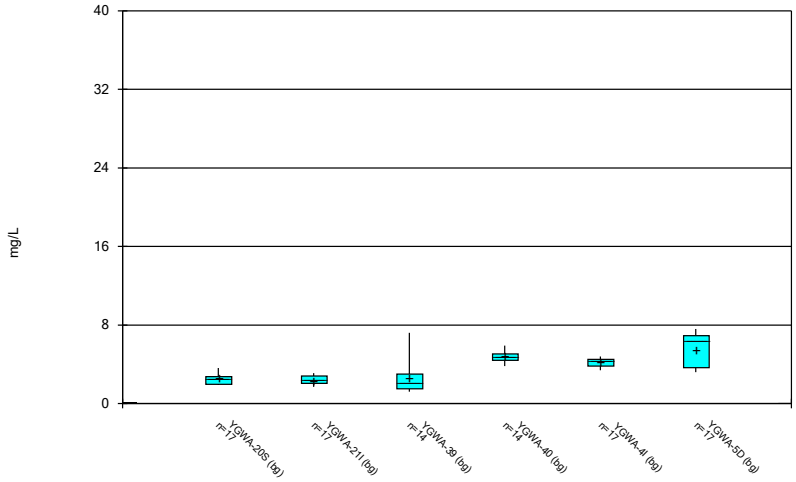
Box & Whiskers Plot



Constituent: Chloride, Total Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

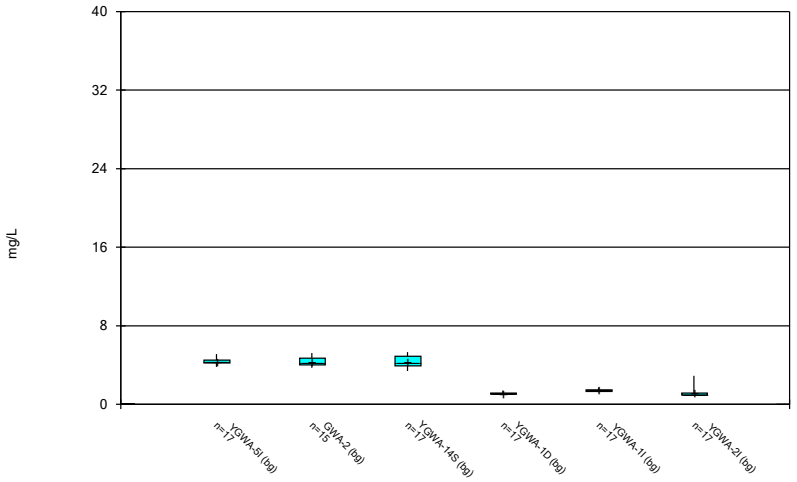
Box & Whiskers Plot



Constituent: Chloride, Total Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

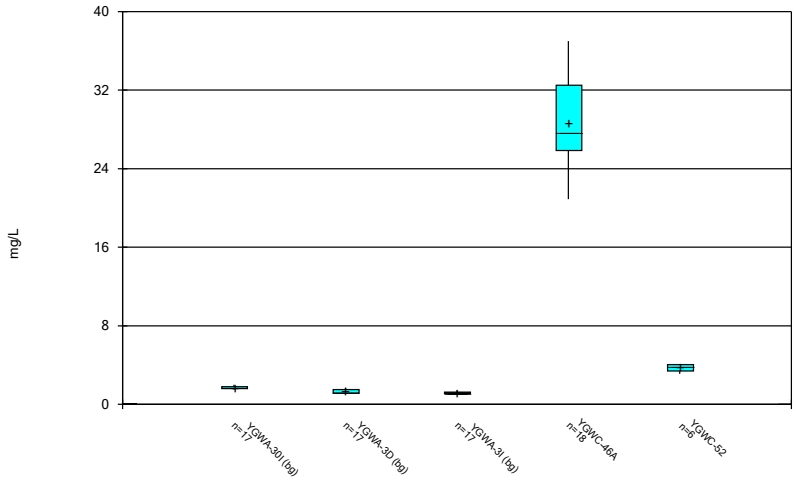
Box & Whiskers Plot



Constituent: Chloride, Total Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

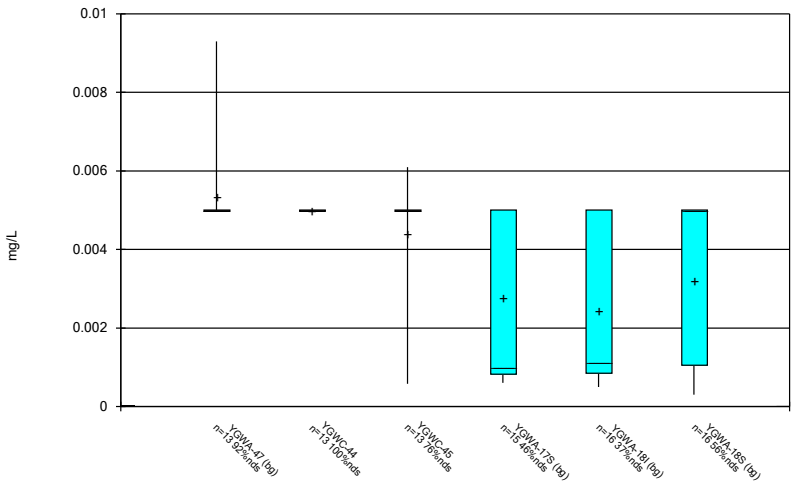
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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

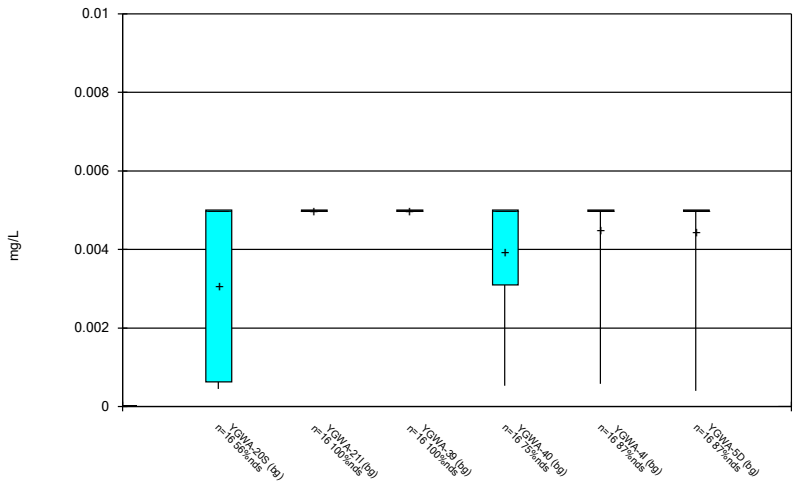


Constituent: Chromium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

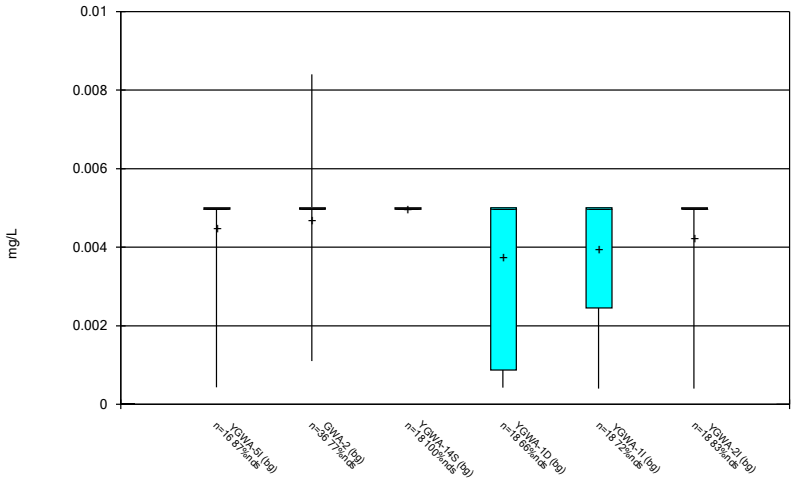


Constituent: Chromium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

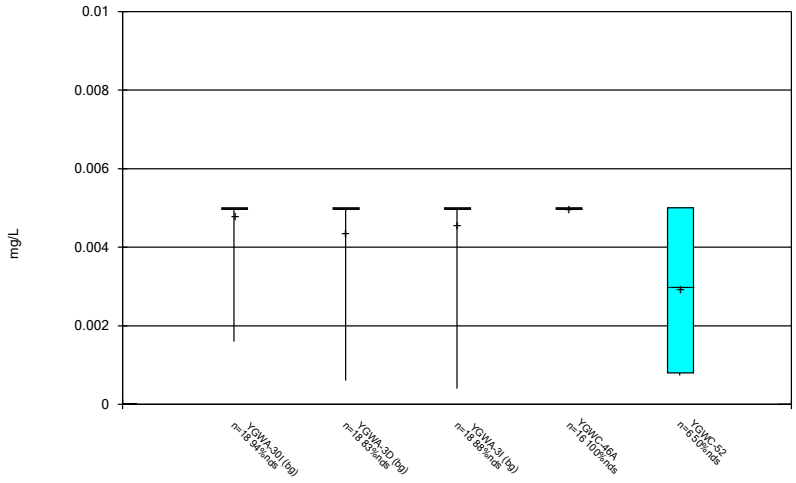


Constituent: Chromium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

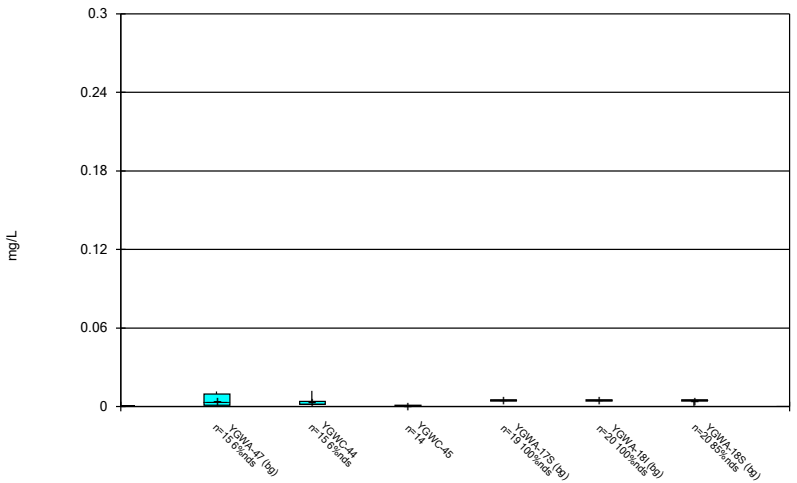
Box & Whiskers Plot



Constituent: Chromium Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot

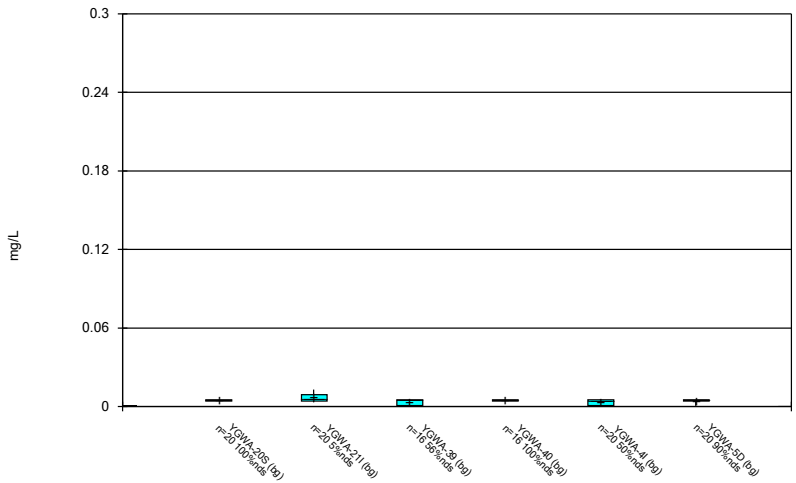


Constituent: Cobalt Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

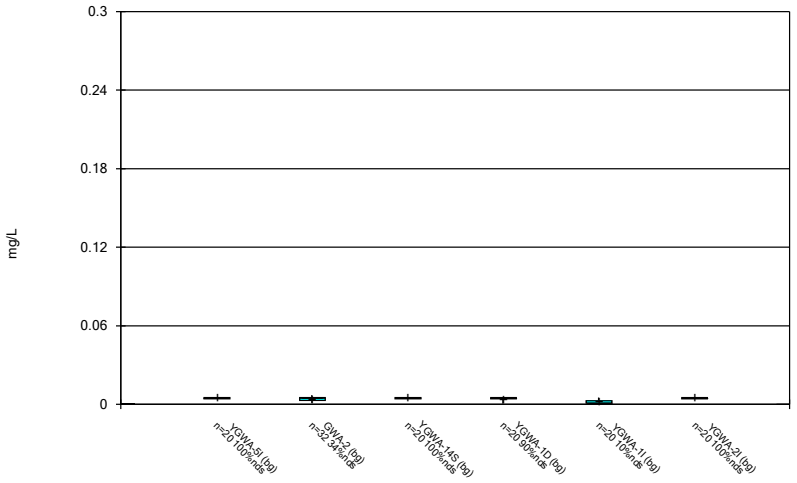


Constituent: Cobalt Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

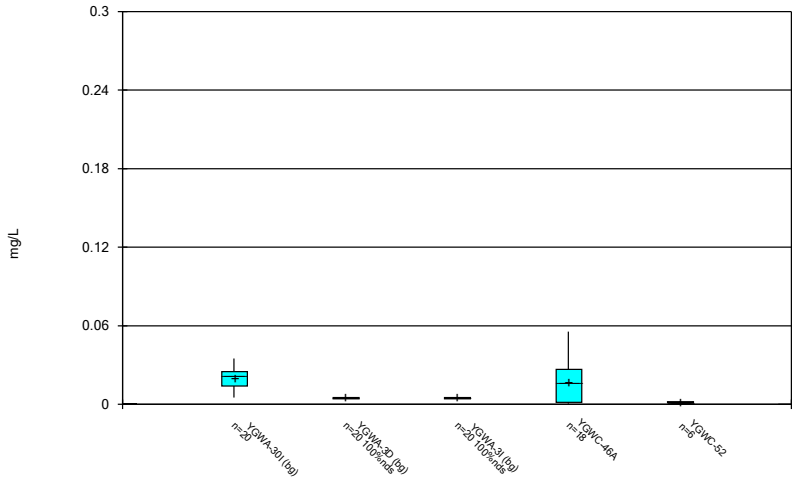


Constituent: Cobalt Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

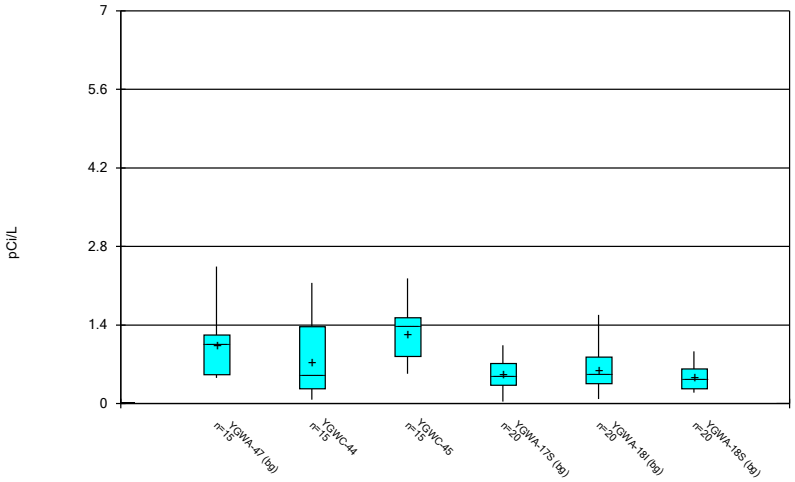
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 11/2/2021 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

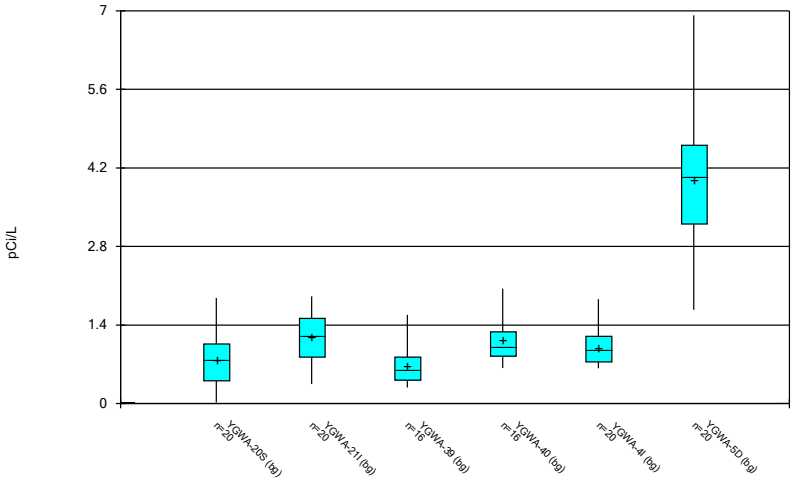
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

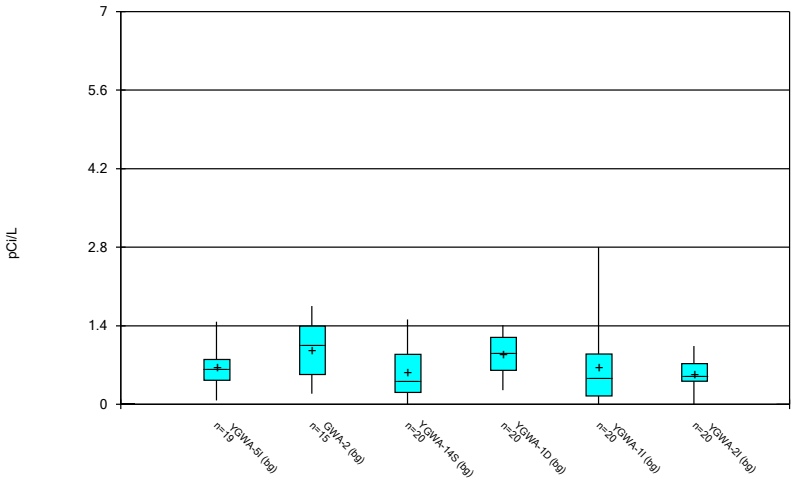
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

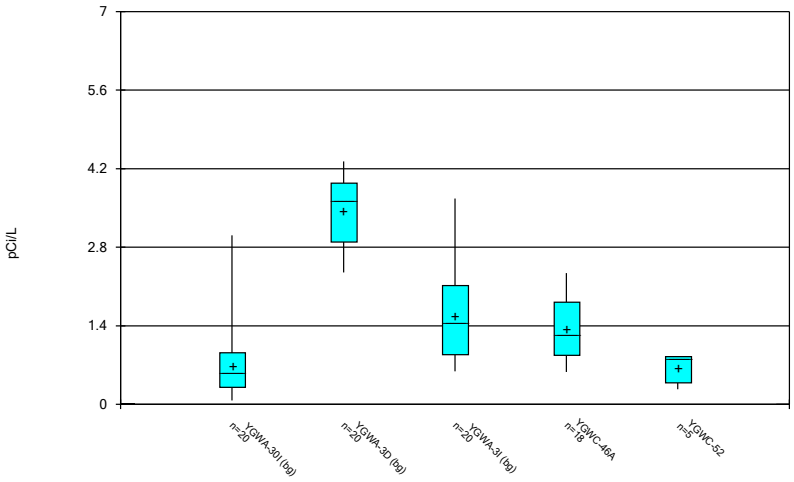
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

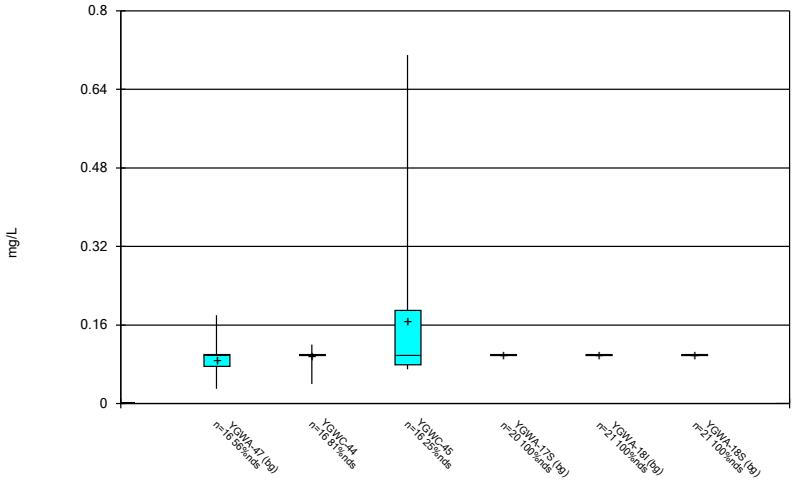
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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

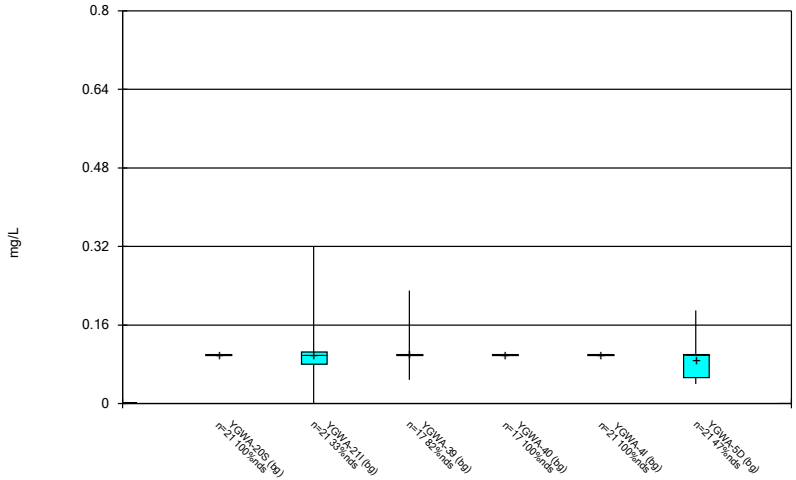
Box & Whiskers Plot



Constituent: Fluoride, total Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

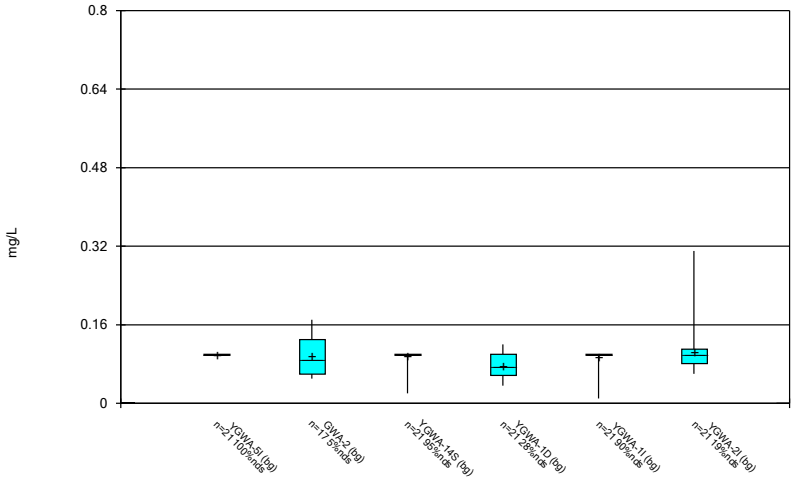
Box & Whiskers Plot



Constituent: Fluoride, total Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

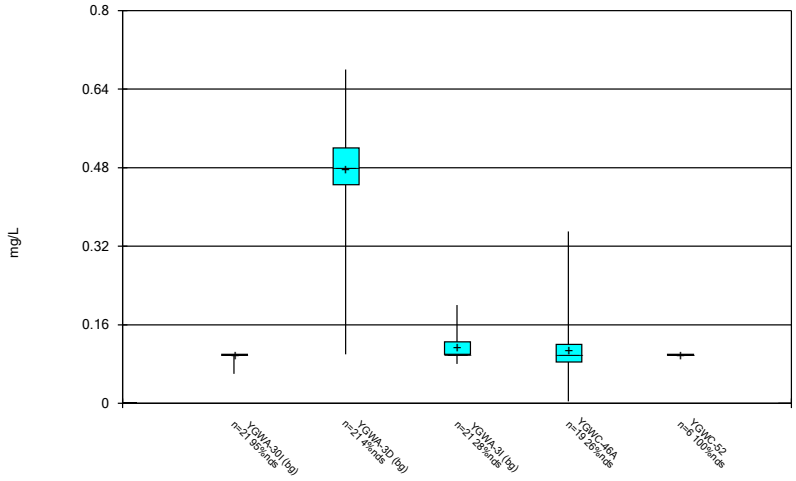
Box & Whiskers Plot



Constituent: Fluoride, total Analysis Run 11/2/2021 4:38 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

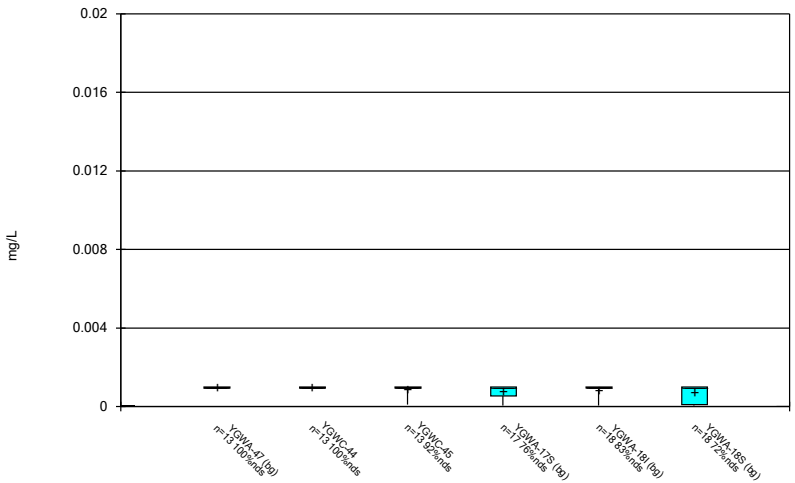
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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

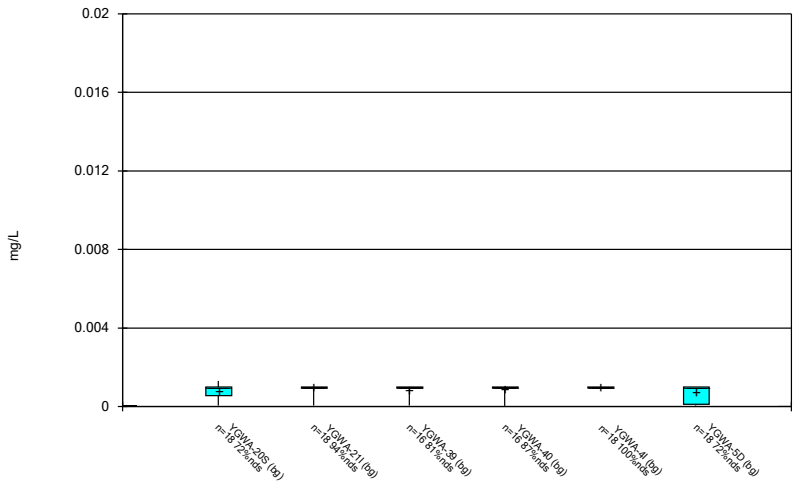


Constituent: Lead Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

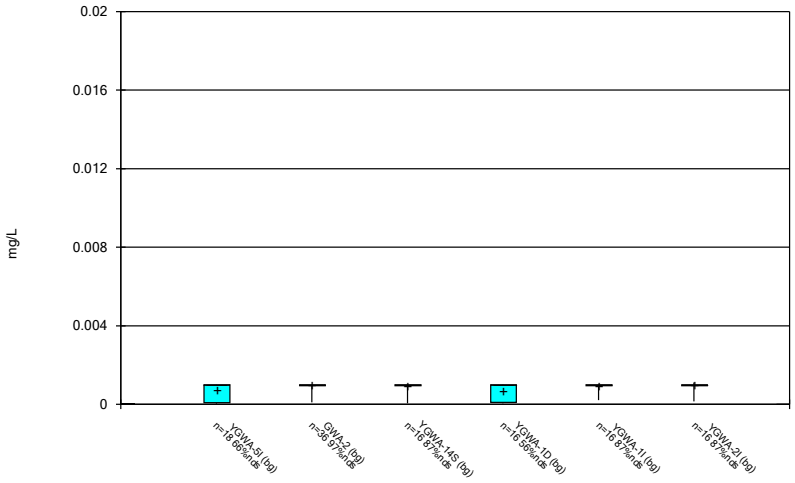


Constituent: Lead Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

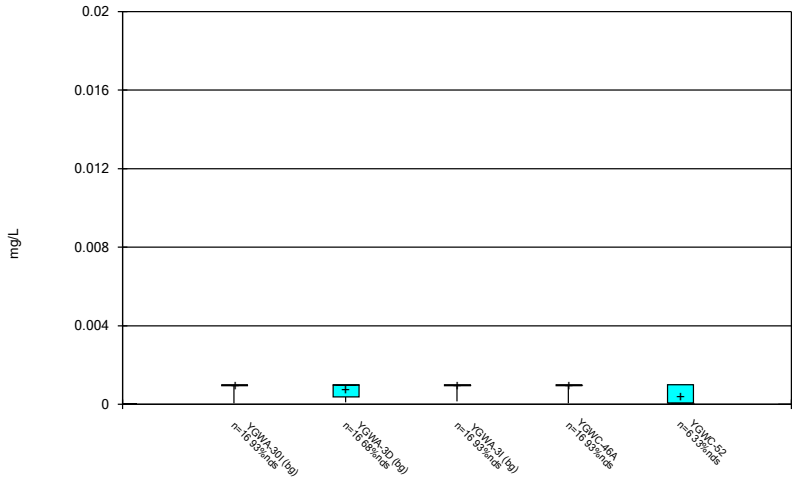


Constituent: Lead Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

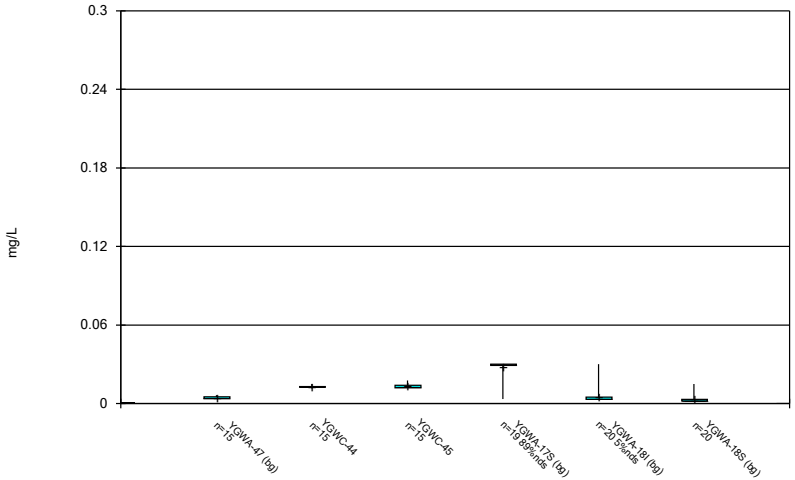
Box & Whiskers Plot



Constituent: Lead Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot

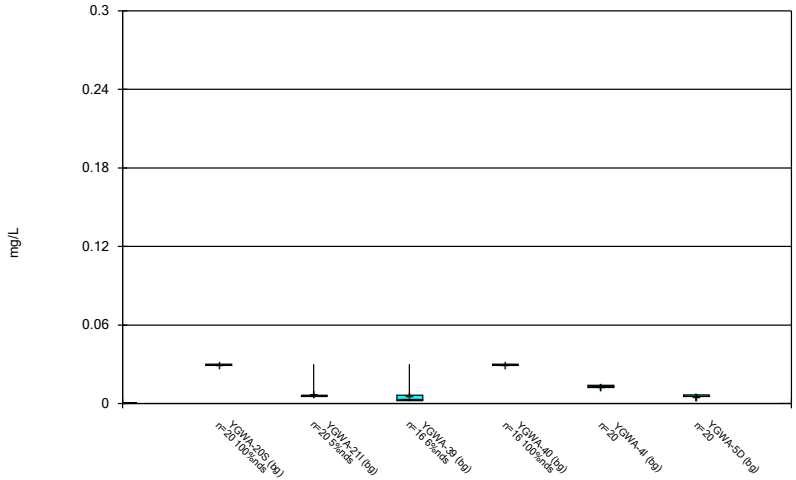


Constituent: Lithium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

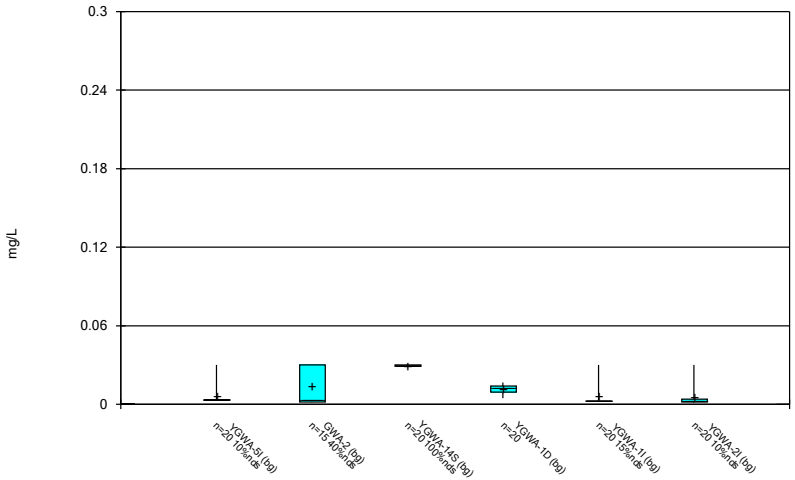


Constituent: Lithium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

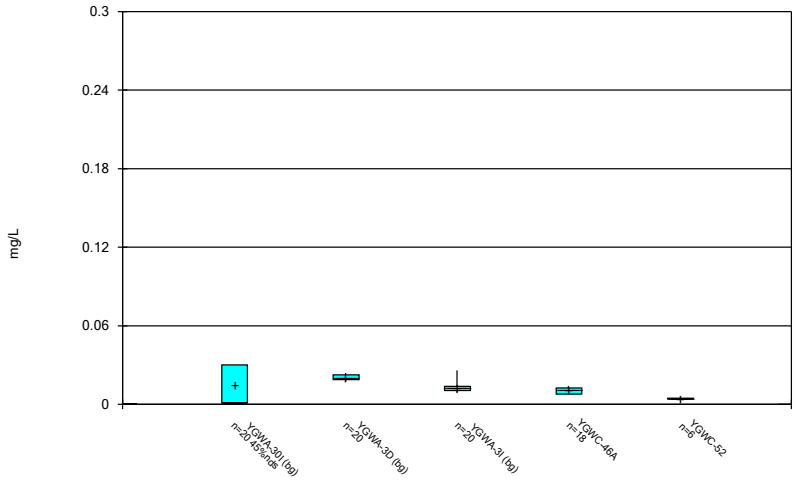


Constituent: Lithium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

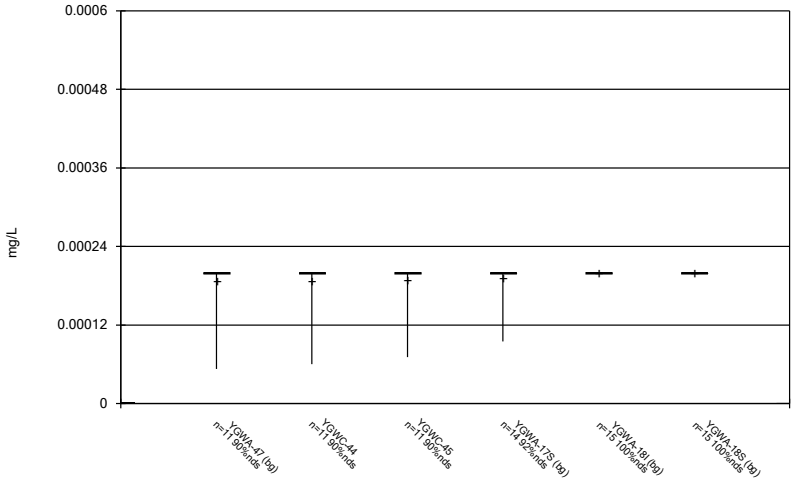
Box & Whiskers Plot



Constituent: Lithium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot

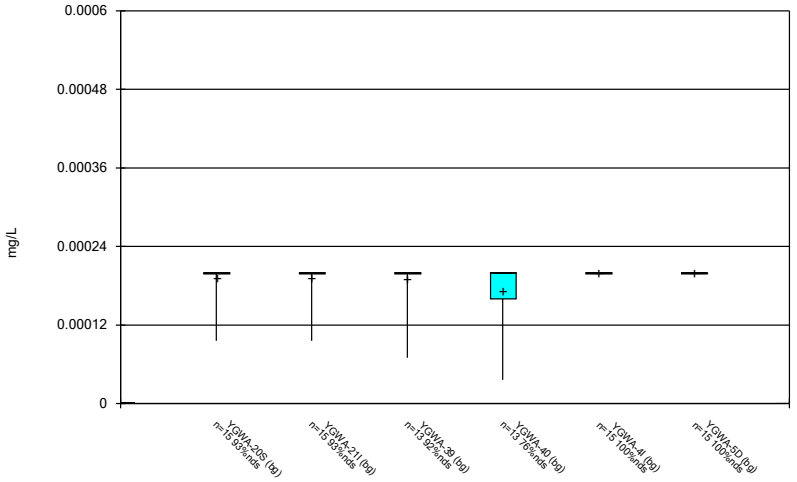


Constituent: Mercury Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

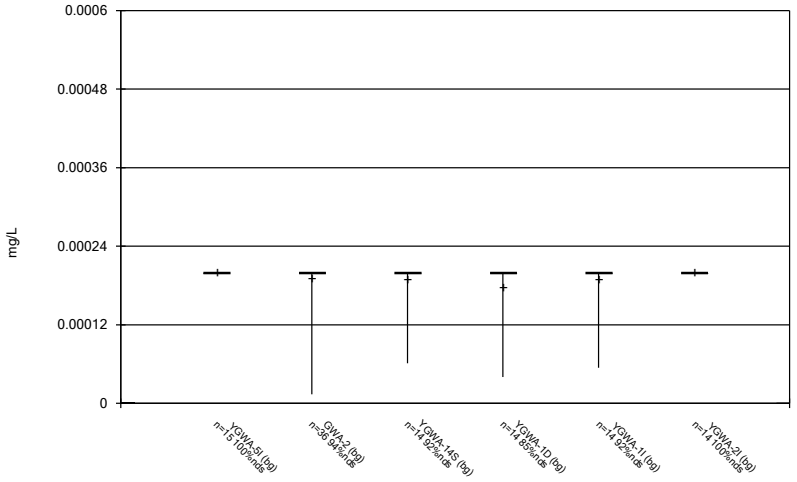


Constituent: Mercury Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

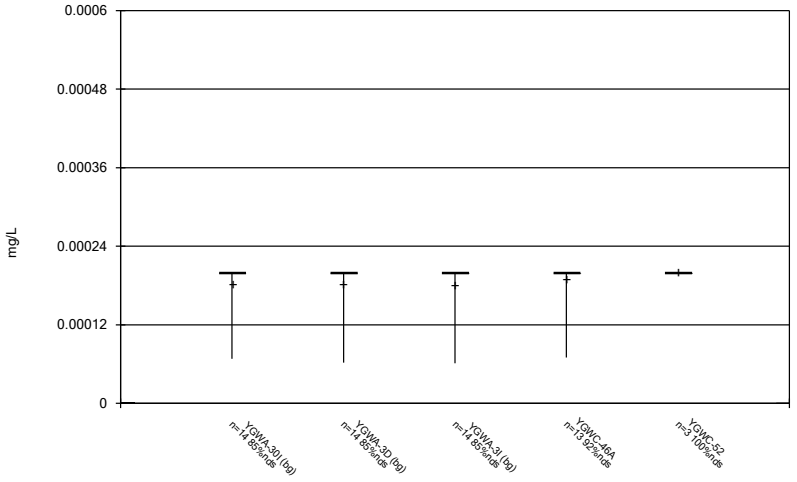


Constituent: Mercury Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

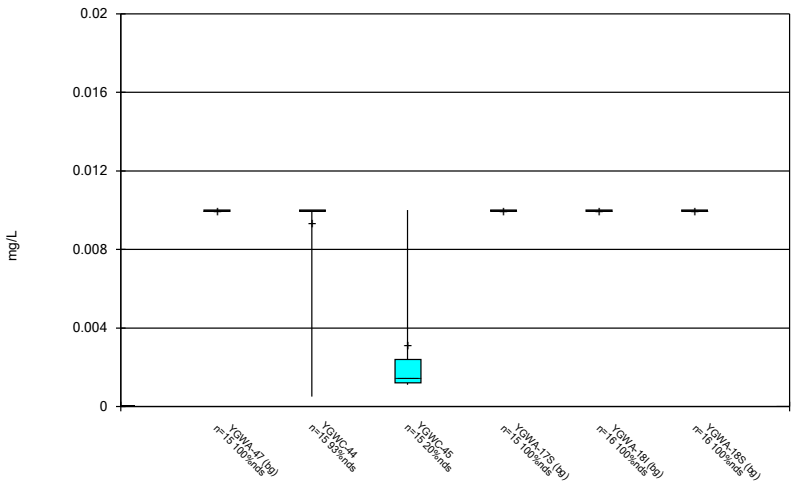
Box & Whiskers Plot



Constituent: Mercury Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

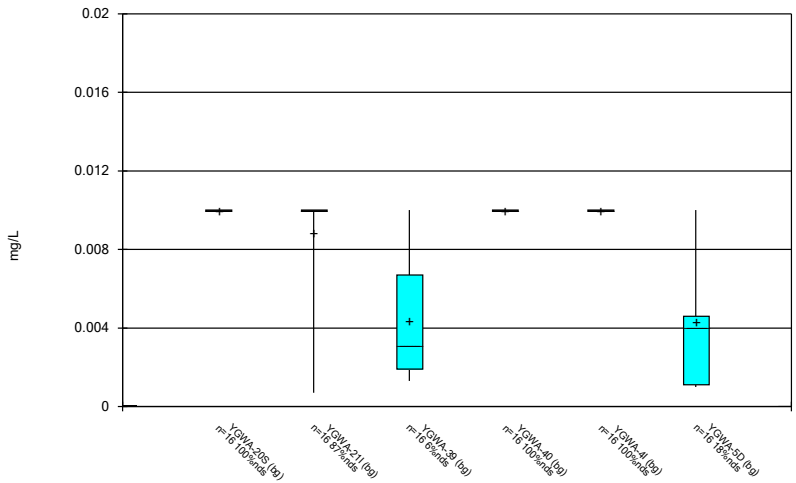
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/2/2021 4:39 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

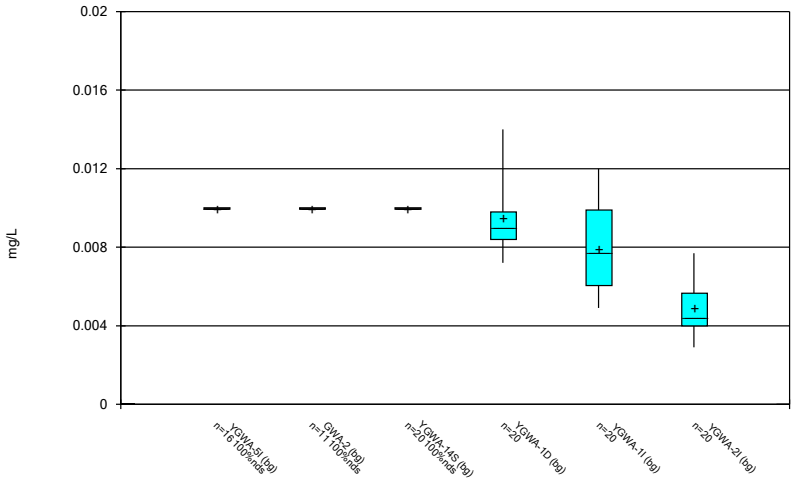
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/2/2021 4:39 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

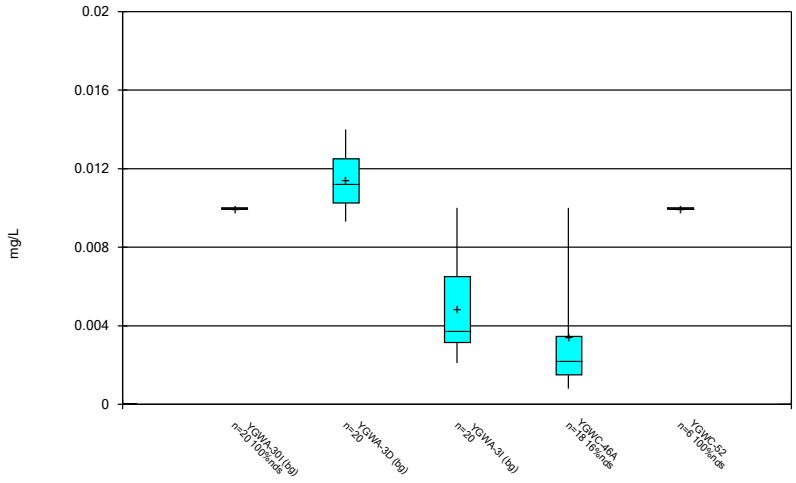
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/2/2021 4:39 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

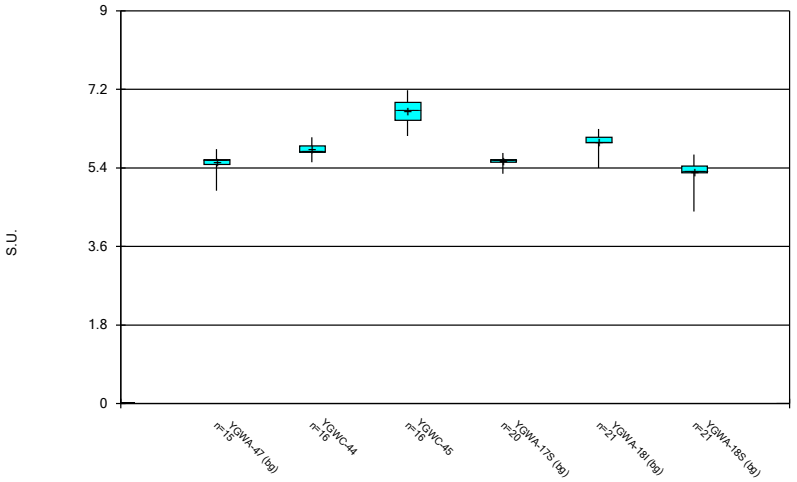
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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

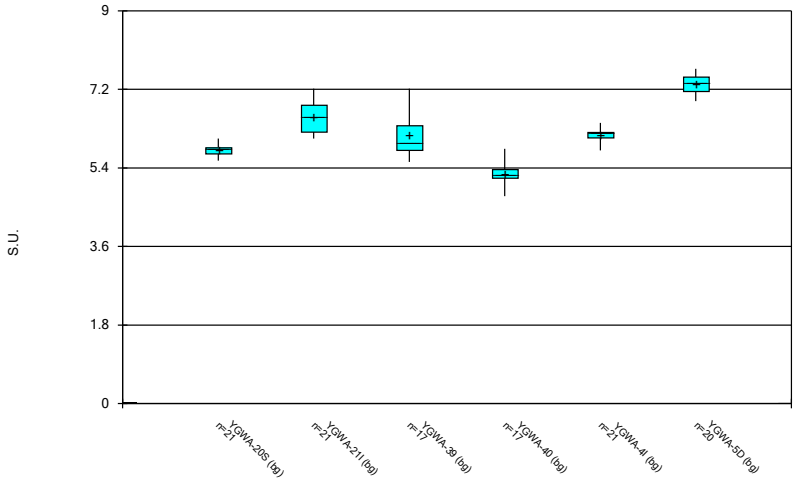


Constituent: pH, Field Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

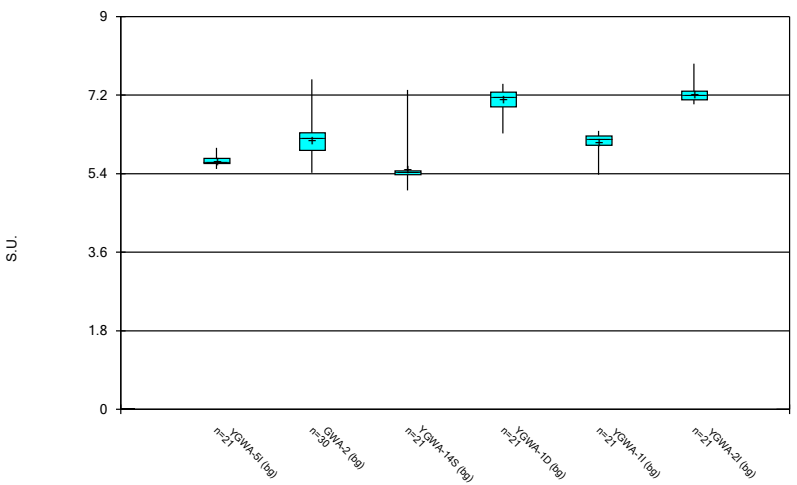


Constituent: pH, Field Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

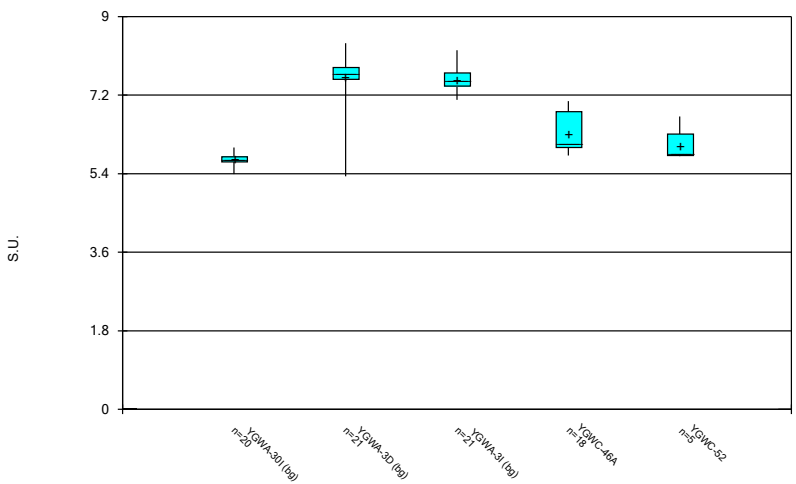


Constituent: pH, Field Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

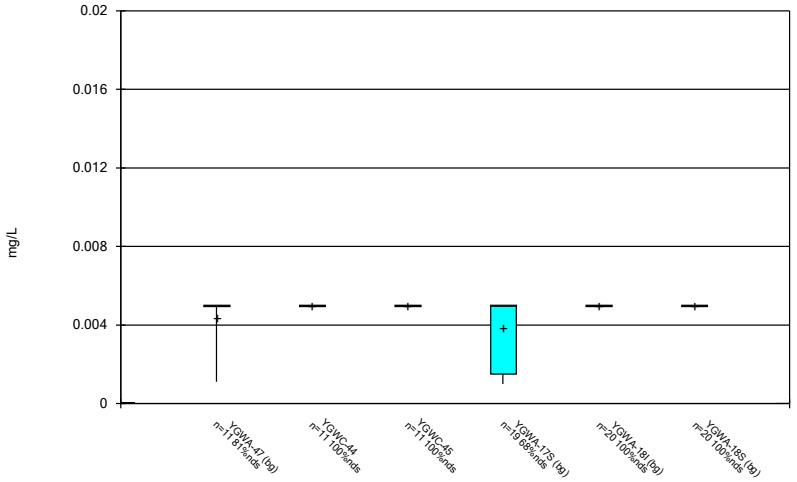
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot

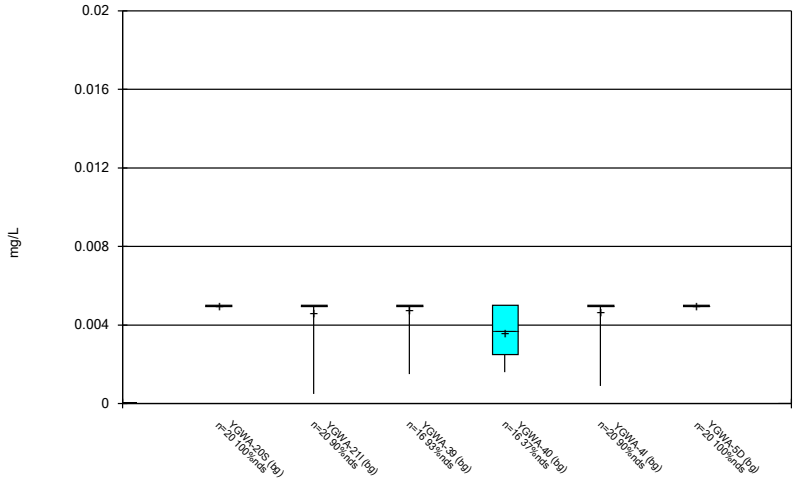


Constituent: Selenium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

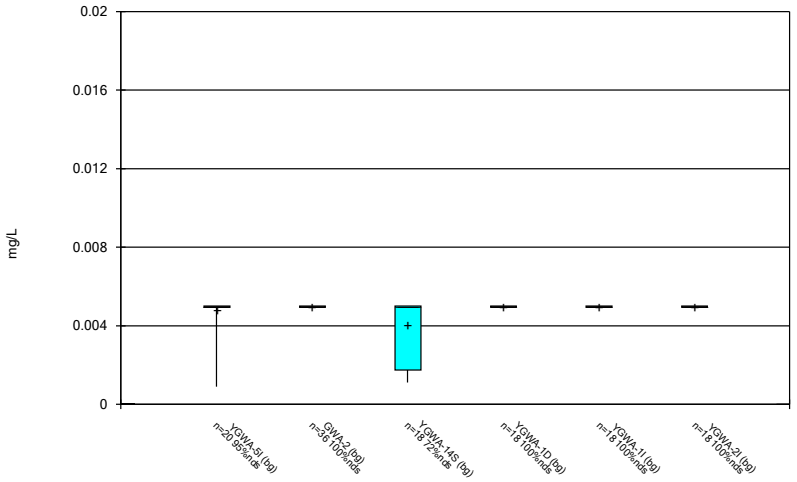


Constituent: Selenium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

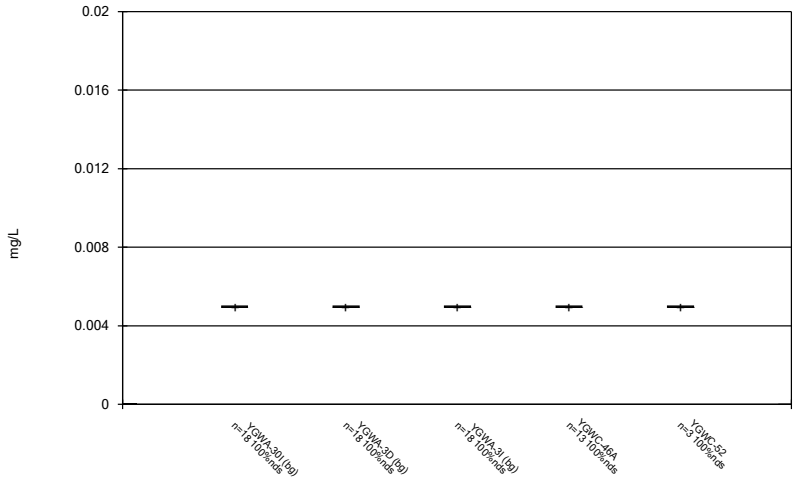


Constituent: Selenium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

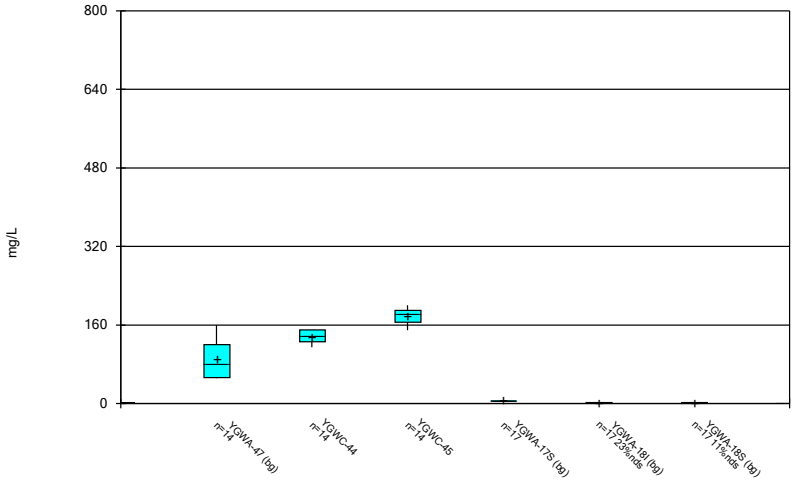
Box & Whiskers Plot



Constituent: Selenium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot

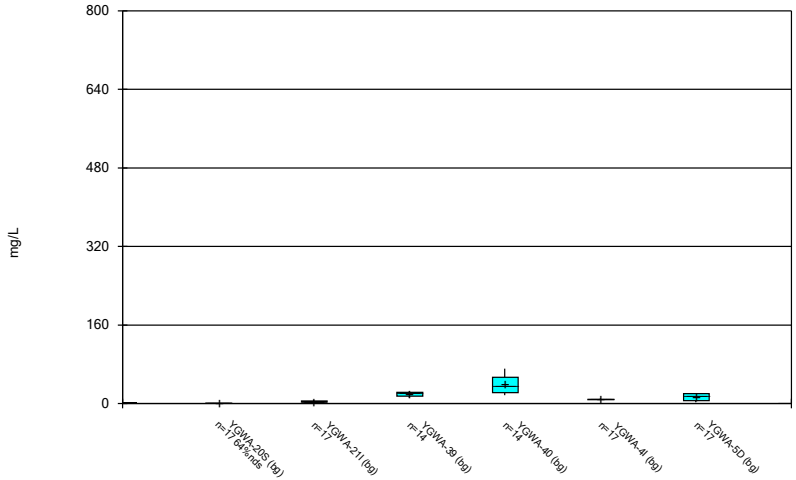


Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

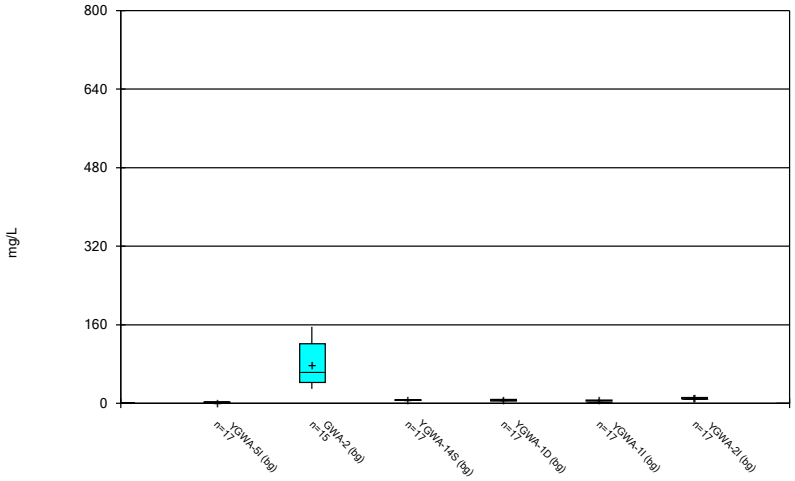


Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

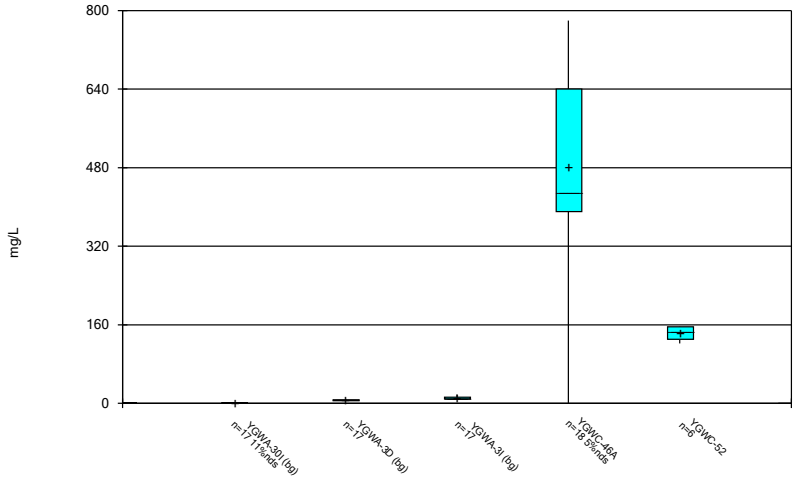


Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

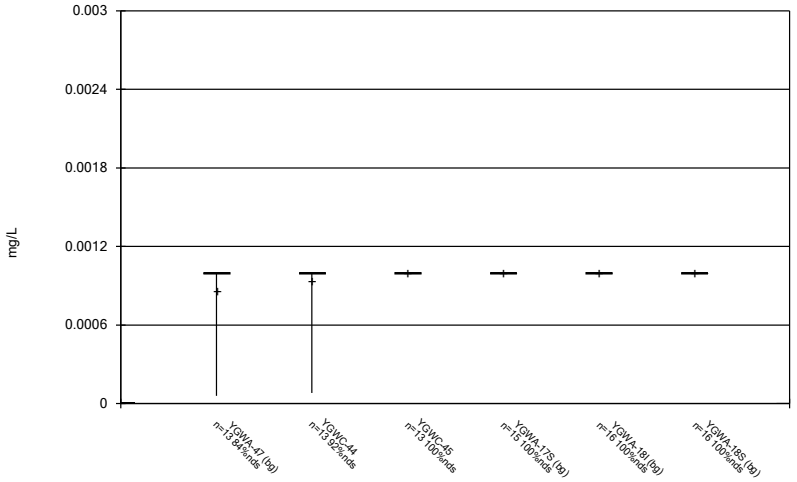
Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot

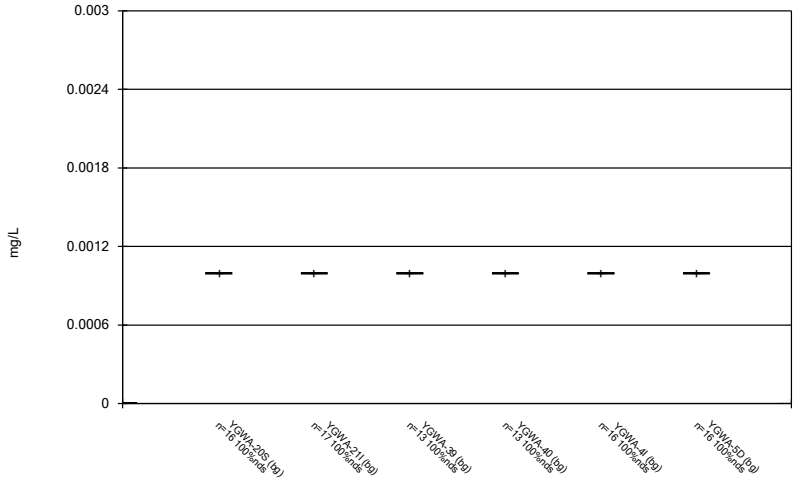


Constituent: Thallium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

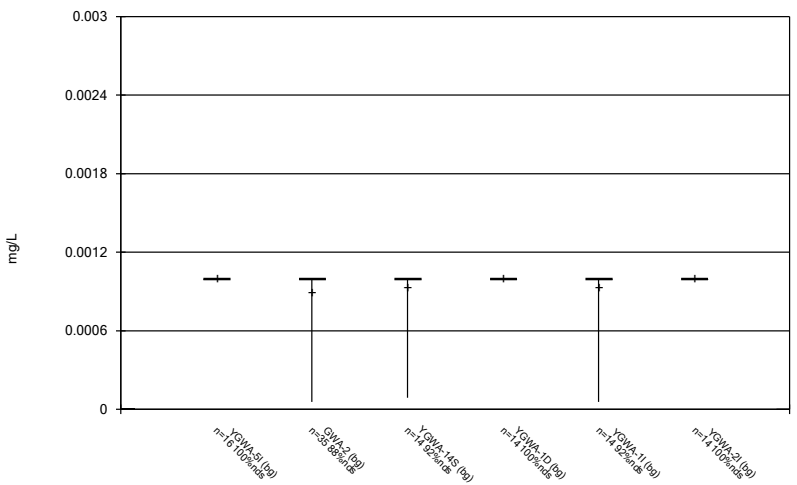


Constituent: Thallium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

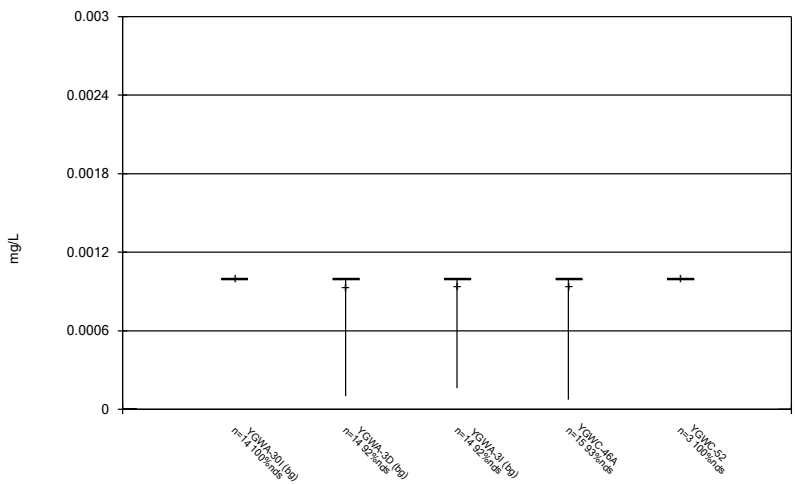


Constituent: Thallium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

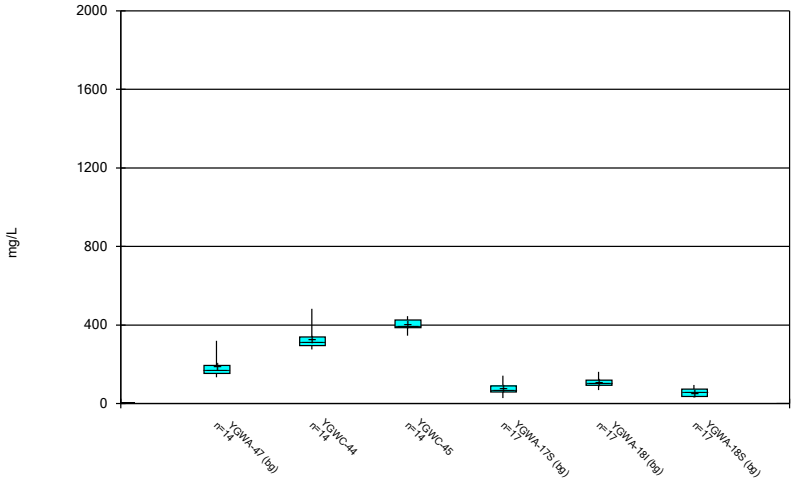
Box & Whiskers Plot



Constituent: Thallium Analysis Run 11/2/2021 4:39 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

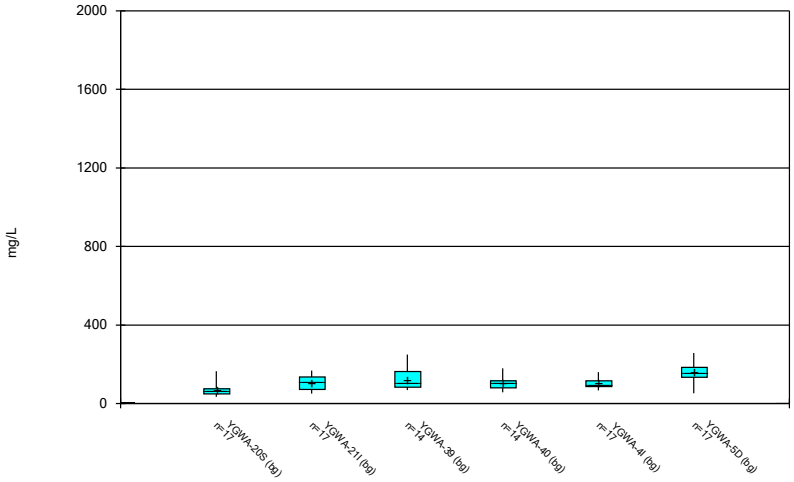
Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:39 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

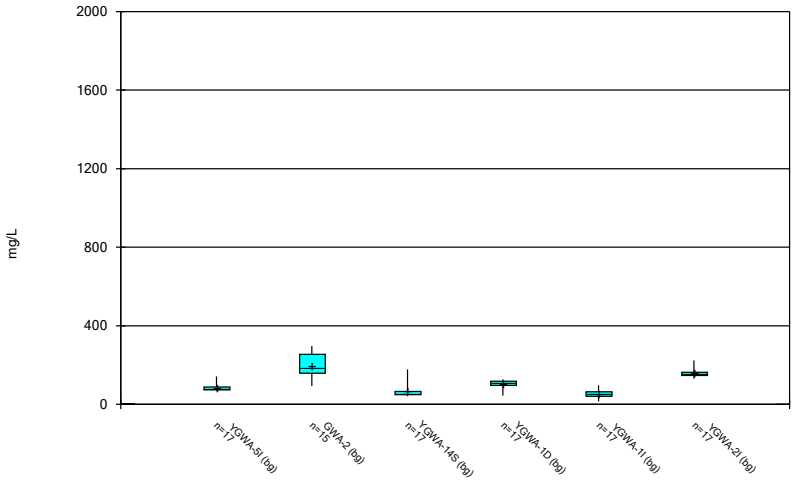
Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:39 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

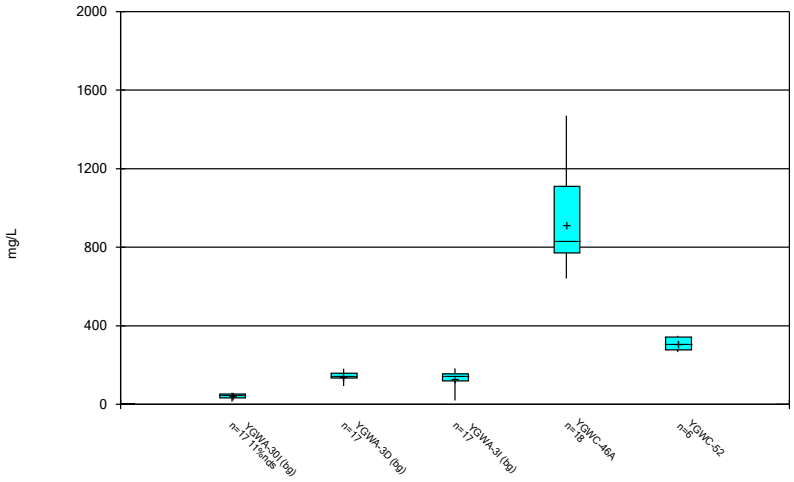
Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 4:39 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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

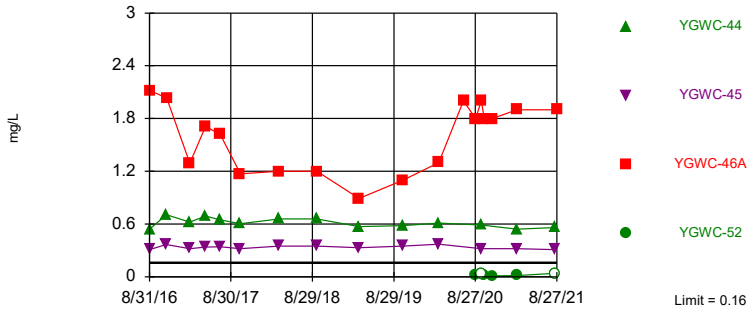
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	**YGWC-44**	**0.16**	**n/a**	**8/19/2021**	**0.56**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Boron, total (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**
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
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-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
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**
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
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**
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
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**

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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.

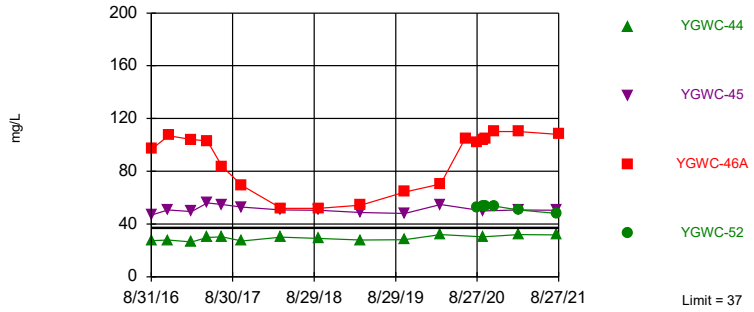
Constituent: Boron, total Analysis Run 11/2/2021 4:55 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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.

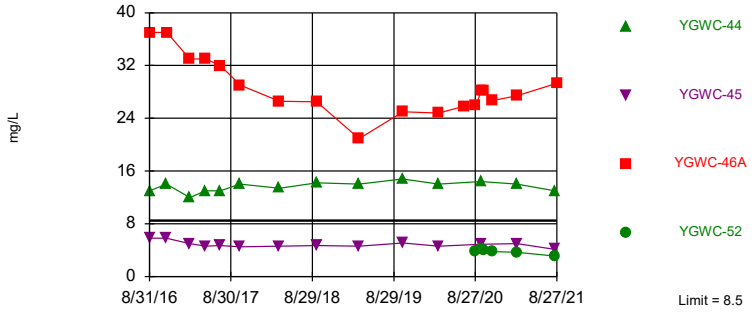
Constituent: Calcium, total Analysis Run 11/2/2021 4:55 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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.

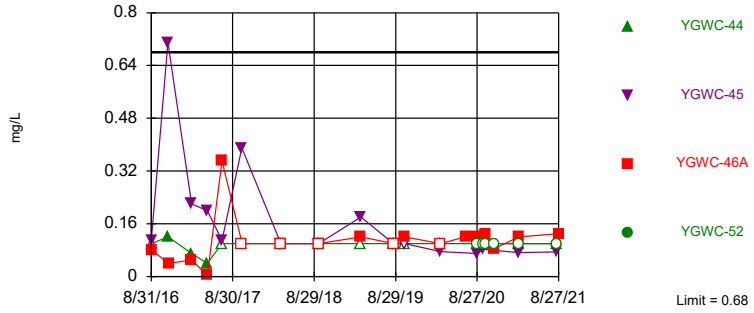
Constituent: Chloride, Total Analysis Run 11/2/2021 4:55 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 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.

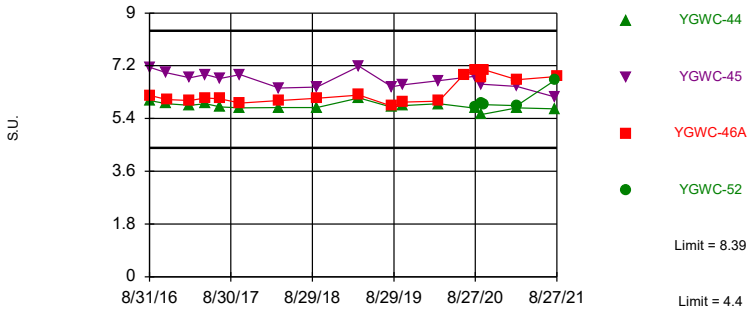
Constituent: Fluoride, total Analysis Run 11/2/2021 4:55 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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

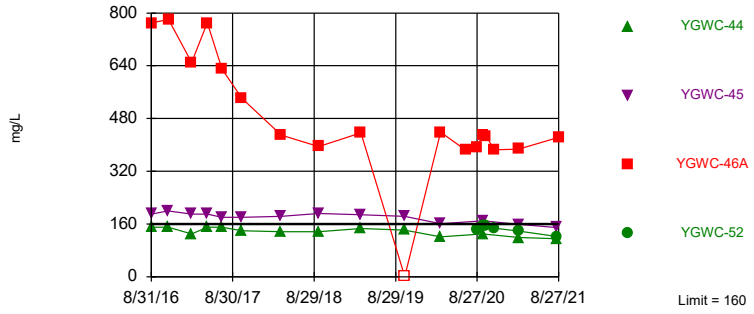
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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

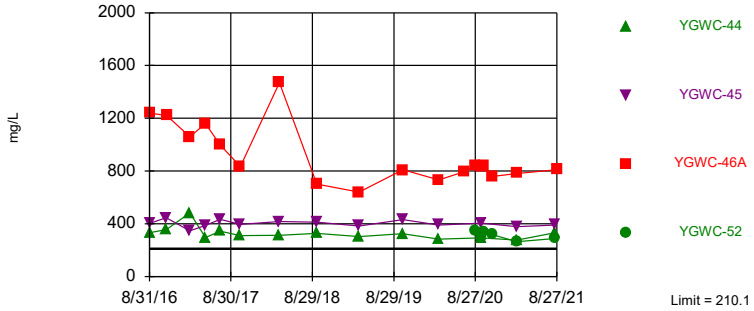
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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-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)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020				0.0053 (J)	0.0079 (J)		<0.04		
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				0.011 (J)	0.0068 (J)			0.017 (J)	
3/3/2021	<0.04	<0.04	<0.04			<0.04	0.0056 (J)		
3/4/2021									
8/19/2021	<0.04	<0.04				<0.04		0.018 (J)	<0.04
8/20/2021									
8/26/2021				<0.04	0.009 (J)		<0.04		
8/27/2021			<0.04						
9/1/2021									
9/3/2021									

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-21I (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

	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)
6/30/2017									
7/11/2017						0.0131 (J)			
7/13/2017							0.34	0.649	
7/17/2017									0.0092 (J)
10/3/2017				<0.04					
10/4/2017		0.009 (J)	0.0077 (J)		<0.04				
10/5/2017	<0.04								
10/10/2017						0.0124 (J)	0.319	0.603	
10/11/2017									
10/12/2017									
10/16/2017									<0.04
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									<0.04
2/20/2018									
4/2/2018						0.013 (J)			
4/3/2018							0.35		
4/4/2018								0.66	
6/5/2018				0.0092 (J)					
6/6/2018					0.0049 (J)				
6/7/2018	<0.04								
6/8/2018									
6/11/2018		0.0093 (J)	0.01 (J)						
6/28/2018									
8/6/2018									<0.04
8/7/2018									
9/19/2018						0.012 (J)	0.35	0.66	
9/24/2018									
9/25/2018	0.0046 (J)	0.007 (J)	0.0096 (J)	0.0054 (J)	<0.04				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019									<0.04
3/26/2019									
3/27/2019						0.013 (J)	0.33	0.57	
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			0.0066 (J)	0.011 (J)					
4/3/2019	<0.04	0.0053 (J)			<0.04				
6/12/2019									<0.04
9/24/2019				0.018 (J)					
9/25/2019			0.0081 (J)		<0.04				
9/26/2019	0.0062 (J)	0.0072 (J)							
10/8/2019						0.012 (J)		0.58	<0.04
10/9/2019							0.35		
3/17/2020						0.023 (J)	0.37	0.61	0.0051 (J)
3/18/2020									
3/19/2020									
3/24/2020	0.0054 (J)	0.01 (J)	0.0092 (J)	0.016 (J)	<0.04				
3/25/2020									

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-21I (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44	GWA-2 (bg)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020						0.0076 (J)		0.59	0.0079 (J)
9/23/2020	0.021 (J)	0.006 (J)	0.0066 (J)				0.32		
9/24/2020				0.013 (J)	0.0094 (J)				
9/25/2020									
10/7/2020									
11/12/2020									
3/1/2021						0.013 (J)	0.32	0.54	
3/2/2021									<0.04
3/3/2021	<0.04	0.0094 (J)	0.01 (J)		<0.04				
3/4/2021				0.0079 (J)					
8/19/2021						0.011 (J)	0.31	0.56	
8/20/2021									<0.04
8/26/2021		<0.04							
8/27/2021	<0.04		0.011 (J)		<0.04				
9/1/2021				<0.04					
9/3/2021									

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-2I (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-2I (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-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)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020				2.6	27.2		9.6		
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				2.6	1.6			1.2	
3/3/2021	14.1	1.8	20.6			29.8	7.7		
3/4/2021									
8/19/2021	14.2	2				28.1		1.2	1.2
8/20/2021									
8/26/2021				2.5	25.2		7.6		
8/27/2021			24.7						
9/1/2021									
9/3/2021									

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-21I (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44	GWA-2 (bg)
6/1/2016									
6/2/2016									
6/6/2016	6.2	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

	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)
6/30/2017									
7/11/2017						14.3			
7/13/2017							54.8	30.2	
7/17/2017									14.1
10/3/2017				8.28					
10/4/2017		1.1	2.03		2.25				
10/5/2017	5.28								
10/10/2017						12.1	52.8	27.2	
10/11/2017									
10/12/2017									
10/16/2017									13.6
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									<25
2/20/2018									
4/2/2018						<25			
4/3/2018							50.6		
4/4/2018								30.1	
6/5/2018				9.1					
6/6/2018					2.3				
6/7/2018	4.8								
6/8/2018									
6/11/2018		1.4	2.1						
6/28/2018									
8/6/2018									11.4 (J)
8/7/2018									
9/19/2018						11.1 (J)	50.5	29.2	
9/24/2018									
9/25/2018	4.6	1	2.1	10.4 (J)	2.3				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019									12.7 (J)
3/26/2019									
3/27/2019						10.8 (J)	48.8	27.9	
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			2.5	8.8					
4/3/2019	5.3	1.2			2.9				
6/12/2019									18.9
9/24/2019				7.7					
9/25/2019			2.6		2.4				
9/26/2019	4.9	1.1							
10/8/2019						9.7		28.1	28.3
10/9/2019							47.9		
3/17/2020						14.8	54.8	31.9	24.3
3/18/2020									
3/19/2020									
3/24/2020	5.3	1	2.7	6	2.6				
3/25/2020									

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-21I (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44	GWA-2 (bg)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020						10.1		30.4	31
9/23/2020	5.2	0.91 (J)	2.6				50		
9/24/2020				7.8	2.6				
9/25/2020									
10/7/2020									
11/12/2020									
3/1/2021						10.3	50.7	31.9	
3/2/2021									34.2
3/3/2021	5.2	0.96 (J)	2.5		2.4				
3/4/2021				8.7					
8/19/2021						9.6	50.4	31.7	
8/20/2021									26.5
8/26/2021		0.98 (J)							
8/27/2021	5.1		2.7		2.4				
9/1/2021				9.5					
9/3/2021									

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
6/1/2016					
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-2I (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-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)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020				4.2	3.6		4.5		
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				4.3	3.2			4.9	
3/3/2021	0.96 (J)	1.2	0.99 (J)			1.1	4.1		
3/4/2021									
8/19/2021	1.1	1.3				1.1		5	1.6
8/20/2021									
8/26/2021				4.3	3.4		4.4		
8/27/2021			1.1						
9/1/2021									
9/3/2021									

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

	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)
6/30/2017									
7/11/2017						5.8			
7/13/2017							4.7	13	
7/17/2017									3.8
10/3/2017				2.2					
10/4/2017		6.8	4.7		2.6				
10/5/2017	7								
10/10/2017						5.9	4.5	14	
10/11/2017									
10/12/2017									
10/16/2017									4.2
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									4.3
2/20/2018									
4/2/2018						4.8			
4/3/2018							4.6		
4/4/2018								13.4	
6/5/2018				1.7					
6/6/2018					2.7				
6/7/2018	6.8								
6/8/2018									
6/11/2018		6.8	4.9						
6/28/2018									
8/6/2018									3.8
8/7/2018									
9/19/2018						4	4.7	14.2	
9/24/2018									
9/25/2018	7.9	7.8	5.6	2.2	3.6				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019									4.1
3/26/2019									
3/27/2019						4.3	4.6	14	
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			4.8	2.5					
4/3/2019	6.9	6.3			3.1				
6/12/2019									4.7
9/24/2019				3.1					
9/25/2019			5.7		2.8				
9/26/2019	7	7.1							
10/8/2019						4.4		14.8	5.1
10/9/2019							5.1		
3/17/2020						4.1	4.6	14	4.8
3/18/2020									
3/19/2020									
3/24/2020	7	6.8	5	2.8	2.7				
3/25/2020									

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)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020						4.2		14.4	4.2
9/23/2020	7.2	7.2	6.6				4.9		
9/24/2020				2	2.7				
9/25/2020									
10/7/2020									
11/12/2020									
3/1/2021						3.7	5	14	
3/2/2021									4.1
3/3/2021	7	7.2	7.1		2.7				
3/4/2021				1.8					
8/19/2021						3.5	4.1	13	
8/20/2021									5.2
8/26/2021		7.3							
8/27/2021	7.4		8.5		2.8				
9/1/2021				1.8					
9/3/2021									

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-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	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-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 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
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-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								<0.1	<0.1
7/11/2017									
7/13/2017									
7/17/2017									
10/3/2017	<0.1	<0.1		<0.1	<0.1				
10/4/2017			<0.1			<0.1			<0.1
10/5/2017							<0.1	<0.1	
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									
3/27/2018		<0.1						<0.1	<0.1
3/28/2018			<0.1			0.56			
3/29/2018	<0.1			<0.1	<0.1		<0.1		
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018	0.055 (J)								
6/6/2018		<0.1			0.15 (J)				
6/7/2018				<0.1		0.48	<0.1		
6/8/2018			0.2 (J)					<0.1	
6/11/2018									<0.1
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018				<0.1	<0.1		<0.1		
10/1/2018	<0.1	<0.1	<0.1			0.44		<0.1	
10/2/2018									<0.1
2/25/2019									
2/26/2019								<0.1	<0.1
2/27/2019	0.052 (J)	<0.1	0.13 (J)			0.53			
3/4/2019				<0.1	0.19 (J)		<0.1		
3/5/2019									
3/6/2019									
3/26/2019									
3/27/2019									
3/28/2019	0.036 (J)	<0.1							
3/29/2019								<0.1	
4/1/2019			0.1 (J)			0.45			<0.1
4/2/2019									
4/3/2019				<0.1	0.047 (J)		<0.1		
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

	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)
8/21/2019									
9/24/2019	0.063 (J)	<0.1		<0.1	0.05 (J)				
9/25/2019			0.1 (J)			0.46	<0.1	<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	<0.1	0.4	<0.1	<0.1	<0.1
3/17/2020									
3/18/2020		<0.1						<0.1	
3/19/2020	0.064 (J)		0.11 (J)			0.51			<0.1
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	0.056 (J)		<0.1		
9/23/2020	0.058 (J)	<0.1	0.098 (J)			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	0.078 (J)	<0.1	0.1			0.44	<0.1		
3/4/2021									
8/19/2021	0.074 (J)	<0.1				0.47		<0.1	<0.1
8/20/2021									
8/26/2021				<0.1	0.061 (J)		<0.1		
8/27/2021			0.12						
9/1/2021									
9/3/2021									

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-21I (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-21I (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

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-44	YGWC-45	GWA-2 (bg)
8/21/2019									
9/24/2019				0.15 (J)					
9/25/2019			<0.1		<0.1				
9/26/2019	<0.1	<0.1							
10/8/2019						0.034 (J)	<0.1		0.052 (J)
10/9/2019								<0.1	
2/10/2020									
2/11/2020	<0.1	<0.1	<0.1						
2/12/2020				0.1 (J)	<0.1				
3/17/2020						<0.1	<0.1	0.076 (J)	0.053 (J)
3/18/2020									
3/19/2020									
3/24/2020	<0.1	<0.1	<0.1	0.081 (J)	<0.1				
3/25/2020									
7/6/2020									
8/26/2020									0.068 (J)
8/27/2020						<0.1	<0.1		
8/28/2020								0.07 (J)	
9/22/2020						<0.1	<0.1		0.058 (J)
9/23/2020	<0.1	<0.1	<0.1					0.082 (J)	
9/24/2020				0.079 (J)	<0.1				
9/25/2020									
10/7/2020									
11/12/2020									
2/8/2021									
2/9/2021	<0.1	<0.1		0.092 (J)	<0.1				
2/10/2021									
2/11/2021									
2/12/2021									
3/1/2021						<0.1	<0.1	0.073 (J)	
3/2/2021									0.073 (J)
3/3/2021	<0.1	<0.1	<0.1		<0.1				
3/4/2021				0.091 (J)					
8/19/2021						<0.1	<0.1	0.075 (J)	
8/20/2021									0.06 (J)
8/26/2021		<0.1							
8/27/2021	<0.1		<0.1		<0.1				
9/1/2021				0.11					
9/3/2021									

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-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	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-2I (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-2I (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)
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		6.33	7.72	7.46					
6/2/2016					7.84	5.46	7.67	5.75	5.75
6/6/2016									
6/7/2016									
7/25/2016		6.21	7.74					5.82	
7/26/2016				7.43	7.88	5.45	7.66		5.72
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016		6.16		7.44					
9/14/2016			7.65				7.6		5.74
9/15/2016					7.74	5.45			
9/16/2016									
9/19/2016								5.78 (D)	
11/1/2016			7.7	7.24	7.75			5.62	
11/2/2016						5.41	7.35		
11/3/2016									
11/4/2016		6.29							5.61
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016	6.23								
12/15/2016									
1/10/2017						5.37			
1/11/2017			7.53	7.3	7.66				
1/12/2017							7.49		5.71
1/13/2017									
1/16/2017		6.29						5.72	
2/21/2017								5.67	
2/22/2017	6.21								
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017			7.42						
3/2/2017		6.28		7.23	7.68				
3/3/2017									
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

	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

	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)
3/4/2019							7.46		5.75
3/5/2019									
3/6/2019									
3/26/2019									
3/27/2019									
3/28/2019		6.15		6.99					
3/29/2019						5.34			
4/1/2019			7.74		7.87			5.62	
4/2/2019									
4/3/2019							7.11		5.63
6/12/2019	6.3								
8/19/2019	6.23								
8/20/2019									
8/21/2019									
9/24/2019		6.23		7.07			6.93		5.6
9/25/2019			7.47		7.64	5.19		5.69	
9/26/2019									
10/8/2019	6.28								
10/9/2019									
2/10/2020		6.1		7.2					
2/11/2020			7.09						
2/12/2020					7.83	5.48	7.52	5.8	5.83
3/17/2020	6.14								
3/18/2020		6.19				5.38			
3/19/2020			7.31	7.03	7.65			6	
3/24/2020							7.34		5.81
3/25/2020									
5/6/2020	6.24								
7/6/2020									
8/26/2020	5.67								
8/27/2020									
8/28/2020									
9/22/2020	5.78						7.19		5.99
9/23/2020		6.01	7.37	7.15	7.57				
9/24/2020								5.67	
9/25/2020						5.44			
10/7/2020									
2/8/2021									5.67
2/9/2021									
2/10/2021			7.58		7.81	5.35			
2/11/2021								5.73	
2/12/2021		6.21		7.14					
3/1/2021								5.78	
3/2/2021	5.42					5.49	7.15		5.63
3/3/2021		5.38	8.23	7.2	8.39				
3/4/2021									
8/19/2021		6.38		6.32	5.34	7.32			
8/20/2021	5.86								
8/26/2021							7.16		5.51
8/27/2021			7.39						
9/1/2021									
9/3/2021									

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

	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
3/7/2017									
3/8/2017									
4/26/2017		5.4	5.99		6.32	5.66			
4/27/2017									
4/28/2017									
5/1/2017	6.21								
5/2/2017				5.47					
5/8/2017							5.58	5.91	
5/9/2017									6.9
5/26/2017									
6/27/2017									
6/28/2017		5.36	6						
6/29/2017	6.21			5.56	6.47	5.85			
6/30/2017									
7/11/2017							5.58		
7/13/2017								5.8	6.77
7/17/2017									
10/3/2017					6.56				
10/4/2017		5.32		5.57		5.83			
10/5/2017	6.16		6.11						
10/10/2017							5.49	5.76	6.9
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
3/27/2018									
3/28/2018		5.34	6.1	5.59					
3/29/2018	6.09				6.75	5.93			
4/2/2018							6.3 (O)		
4/3/2018									6.44
4/4/2018								5.77	
6/5/2018					6.09				
6/6/2018						5.86			
6/7/2018	6.12		5.98						
6/8/2018									
6/11/2018		5.28		5.58					
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018							5.48	5.77	6.47
9/24/2018									
9/25/2018		4.86	5.81	5.59	6.67	5.84			
9/26/2018	5.84								
10/1/2018									
10/2/2018									
2/25/2019									
2/26/2019									
2/27/2019									

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
3/4/2019	6.18								
3/5/2019		5.26		5.48	7.22	6.07			
3/6/2019			5.99						
3/26/2019									
3/27/2019							5.83	6.1	7.18
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				5.74	6.94				
4/3/2019	6.43	5.47	6.29			5.71			
6/12/2019									
8/19/2019									
8/20/2019							5.58	5.78	6.48
8/21/2019									
9/24/2019					6.87				
9/25/2019	6.2			5.49		5.86			
9/26/2019		5.2	6.04						
10/8/2019							5.59	5.84	
10/9/2019									6.55
2/10/2020									
2/11/2020		5.3	6.07	5.58					
2/12/2020	6.15				7.13	6			
3/17/2020							5.57	5.9	6.69
3/18/2020									
3/19/2020									
3/24/2020		5.33	5.98	5.57	6.35	5.86			
3/25/2020	6.26								
5/6/2020									
7/6/2020									
8/26/2020									
8/27/2020							4.88	5.75	
8/28/2020									6.84
9/22/2020	5.8						5.46	5.53	
9/23/2020		5.29	6.01	5.58					6.57
9/24/2020					6.7	5.8			
9/25/2020									
10/7/2020									
2/8/2021									
2/9/2021	6.06	5.43	6.12		6.95	5.86			
2/10/2021									
2/11/2021									
2/12/2021									
3/1/2021							5.48	5.76	6.5
3/2/2021									
3/3/2021	6.21	5.31	5.89	5.52		5.89			
3/4/2021					6.8				
8/19/2021							5.5	5.73	6.13
8/20/2021									
8/26/2021	5.82	4.4							
8/27/2021			5.4	5.27		5.57			
9/1/2021					6.65				
9/3/2021									

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-2I (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-2I (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-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)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020				2.1	5.5		8.2		
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				2.3	2.6			6	
3/3/2021	9	4.4	9.6			7	7.8		
3/4/2021									
8/19/2021	8.9	4.9				7.5		6.7	1
8/20/2021									
8/26/2021				2.4	6		8.5		
8/27/2021			18.2						
9/1/2021									
9/3/2021									

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

	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)
6/30/2017									
7/11/2017						110			
7/13/2017							180	150	
7/17/2017									63
10/3/2017				5.8					
10/4/2017		1.7	5.3		<1				
10/5/2017	1.6								
10/10/2017						93	180	140	
10/11/2017									
10/12/2017									
10/16/2017									62
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									64.6
2/20/2018									
4/2/2018						88.8			
4/3/2018							183		
4/4/2018								137	
6/5/2018				6.1					
6/6/2018					0.049 (J)				
6/7/2018	0.68 (J)								
6/8/2018									
6/11/2018		0.95 (J)	5.2						
6/28/2018									
8/6/2018									42.1
8/7/2018									
9/19/2018						75	192	137	
9/24/2018									
9/25/2018	1	1.5	6.1	7	0.13 (J)				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019									42.1
3/26/2019									
3/27/2019						65.9	188	146	
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			5.1	3.8					
4/3/2019	0.82 (J)	1.3			0.12 (J)				
6/12/2019									83.4
9/24/2019				1					
9/25/2019			5.5		<1				
9/26/2019	0.64 (J)	1							
10/8/2019						52.3		142	128
10/9/2019							183		
3/17/2020						71.6	161	121	98.6
3/18/2020									
3/19/2020									
3/24/2020	<1	0.99 (J)	5.4	3	<1				
3/25/2020									

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)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020						51.5		130	145
9/23/2020	0.53 (J)	1.1	5.1				170		
9/24/2020				3.6	<1				
9/25/2020									
10/7/2020									
11/12/2020									
3/1/2021						51.6	159	119	
3/2/2021									156
3/3/2021	<1	1	5.2		<1				
3/4/2021				4.5					
8/19/2021						52.6	149	115	
8/20/2021									121
8/26/2021		1.2							
8/27/2021	0.59 (J)		5.3		<1				
9/1/2021				5					
9/3/2021									

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
6/1/2016					
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-2I (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-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)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020				75	104		83		
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			137	80		
3/4/2021									
8/19/2021	105	44				144		54	50
8/20/2021									
8/26/2021				86	123		93		
8/27/2021			155						
9/1/2021									
9/3/2021									

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-21I (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

	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)
6/30/2017									
7/11/2017						193			
7/13/2017							433	345	
7/17/2017									185
10/3/2017				149					
10/4/2017		45	61		54				
10/5/2017	104								
10/10/2017						175	396	311	
10/11/2017									
10/12/2017									
10/16/2017									218
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									173
2/20/2018									
4/2/2018						192			
4/3/2018							418		
4/4/2018								313	
6/5/2018				109					
6/6/2018					79				
6/7/2018	68								
6/8/2018									
6/11/2018		74	70						
6/28/2018									
8/6/2018									158
8/7/2018									
9/19/2018						186	413	326	
9/24/2018									
9/25/2018	109	63	86	122	73				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019									92
3/26/2019									
3/27/2019						170	383	302	
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			72	134					
4/3/2019	89	63			57				
6/12/2019									226
9/24/2019				157					
9/25/2019			81		75				
9/26/2019	126	72							
10/8/2019						172		324	276
10/9/2019							432		
3/17/2020						165	391	283	185
3/18/2020									
3/19/2020									
3/24/2020	91	59	71	117	76				
3/25/2020									

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-21I (bg)	YGWA-20S (bg)	YGWA-47 (bg)	YGWC-45	YGWC-44	GWA-2 (bg)
7/6/2020									
8/27/2020									
8/28/2020									
9/22/2020						141		294	281
9/23/2020	103	81	99				404		
9/24/2020				113	69				
9/25/2020									
10/7/2020									
11/12/2020									
3/1/2021						145	379	276	
3/2/2021									296
3/3/2021	95	37	57		53				
3/4/2021				110					
8/19/2021						134	391	333	
8/20/2021									254
8/26/2021		31							
8/27/2021	112		93		67				
9/1/2021				137					
9/3/2021									

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-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	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-2I (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-2I (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-21I (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-1I (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
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)	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
Boron, total (mg/L)	**YGWA-40 (bg)**	**-0.01963**	**-52**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
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
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)	YGWC-45	-0.04198	-5	-48	No	14	0	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-18I (bg)	0.02122	10	63	No	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-20S (bg)	0.06963	56	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-21I (bg)**	**1.218**	**82**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
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
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)	YGWA-5I (bg)	0.07389	58	63	No	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-14S (bg)	-0.01957	-45	-63	No	17	0	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-1I (bg)**	**-0.1058**	**-73**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
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
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)	YGWC-44	0.2235	31	48	No	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-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
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-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

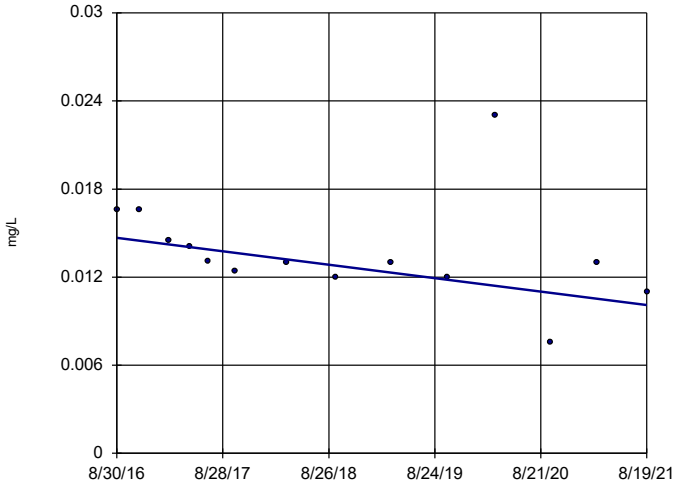
Appendix III Trend Tests - All Results

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
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-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-1I (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
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**
Chloride, Total (mg/L)	YGWC-46A	-1.396	-49	-68	No	18	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-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
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-4I (bg)	0.1495	44	63	No	17	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-14S (bg)	0.08247	21	63	No	17	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-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
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)	YGWA-3I (bg)	1.181	61	63	No	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)	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
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-4I (bg)	0.3992	4	63	No	17	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**
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

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 (α = 0.005 per tail).

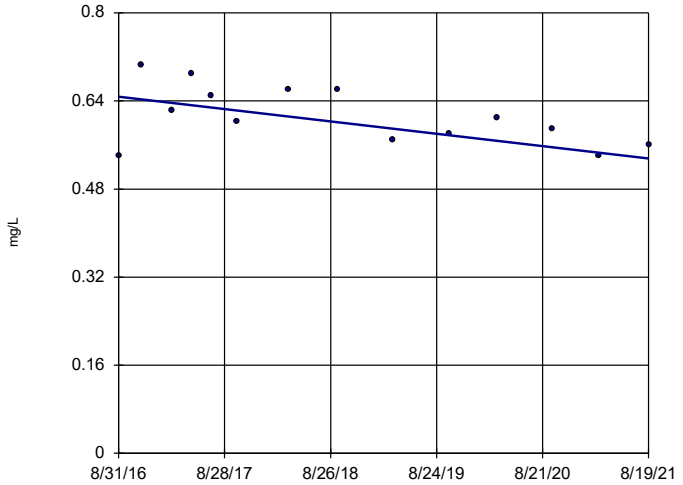
Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-44



n = 14

Slope = -0.0226 units per year.

Mann-Kendall statistic = -36 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

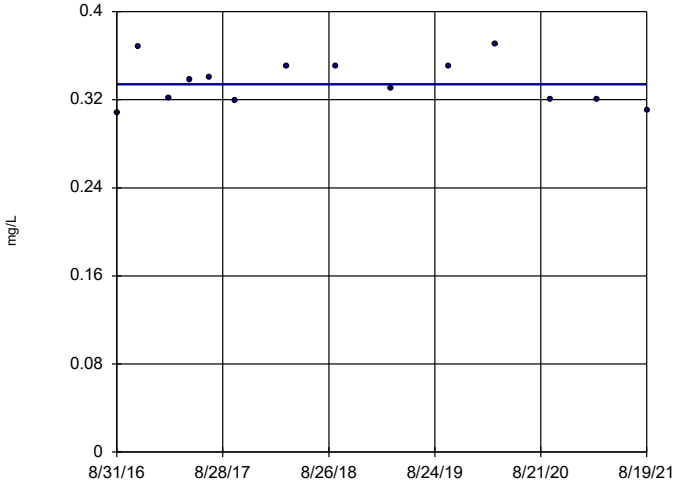
Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-45



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = -3 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

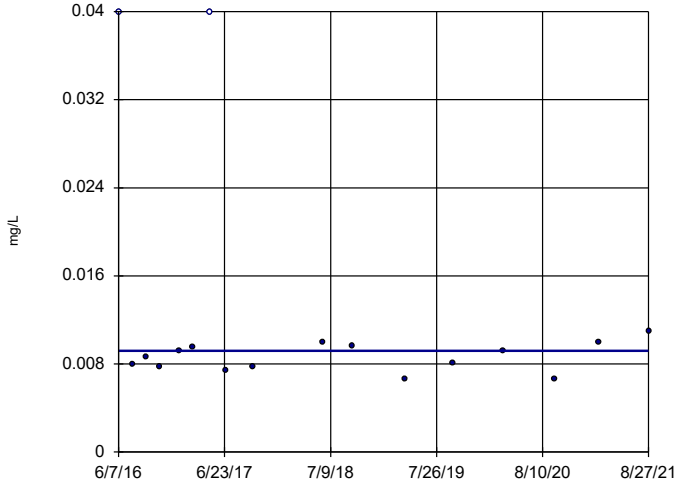
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 1 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

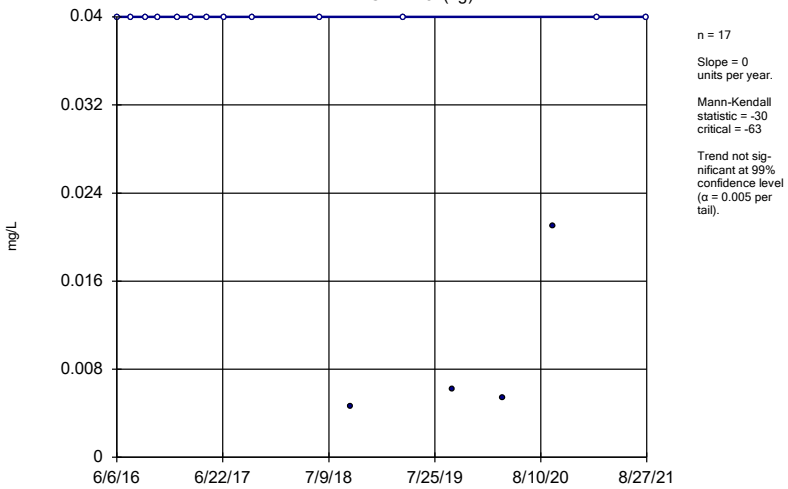
Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -30
critical = -63

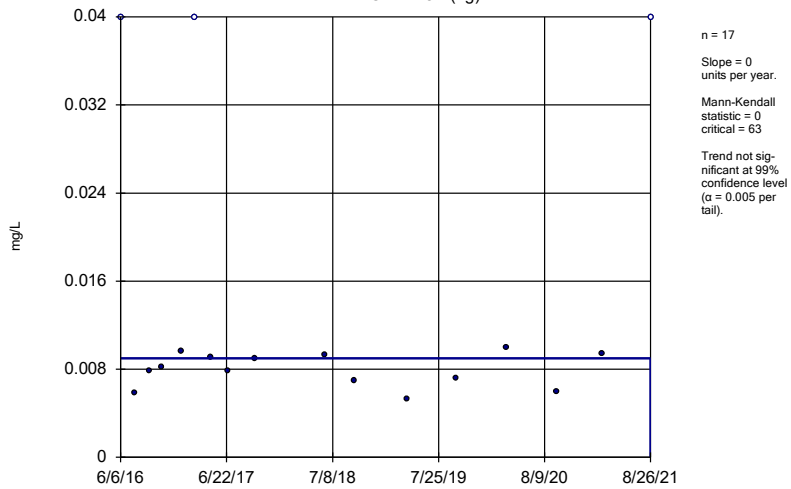
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 63

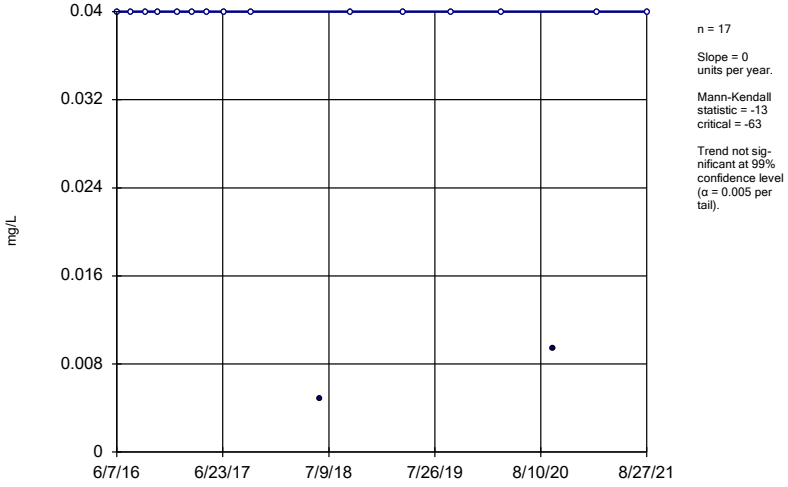
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -13
critical = -63

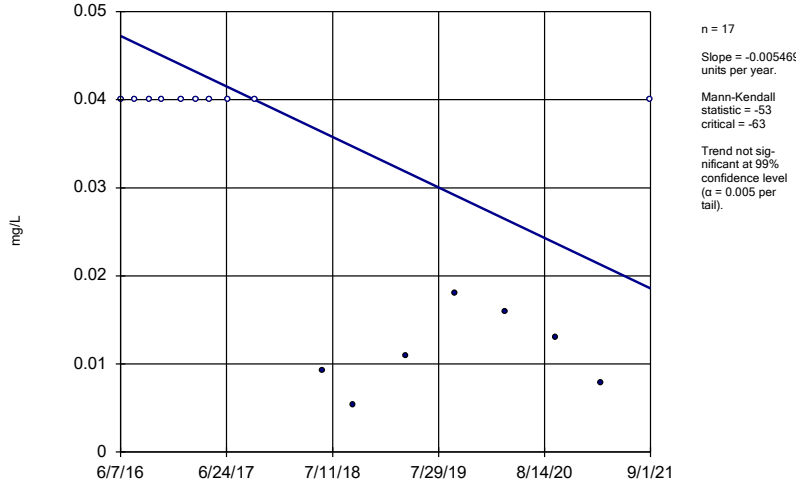
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 17

Slope = -0.005469 units per year.

Mann-Kendall statistic = -53
critical = -63

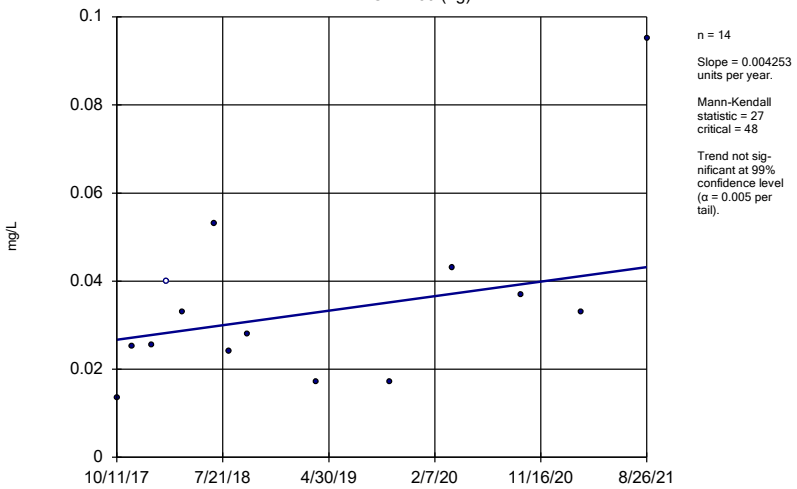
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 14

Slope = 0.004253 units per year.

Mann-Kendall statistic = 27
critical = 48

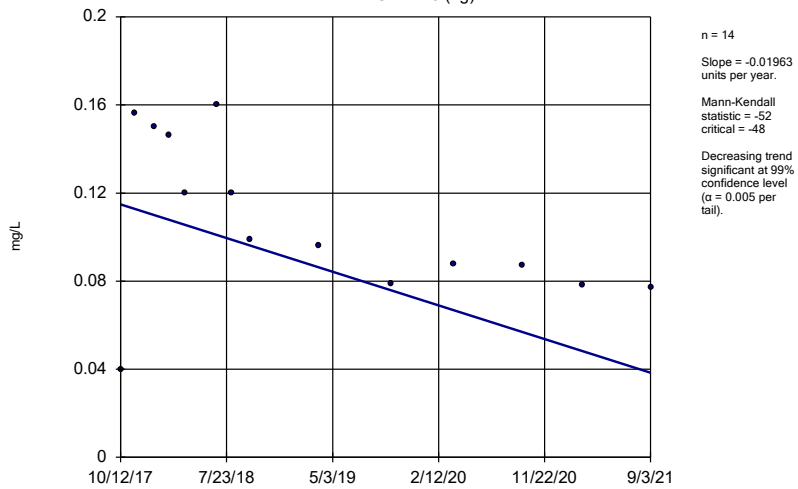
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 14

Slope = -0.01963 units per year.

Mann-Kendall statistic = -52
critical = -48

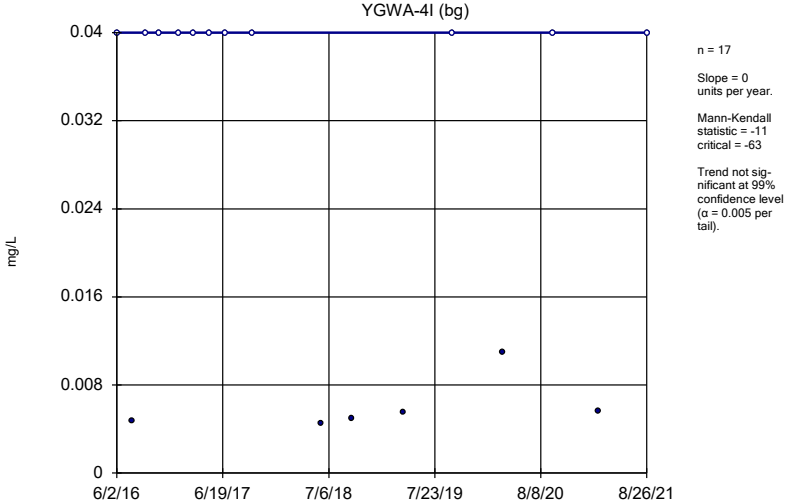
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -11
critical = -63

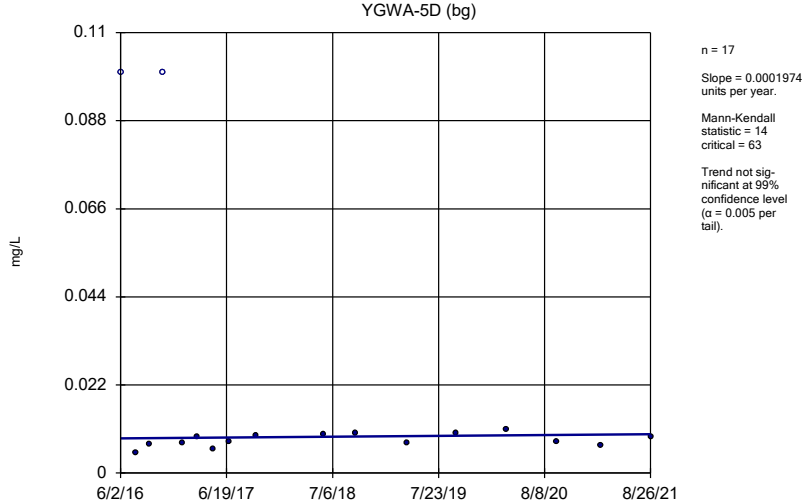
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 17

Slope = 0.0001974 units per year.

Mann-Kendall statistic = 14
critical = 63

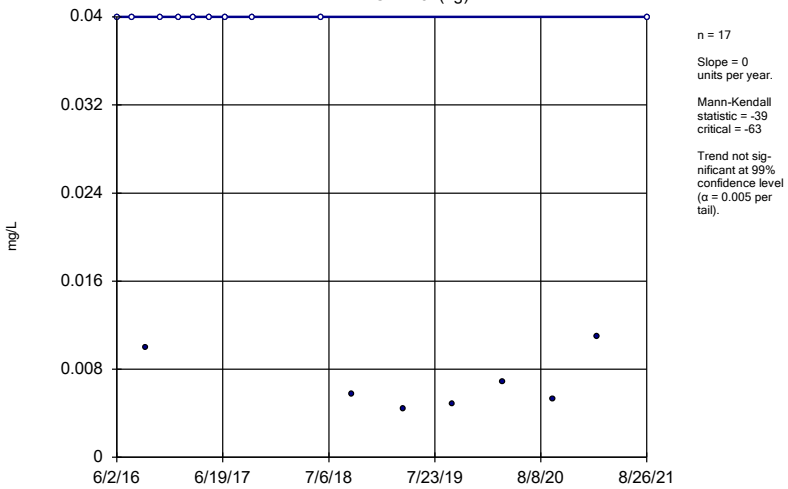
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -39
critical = -63

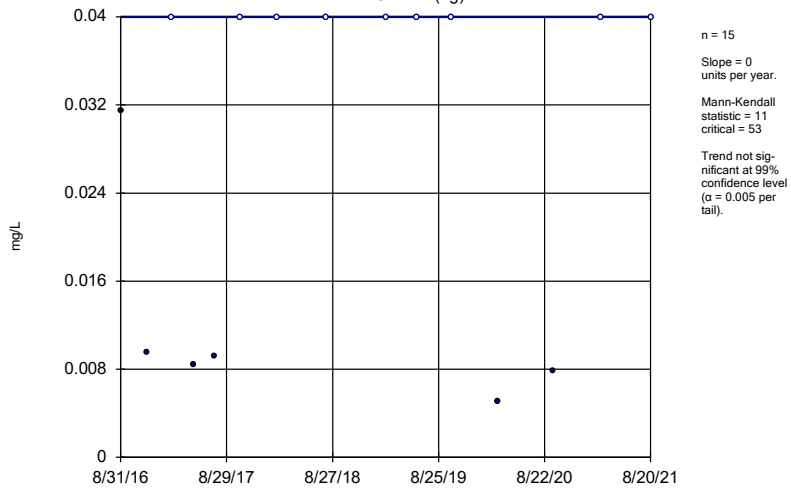
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 11
critical = 53

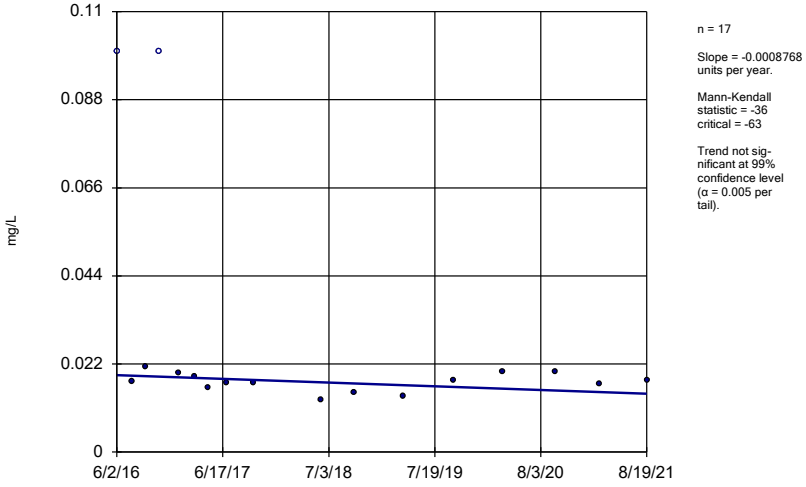
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 17

Slope = -0.0008768 units per year.

Mann-Kendall statistic = -36
critical = -63

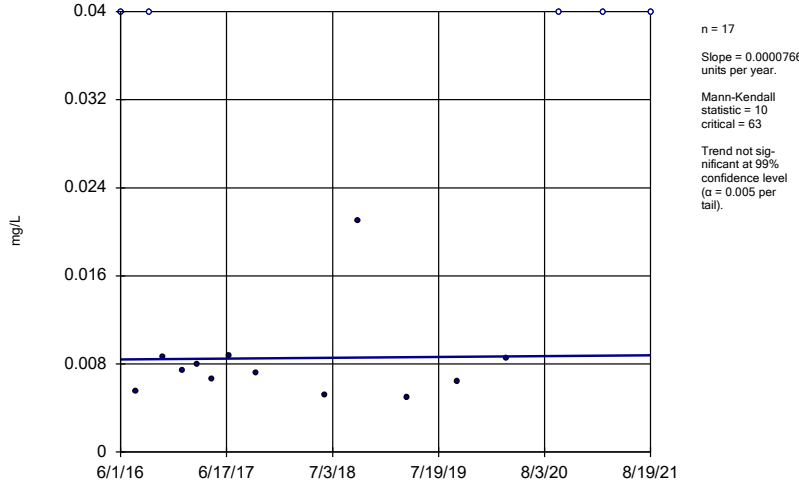
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1D (bg)



n = 17

Slope = 0.00007668 units per year.

Mann-Kendall statistic = 10
critical = 63

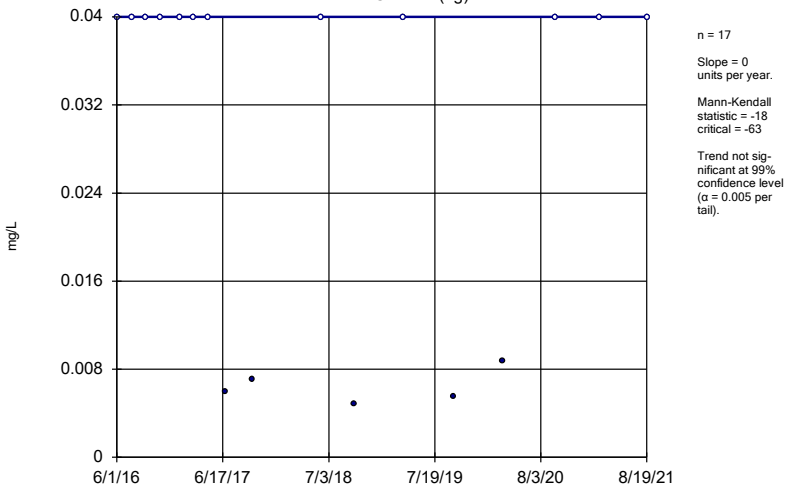
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)

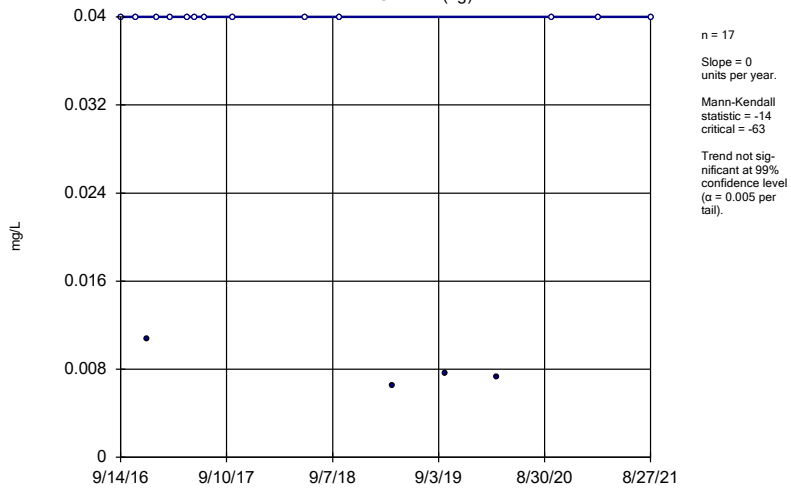


Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)

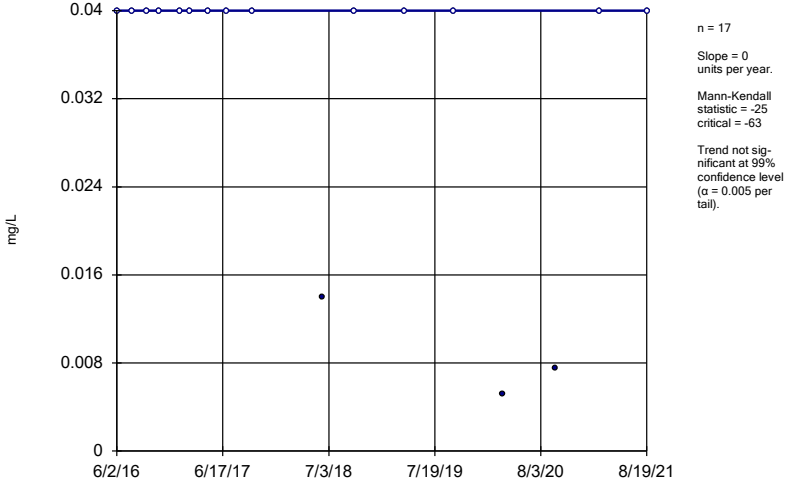


Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)

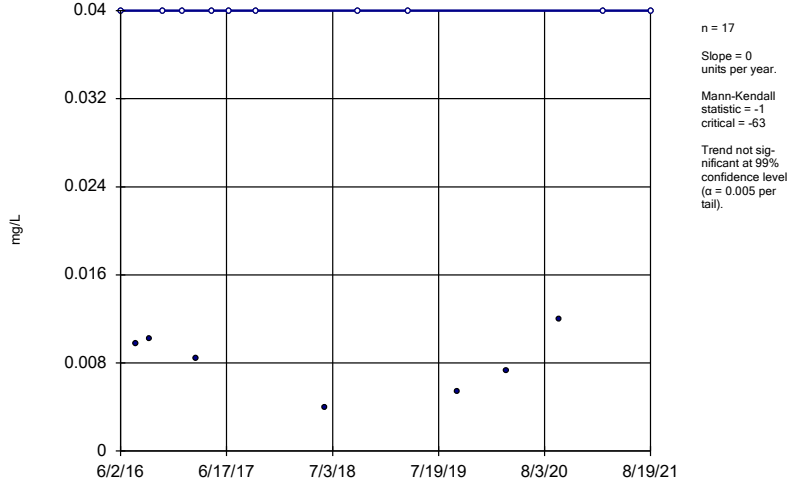


Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3D (bg)

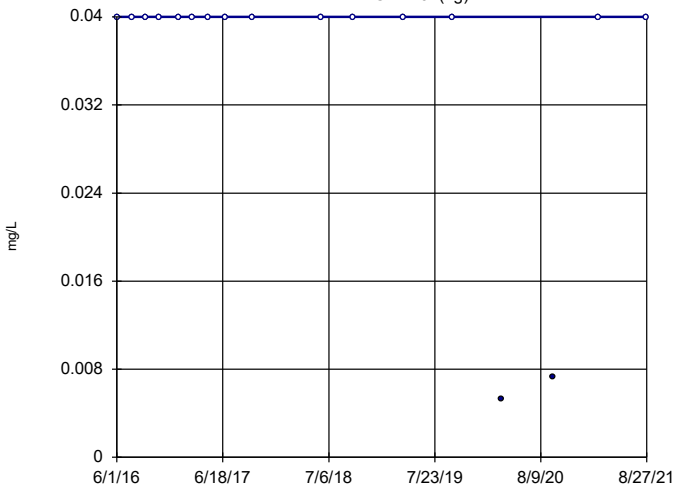


Constituent: Boron, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -21
critical = -63

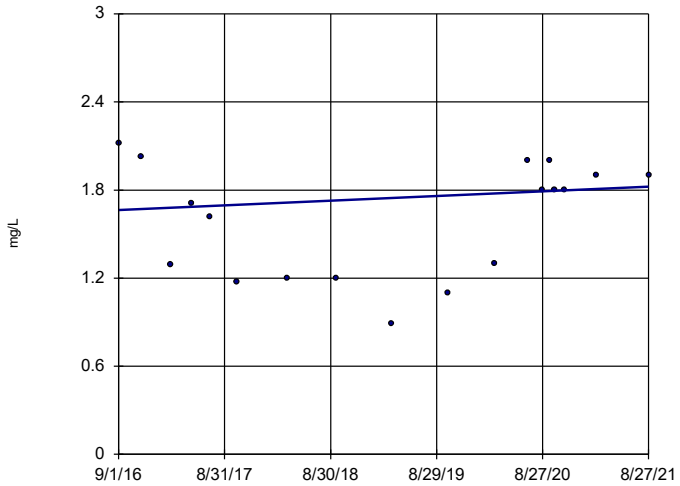
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-46A



n = 18

Slope = 0.03192 units per year.

Mann-Kendall statistic = 15
critical = 68

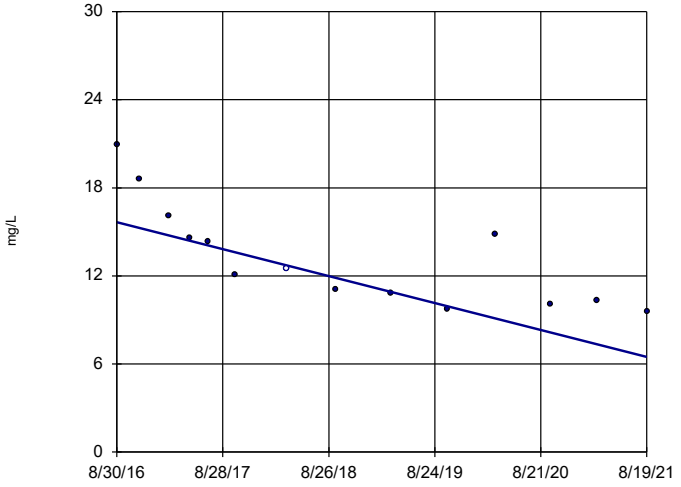
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 14

Slope = -1.845 units per year.

Mann-Kendall statistic = -69
critical = -48

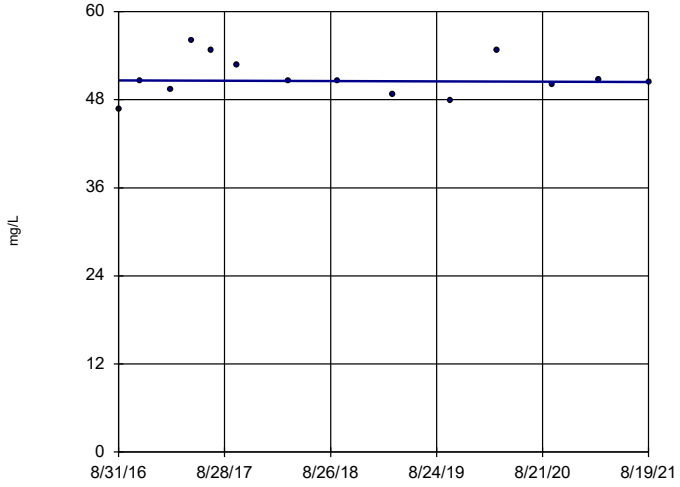
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-45



n = 14

Slope = -0.04198 units per year.

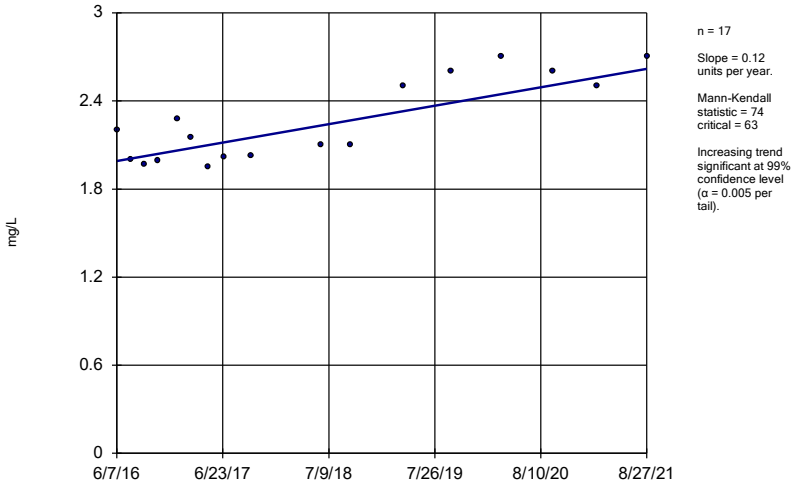
Mann-Kendall statistic = -5
critical = -48

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-17S (bg)



n = 17

Slope = 0.12 units per year.

Mann-Kendall statistic = 74
critical = 63

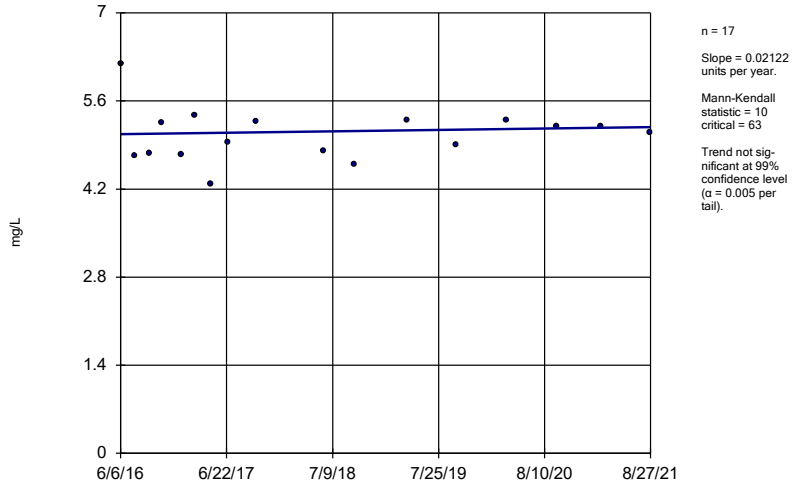
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 17

Slope = 0.02122 units per year.

Mann-Kendall statistic = 10
critical = 63

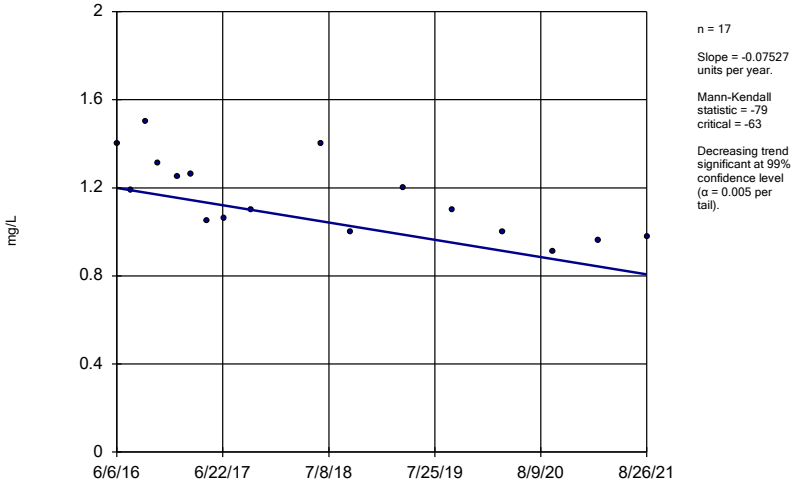
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 17

Slope = -0.07527 units per year.

Mann-Kendall statistic = -79
critical = -63

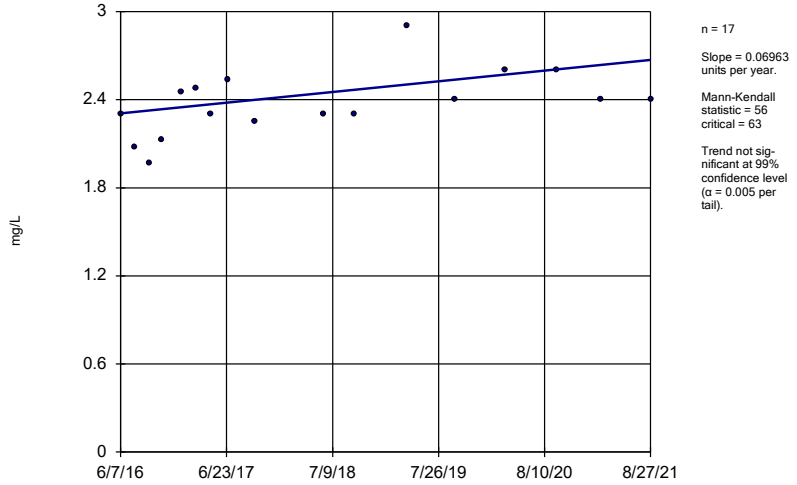
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 17

Slope = 0.06963 units per year.

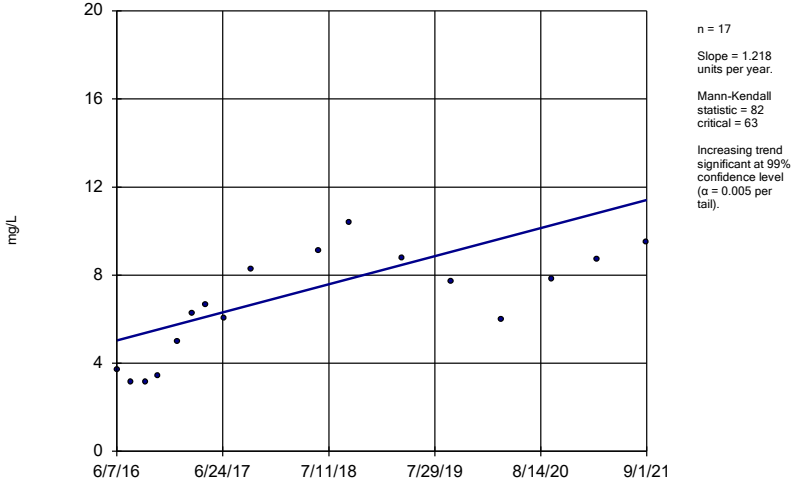
Mann-Kendall statistic = 56
critical = 63

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 (α = 0.005 per tail).

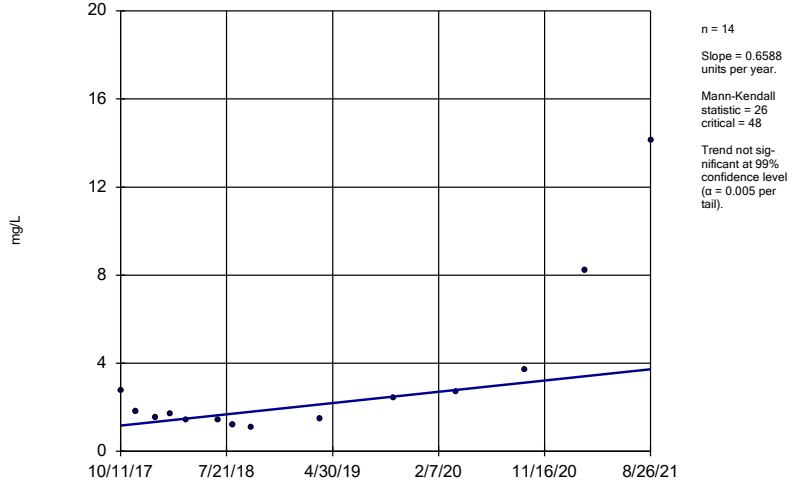
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 14

Slope = 0.6588 units per year.

Mann-Kendall statistic = 26 critical = 48

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

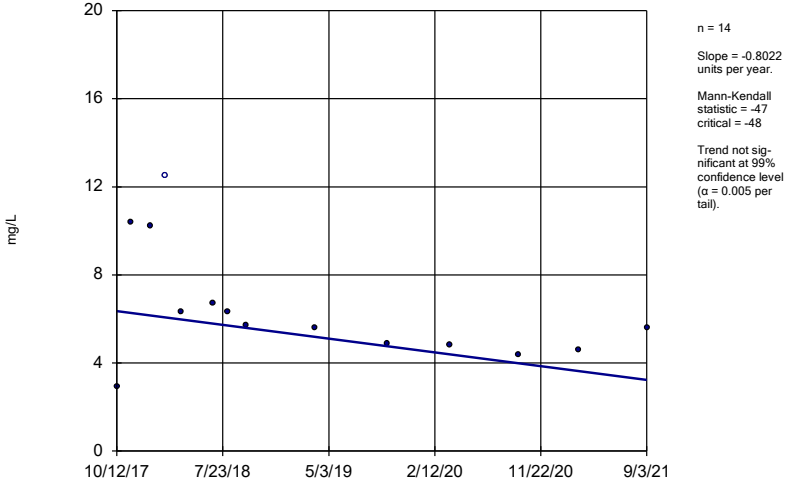
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 14

Slope = -0.8022 units per year.

Mann-Kendall statistic = -47 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

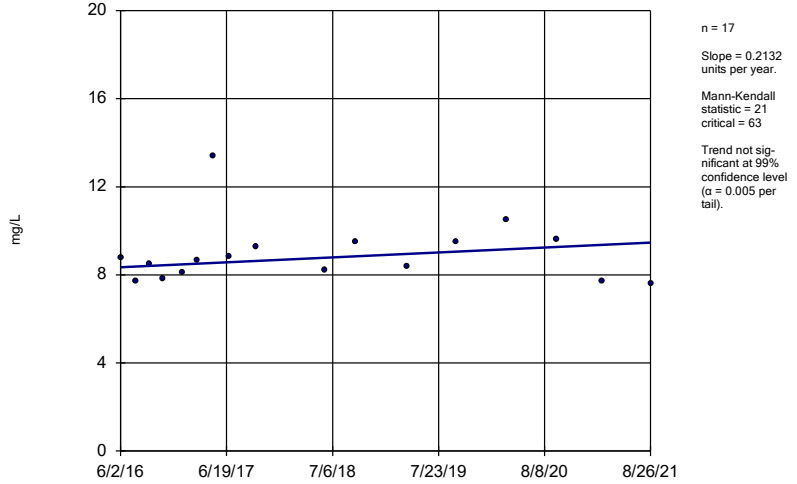
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 17

Slope = 0.2132 units per year.

Mann-Kendall statistic = 21 critical = 63

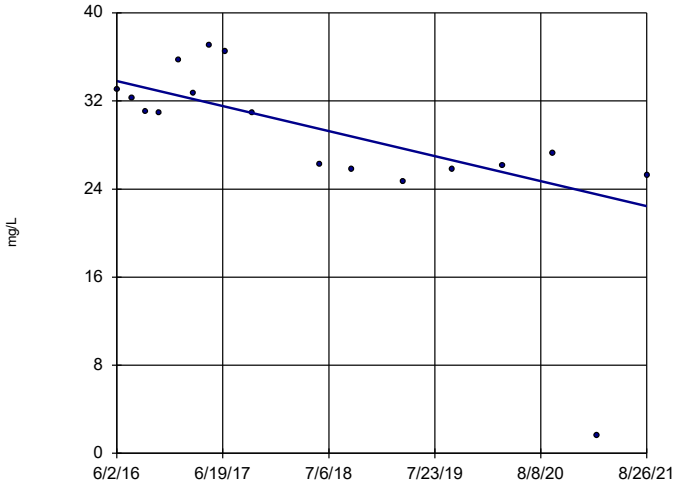
Trend not significant at 99% confidence level (α = 0.005 per tail).

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-5D (bg)



n = 17

Slope = -2.169 units per year.

Mann-Kendall statistic = -74
critical = -63

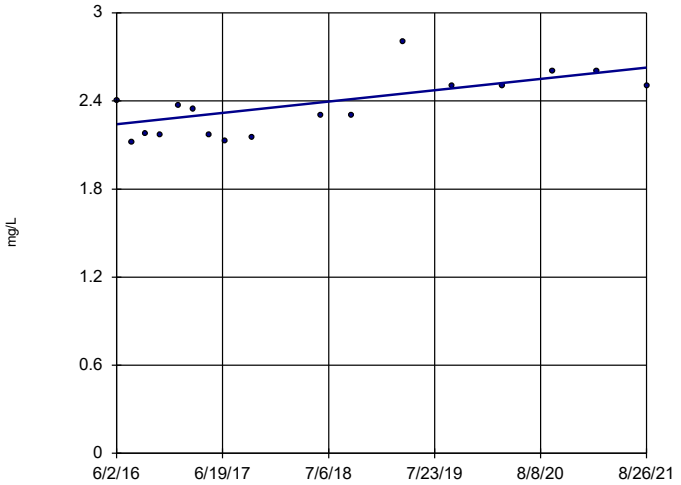
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 17

Slope = 0.07389 units per year.

Mann-Kendall statistic = 58
critical = 63

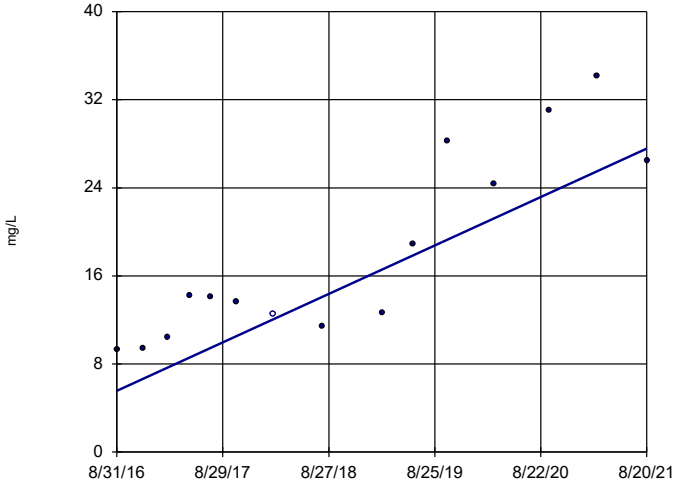
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 15

Slope = 4.423 units per year.

Mann-Kendall statistic = 71
critical = 53

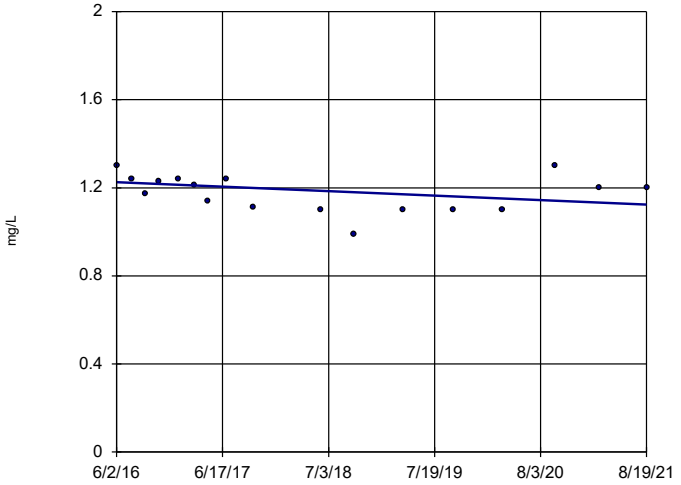
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 17

Slope = -0.01957 units per year.

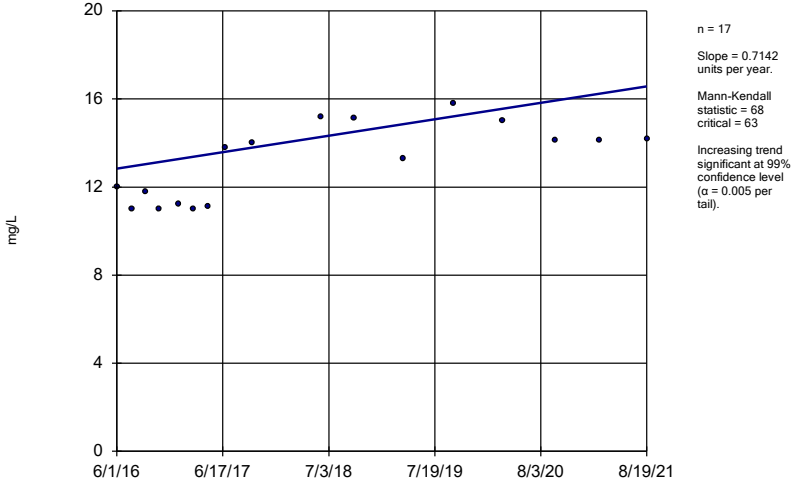
Mann-Kendall statistic = -45
critical = -63

Trend not significant at 99% confidence level (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-1D (bg)



n = 17

Slope = 0.7142 units per year.

Mann-Kendall statistic = 68 critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

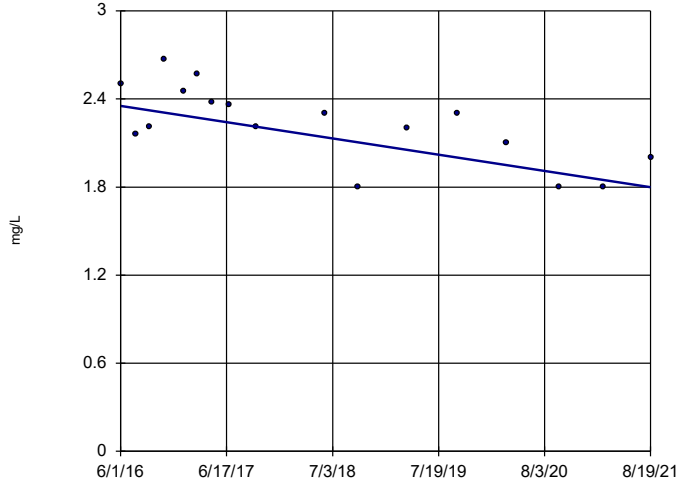
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 17

Slope = -0.1058 units per year.

Mann-Kendall statistic = -73 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

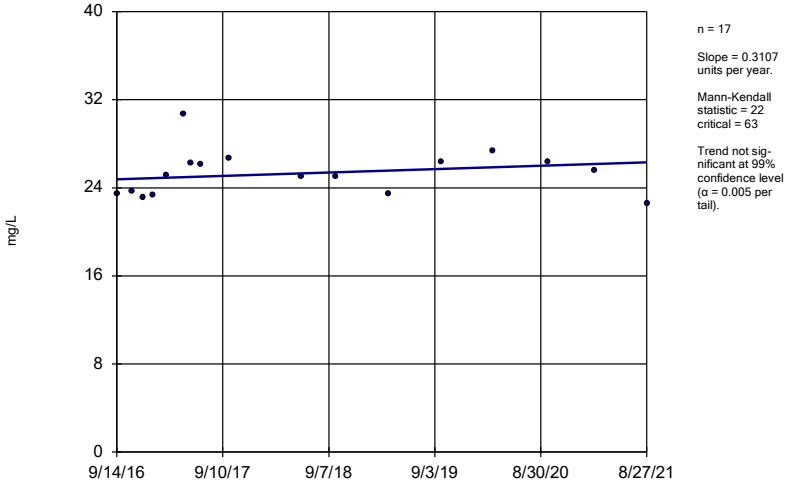
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-2I (bg)



n = 17

Slope = 0.3107 units per year.

Mann-Kendall statistic = 22 critical = 63

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

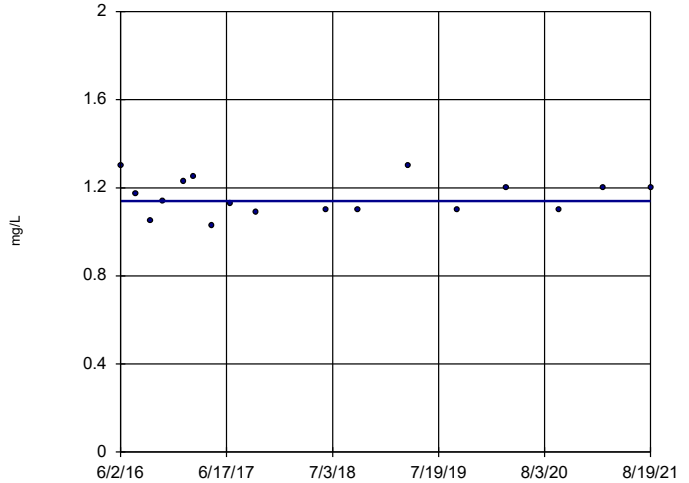
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-30I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 63

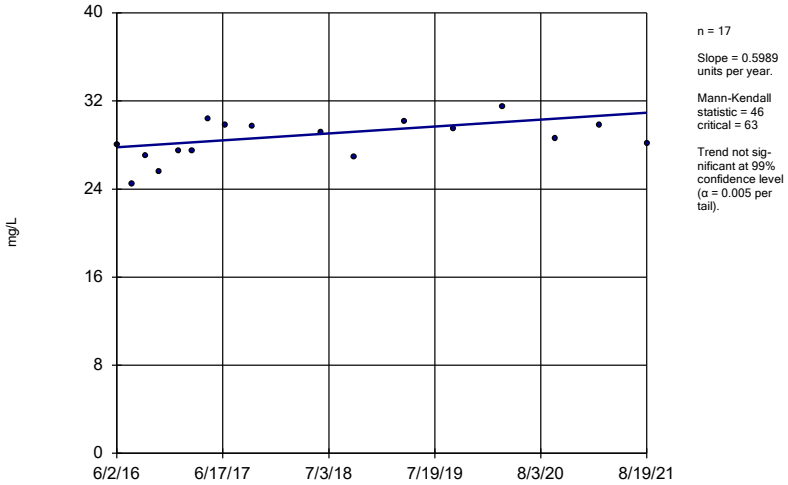
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

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-3D (bg)



n = 17

Slope = 0.5989 units per year.

Mann-Kendall statistic = 46 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

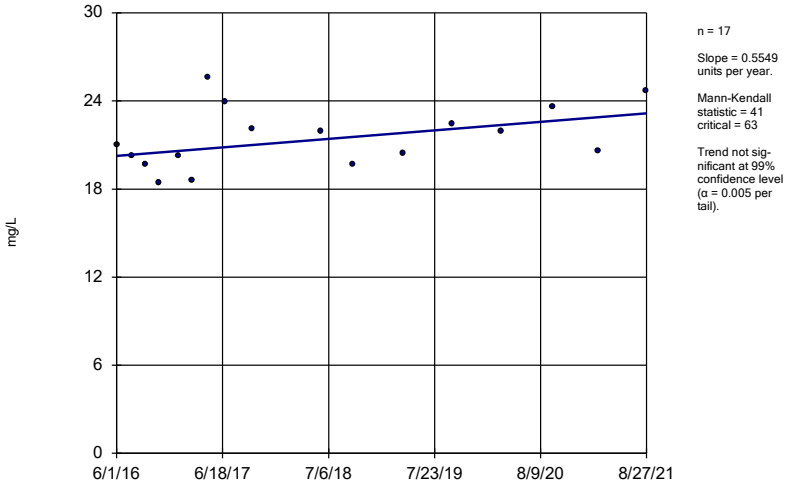
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 17

Slope = 0.5549 units per year.

Mann-Kendall statistic = 41 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

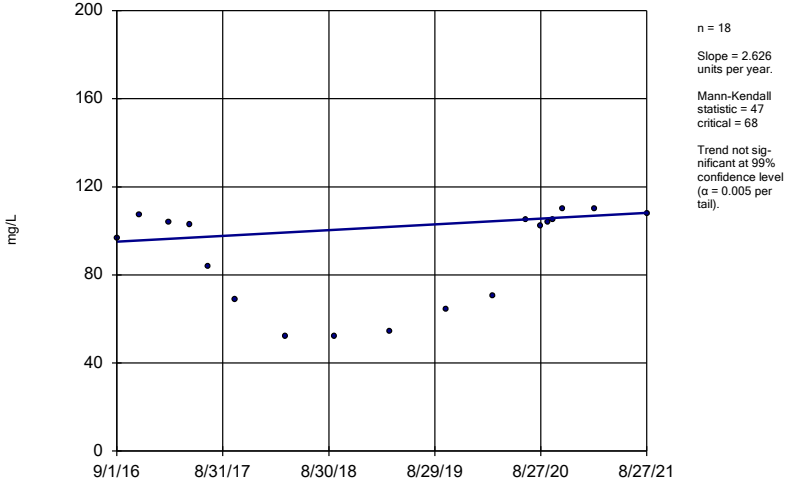
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-46A



n = 18

Slope = 2.626 units per year.

Mann-Kendall statistic = 47 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

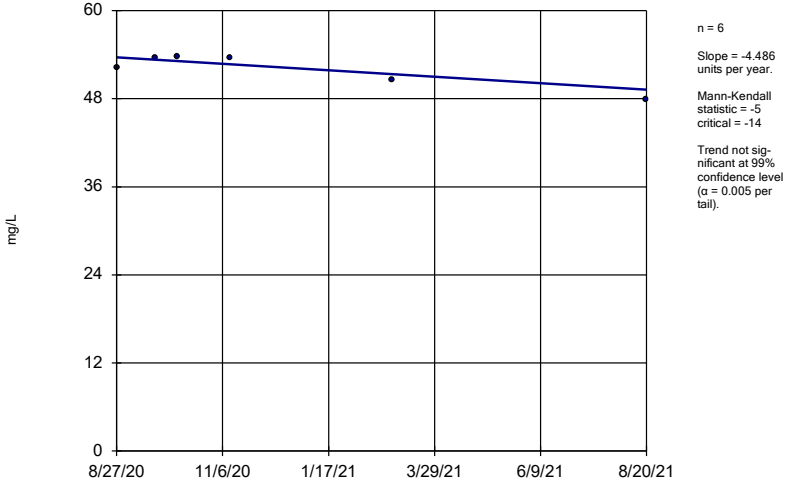
Constituent: Calcium, total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-52



n = 6

Slope = -4.486 units per year.

Mann-Kendall statistic = -5 critical = -14

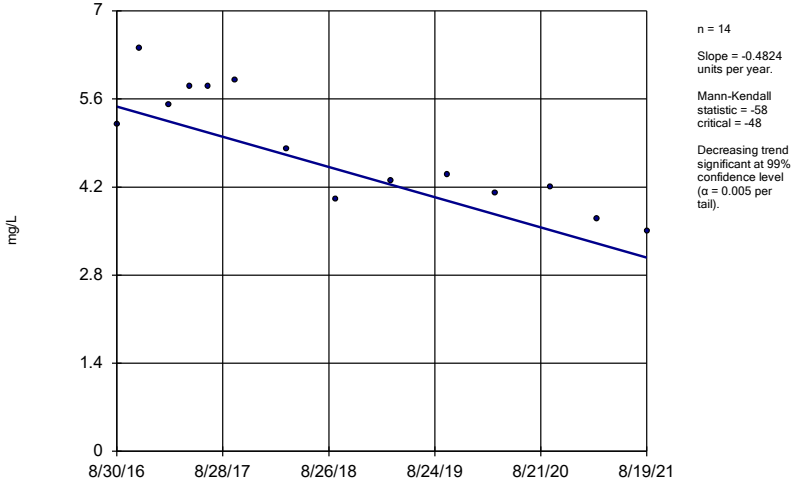
Trend not significant at 99% confidence level (α = 0.005 per tail).

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-47 (bg)



n = 14

Slope = -0.4824 units per year.

Mann-Kendall statistic = -58 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

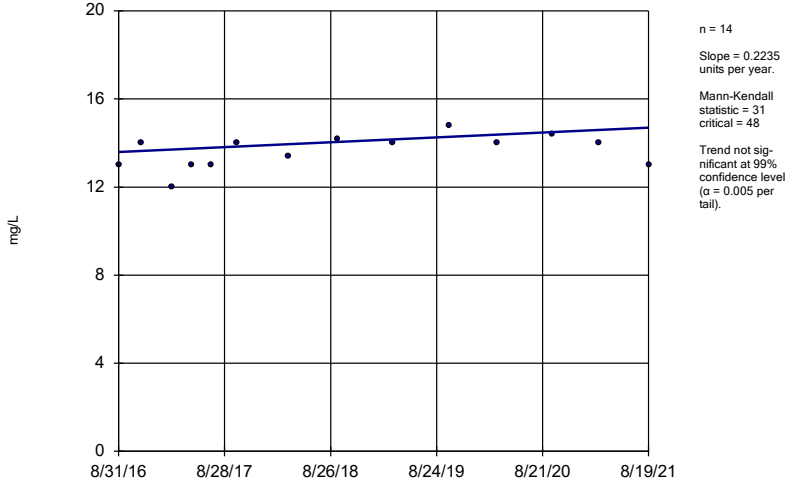
Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-44



n = 14

Slope = 0.2235 units per year.

Mann-Kendall statistic = 31 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

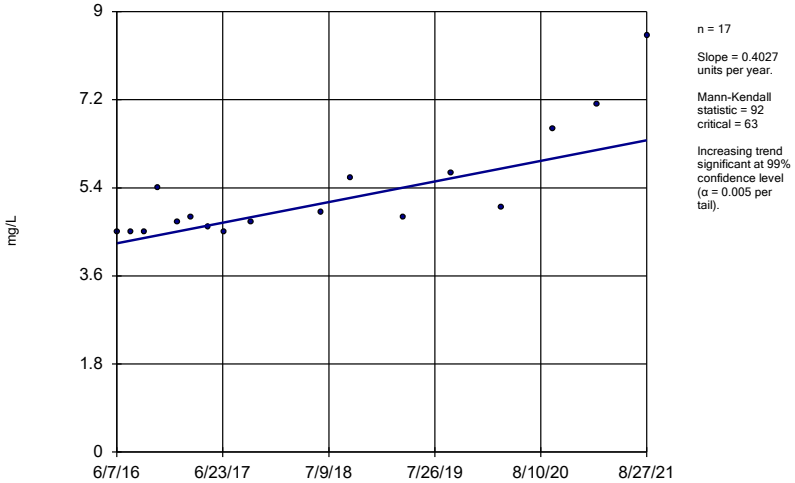
Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 17

Slope = 0.4027 units per year.

Mann-Kendall statistic = 92 critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

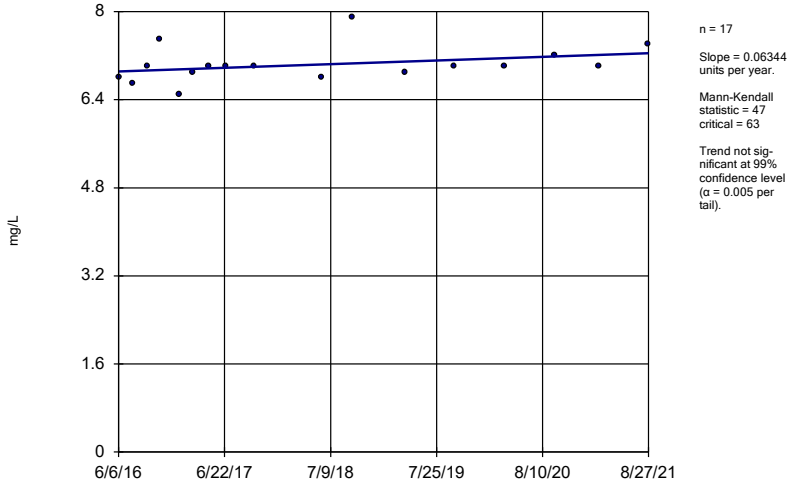
Constituent: Chloride, Total Analysis Run 11/2/2021 5:00 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 17

Slope = 0.06344 units per year.

Mann-Kendall statistic = 47 critical = 63

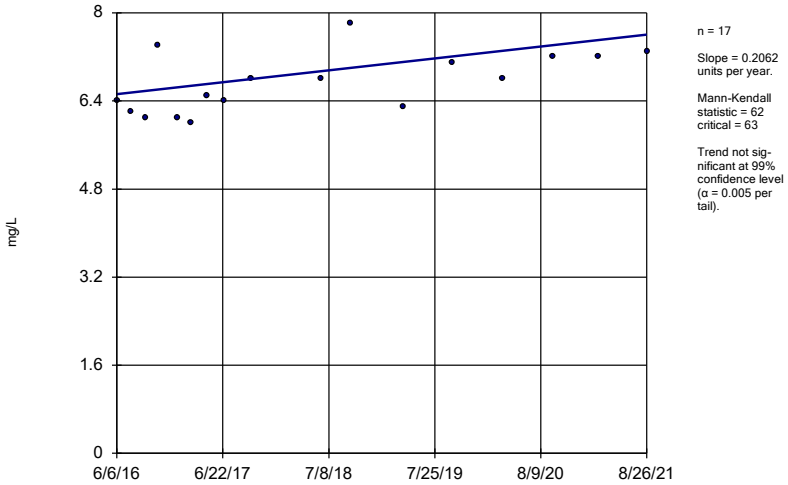
Trend not significant at 99% confidence level (α = 0.005 per tail).

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-18S (bg)



n = 17

Slope = 0.2062 units per year.

Mann-Kendall statistic = 62
critical = 63

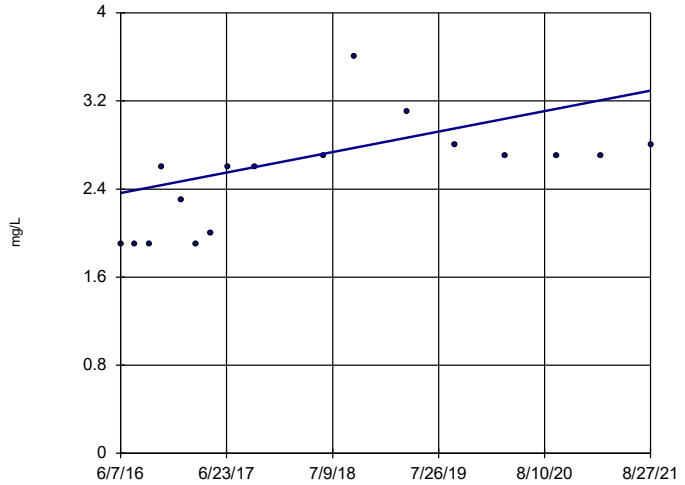
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 17

Slope = 0.1782 units per year.

Mann-Kendall statistic = 82
critical = 63

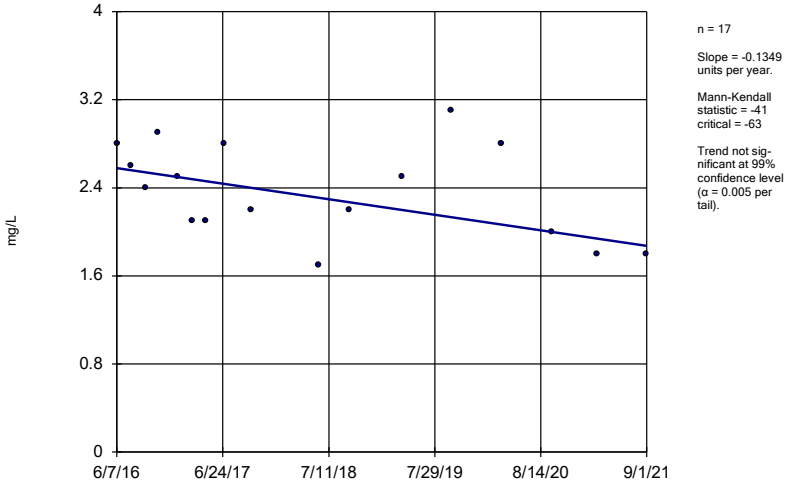
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 17

Slope = -0.1349 units per year.

Mann-Kendall statistic = -41
critical = -63

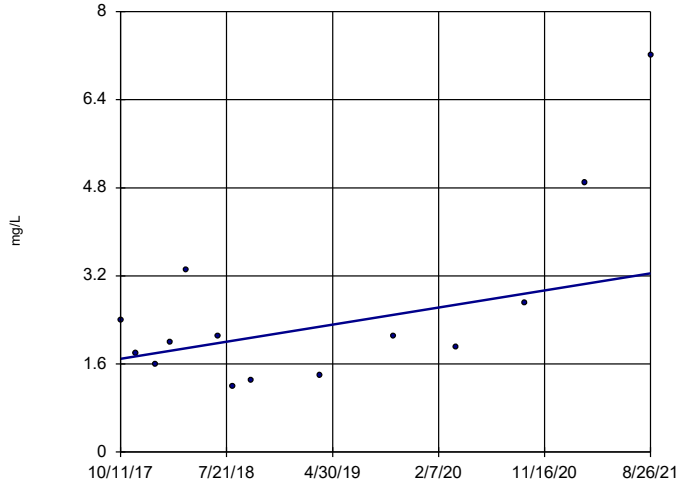
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 14

Slope = 0.3996 units per year.

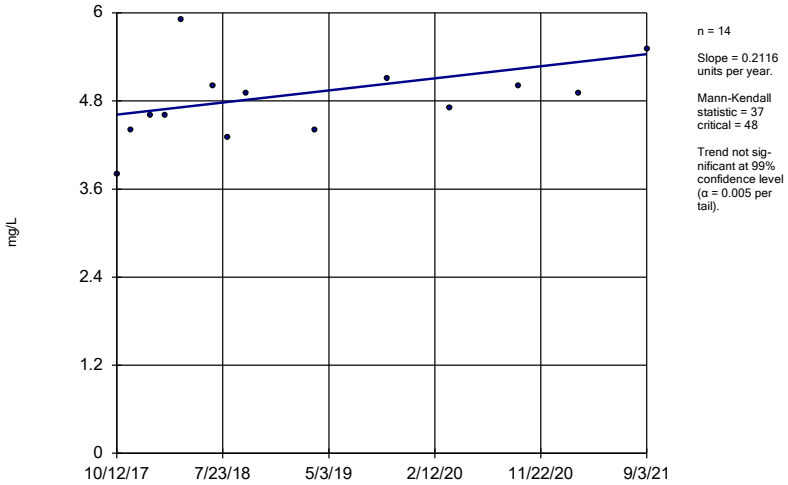
Mann-Kendall statistic = 26
critical = 48

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-40 (bg)



n = 14

Slope = 0.2116 units per year.

Mann-Kendall statistic = 37
critical = 48

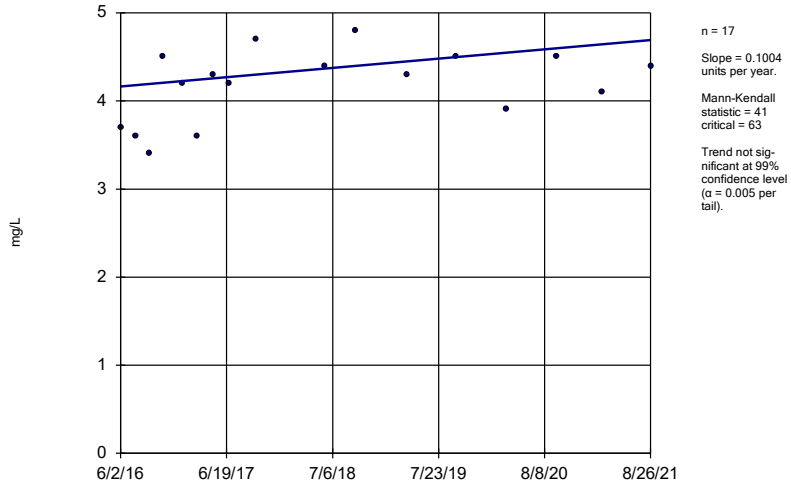
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 17

Slope = 0.1004 units per year.

Mann-Kendall statistic = 41
critical = 63

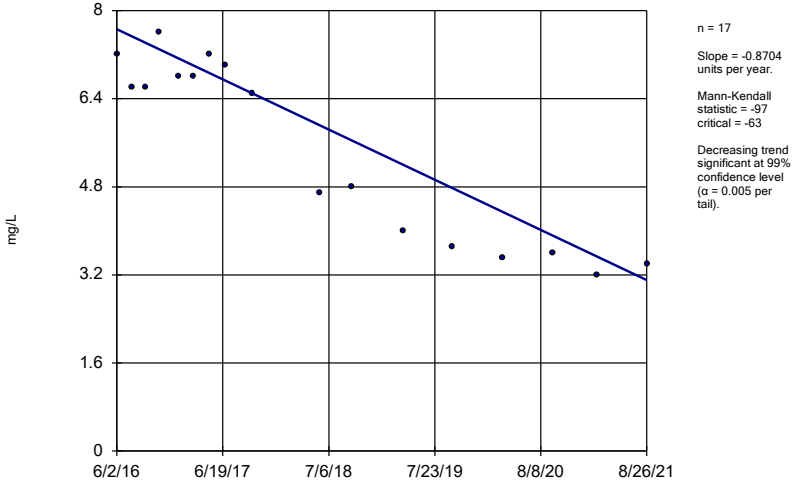
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 17

Slope = -0.8704 units per year.

Mann-Kendall statistic = -97
critical = -63

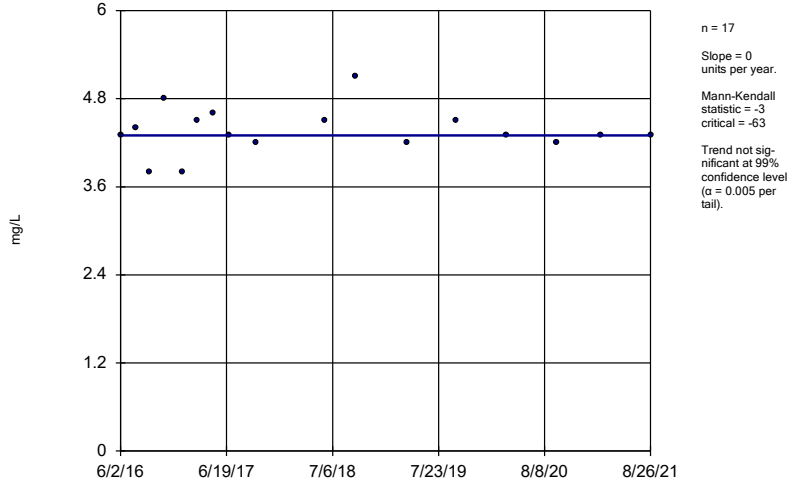
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 17

Slope = 0 units per year.

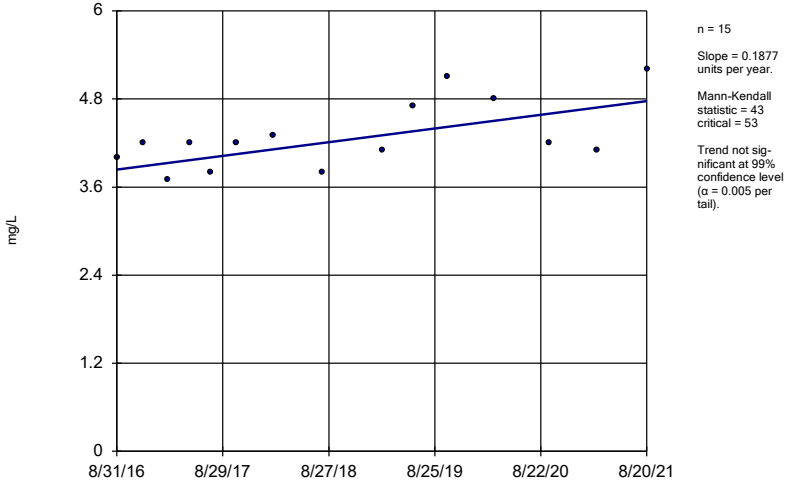
Mann-Kendall statistic = -3
critical = -63

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)



n = 15

Slope = 0.1877 units per year.

Mann-Kendall statistic = 43 critical = 53

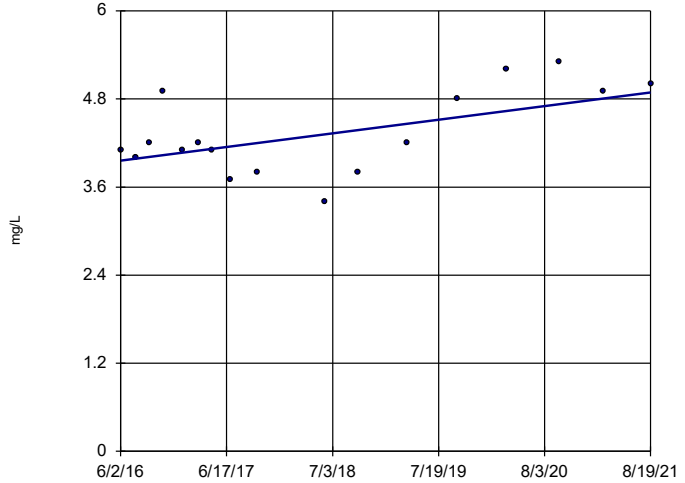
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 17

Slope = 0.1776 units per year.

Mann-Kendall statistic = 42 critical = 63

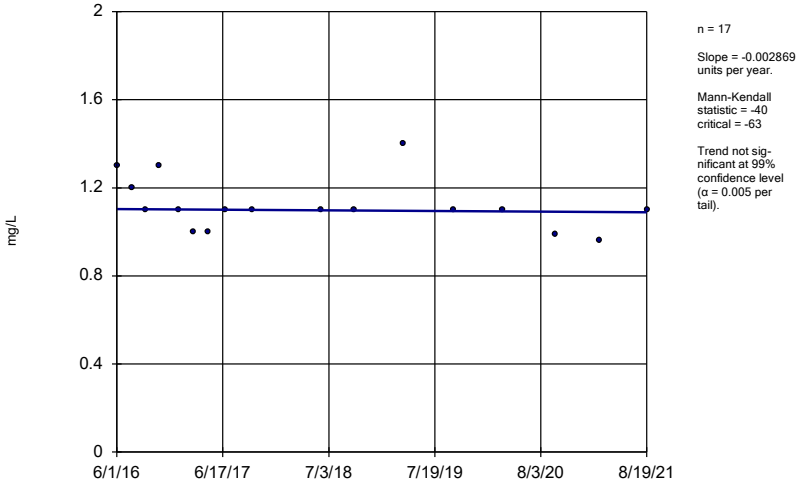
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 17

Slope = -0.002869 units per year.

Mann-Kendall statistic = -40 critical = -63

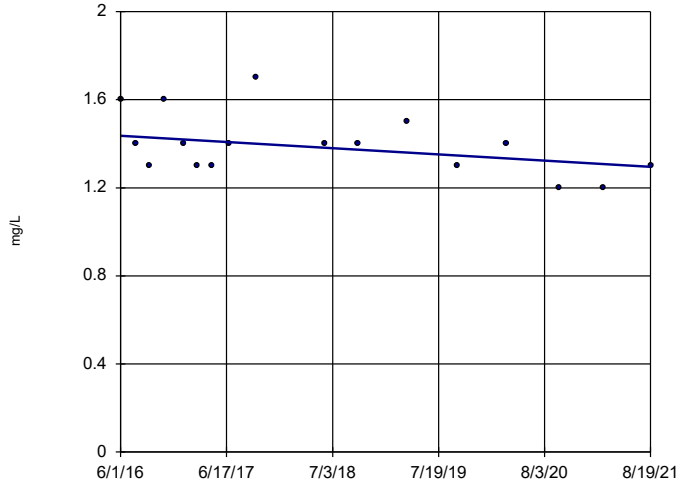
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 17

Slope = -0.02701 units per year.

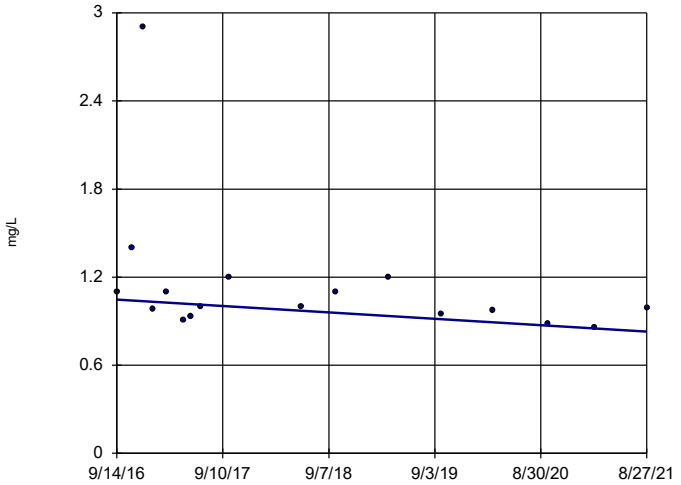
Mann-Kendall statistic = -41 critical = -63

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-2I (bg)



n = 17

Slope = -0.04401 units per year.

Mann-Kendall statistic = -47
critical = -63

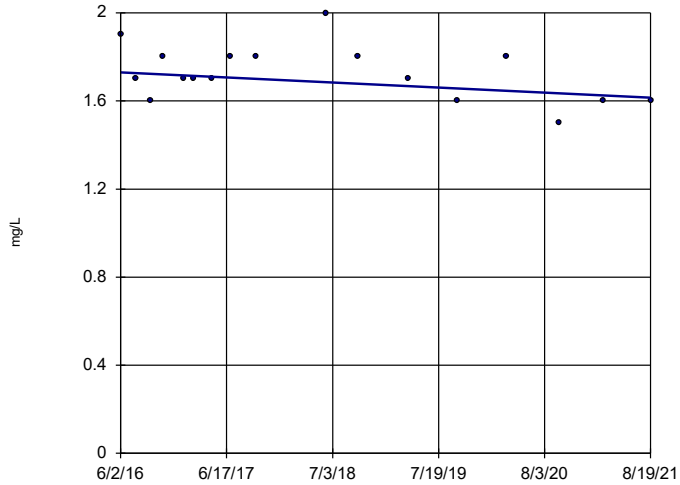
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-30I (bg)



n = 17

Slope = -0.02202 units per year.

Mann-Kendall statistic = -32
critical = -63

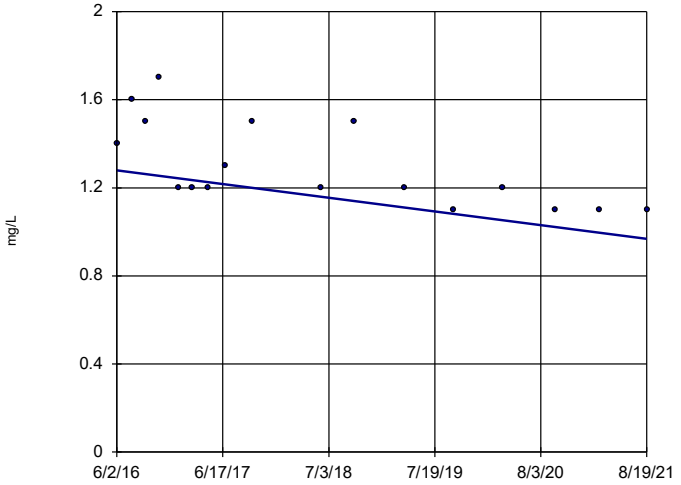
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 17

Slope = -0.05961 units per year.

Mann-Kendall statistic = -72
critical = -63

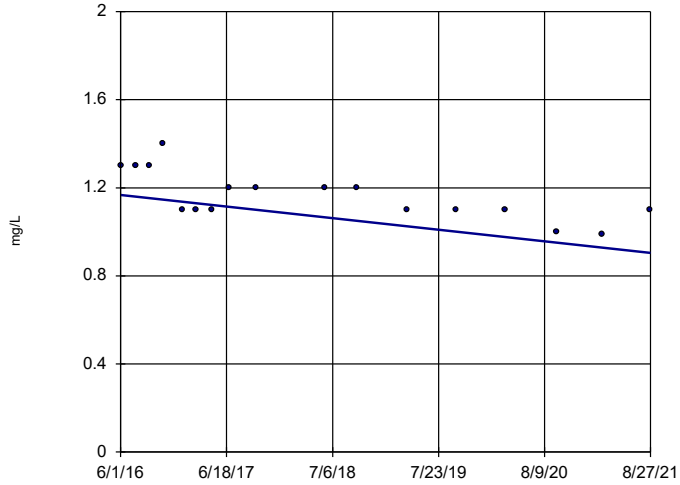
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 17

Slope = -0.05007 units per year.

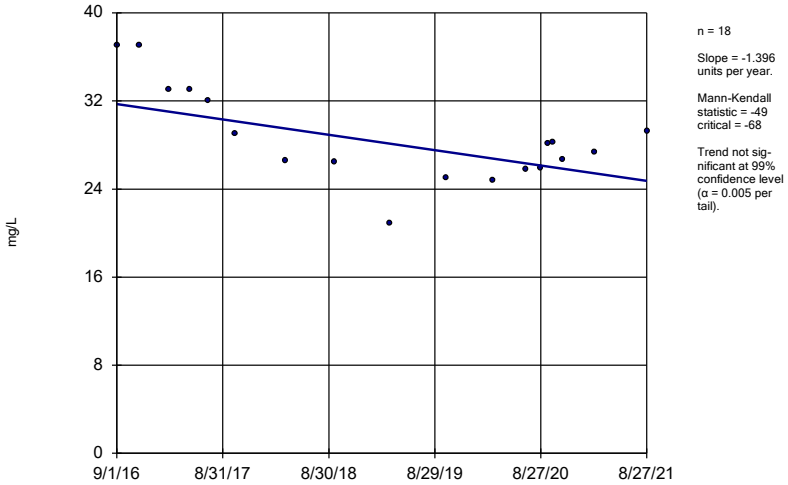
Mann-Kendall statistic = -72
critical = -63

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

YGWC-46A



n = 18

Slope = -1.396 units per year.

Mann-Kendall statistic = -49 critical = -68

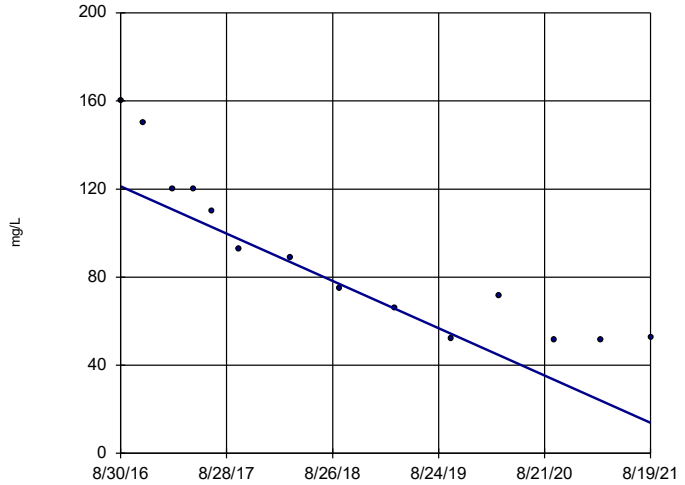
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 14

Slope = -21.6 units per year.

Mann-Kendall statistic = -78 critical = -48

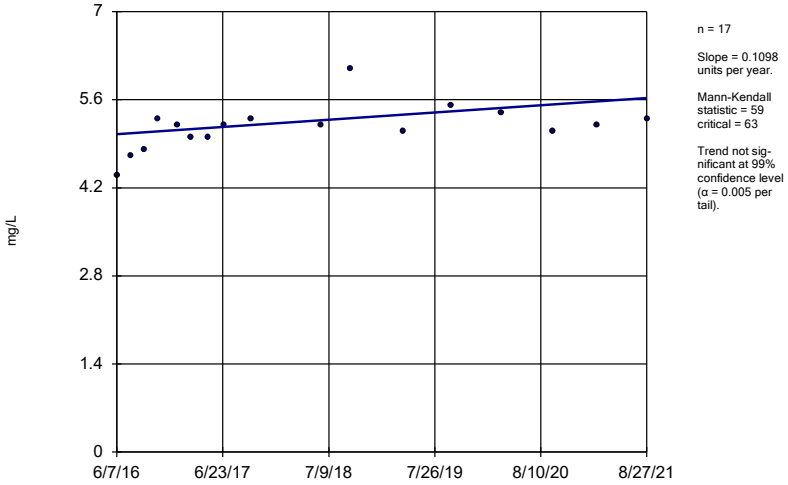
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 17

Slope = 0.1098 units per year.

Mann-Kendall statistic = 59 critical = 63

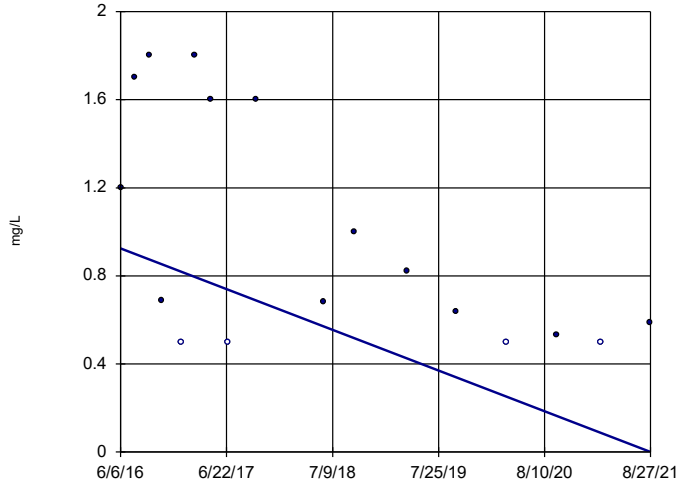
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 17

Slope = -0.1768 units per year.

Mann-Kendall statistic = -60 critical = -63

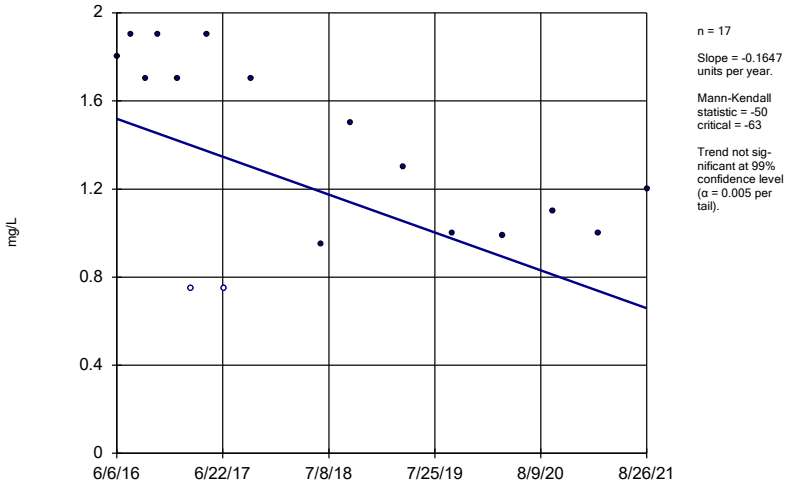
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 17

Slope = -0.1647 units per year.

Mann-Kendall statistic = -50
critical = -63

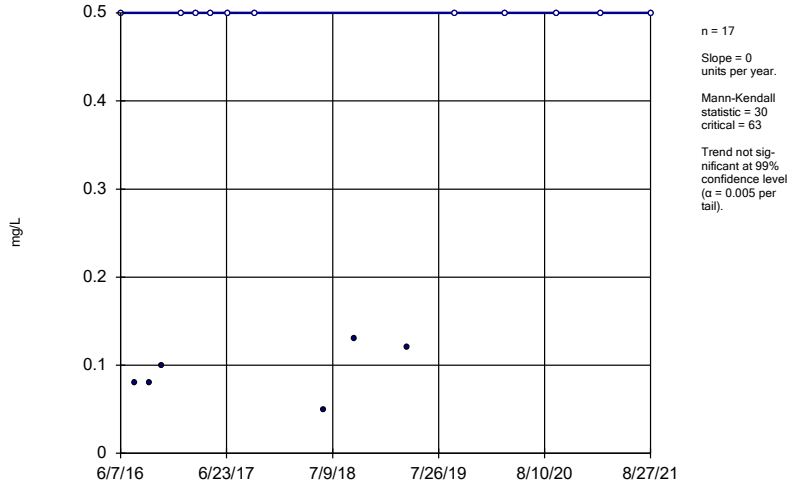
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 30
critical = 63

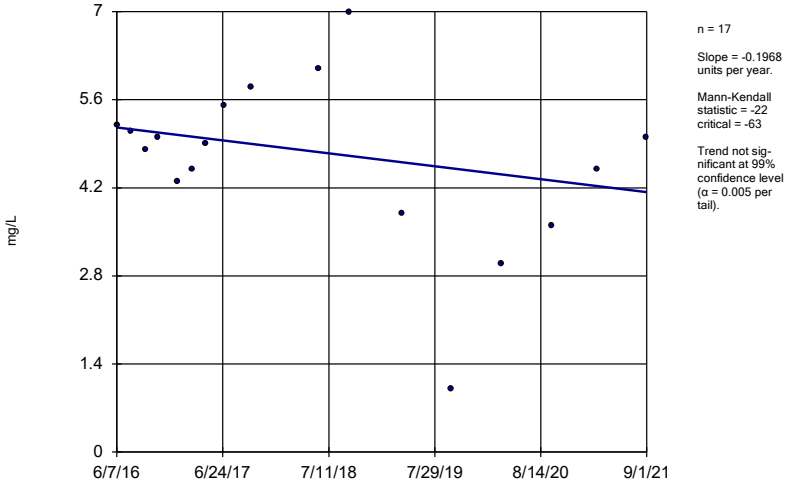
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 17

Slope = -0.1968 units per year.

Mann-Kendall statistic = -22
critical = -63

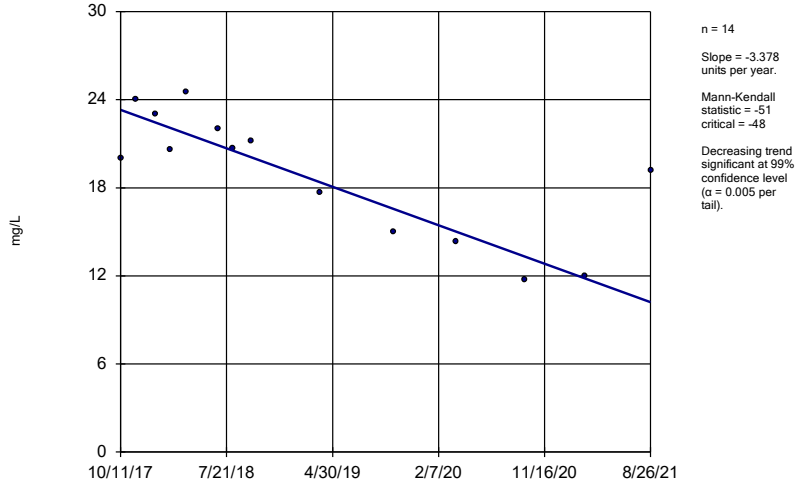
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 14

Slope = -3.378 units per year.

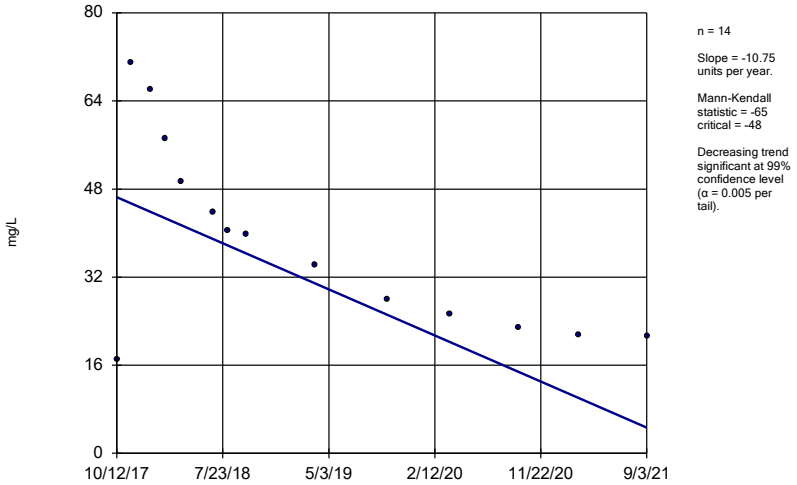
Mann-Kendall statistic = -51
critical = -48

Decreasing trend significant at 99% confidence level (α = 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-40 (bg)



n = 14

Slope = -10.75 units per year.

Mann-Kendall statistic = -65
critical = -48

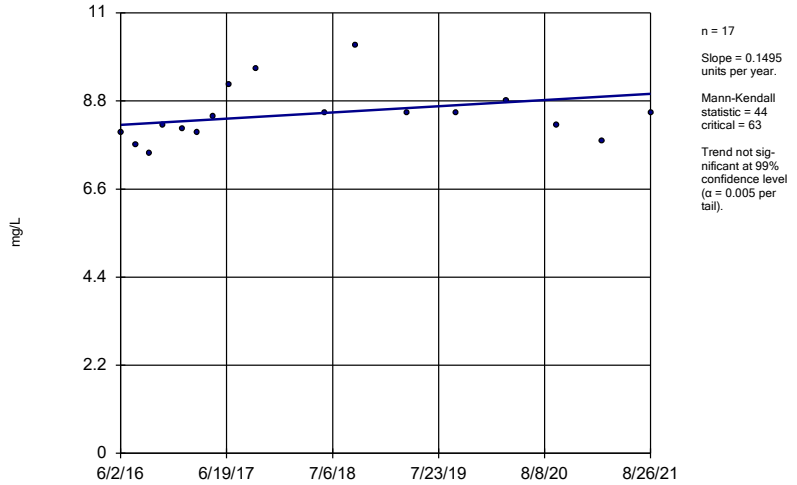
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 17

Slope = 0.1495 units per year.

Mann-Kendall statistic = 44
critical = 63

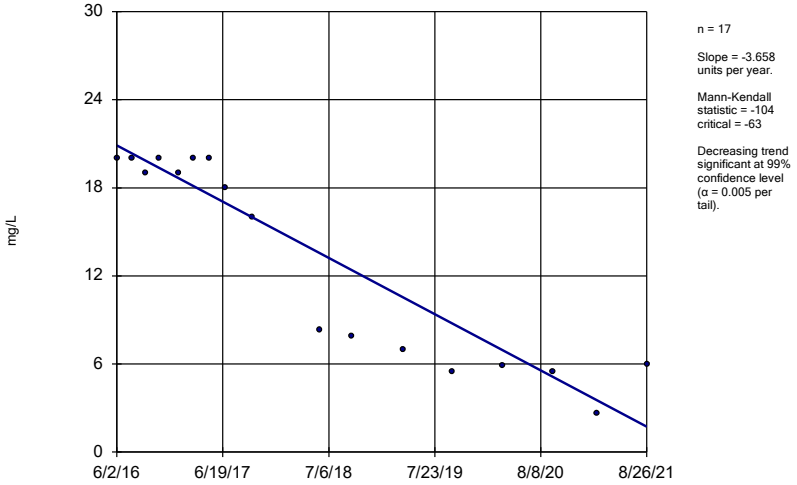
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 17

Slope = -3.658 units per year.

Mann-Kendall statistic = -104
critical = -63

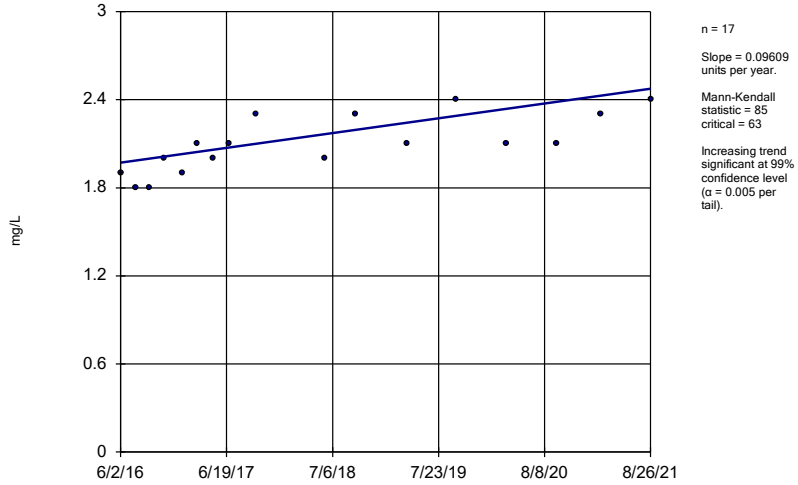
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 17

Slope = 0.09609 units per year.

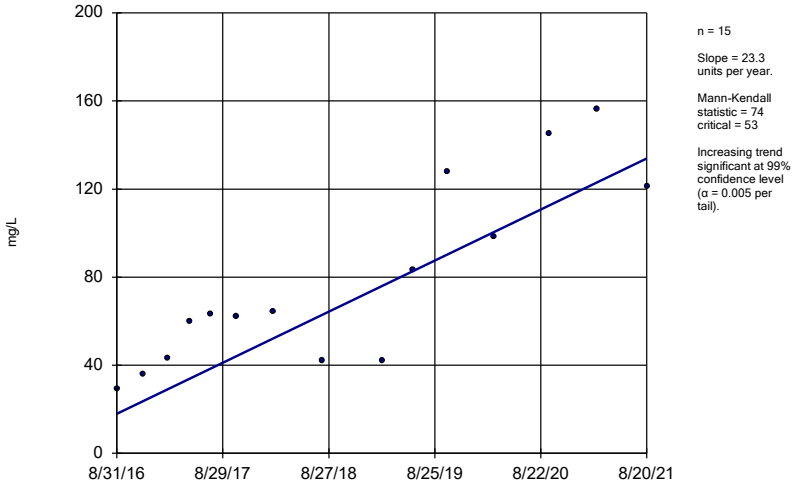
Mann-Kendall statistic = 85
critical = 63

Increasing trend significant at 99% confidence level (α = 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)



n = 15

Slope = 23.3 units per year.

Mann-Kendall statistic = 74 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

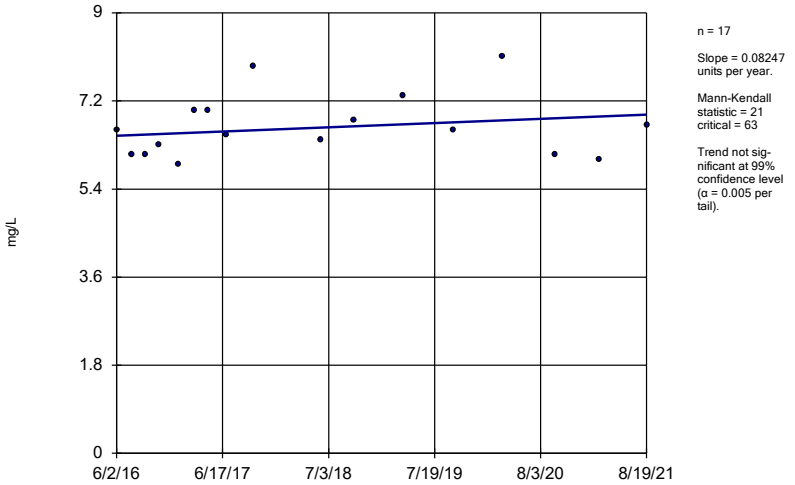
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 17

Slope = 0.08247 units per year.

Mann-Kendall statistic = 21 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

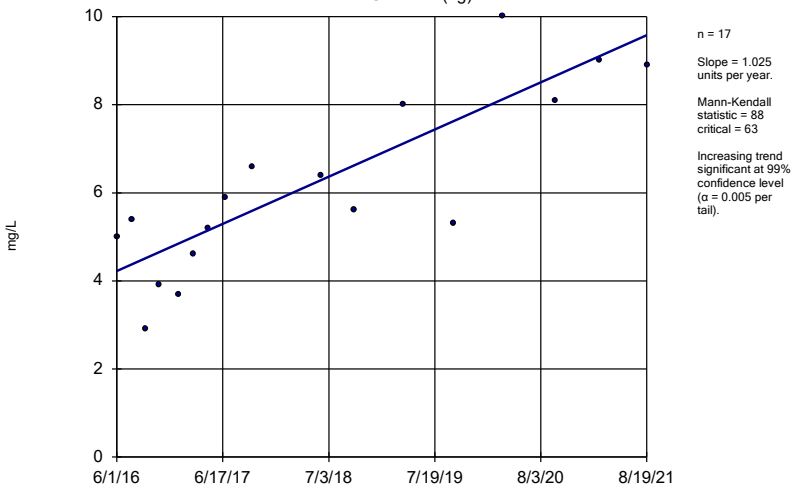
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 17

Slope = 1.025 units per year.

Mann-Kendall statistic = 88 critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

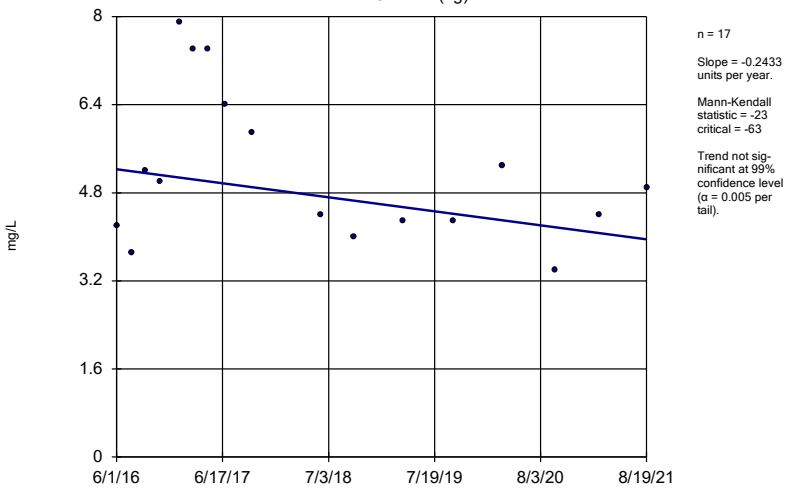
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 17

Slope = -0.2433 units per year.

Mann-Kendall statistic = -23 critical = -63

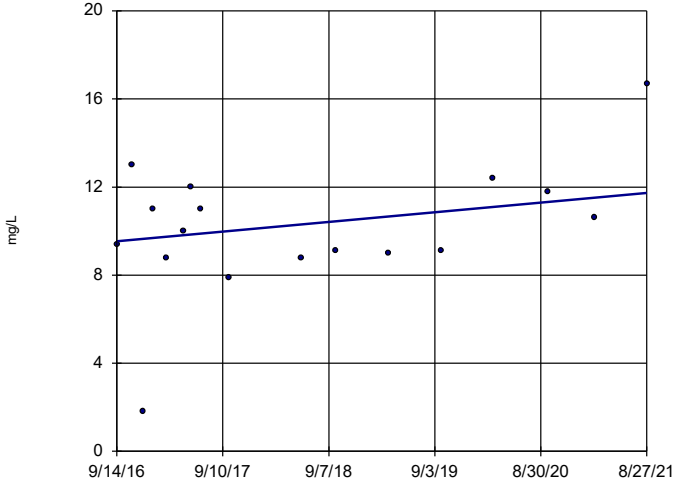
Trend not significant at 99% confidence level (α = 0.005 per tail).

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-2I (bg)



n = 17

Slope = 0.4455 units per year.

Mann-Kendall statistic = 27 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

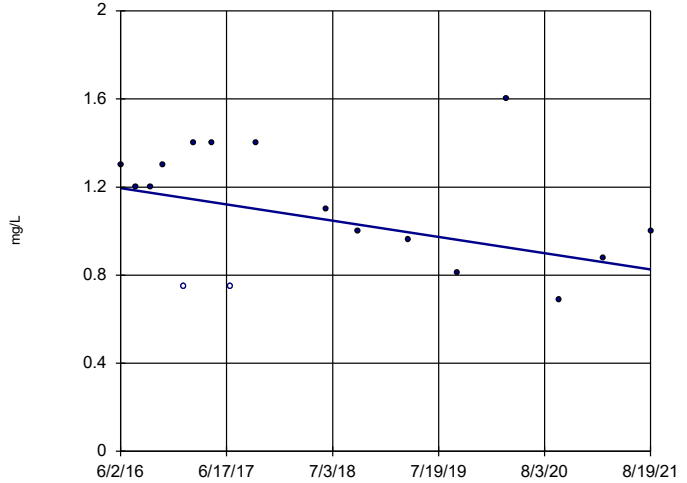
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests

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

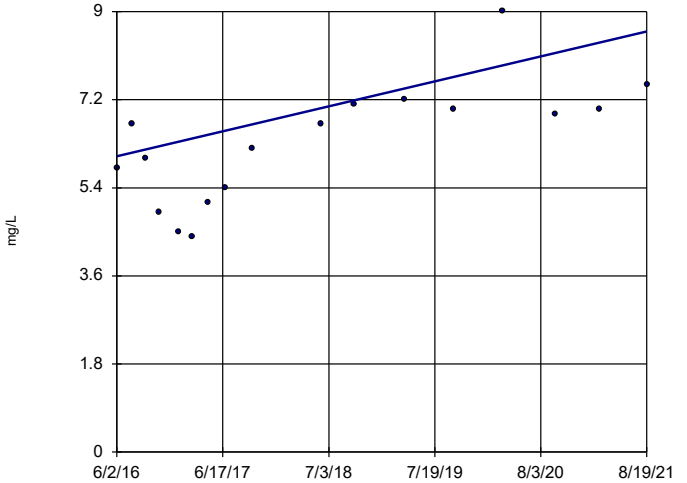
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

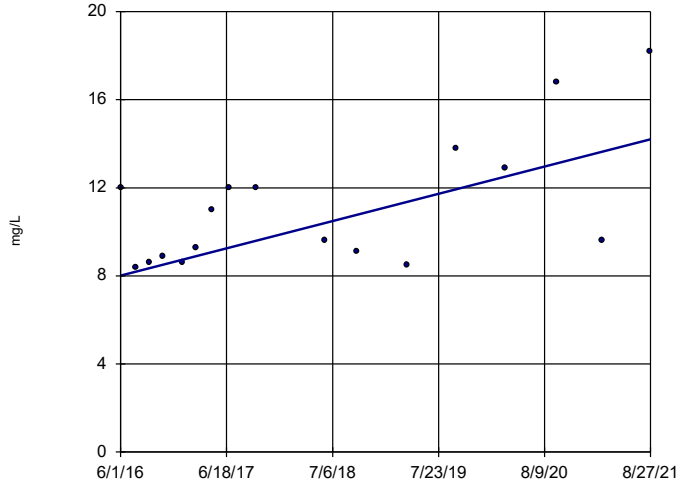
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

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 significant at 99% confidence level (α = 0.005 per tail).

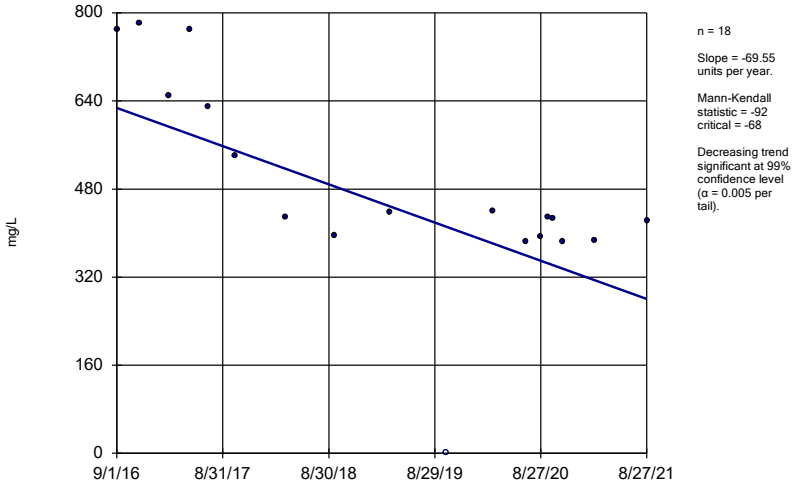
Constituent: Sulfate as SO4 Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWC-46A



n = 18

Slope = -69.55 units per year.

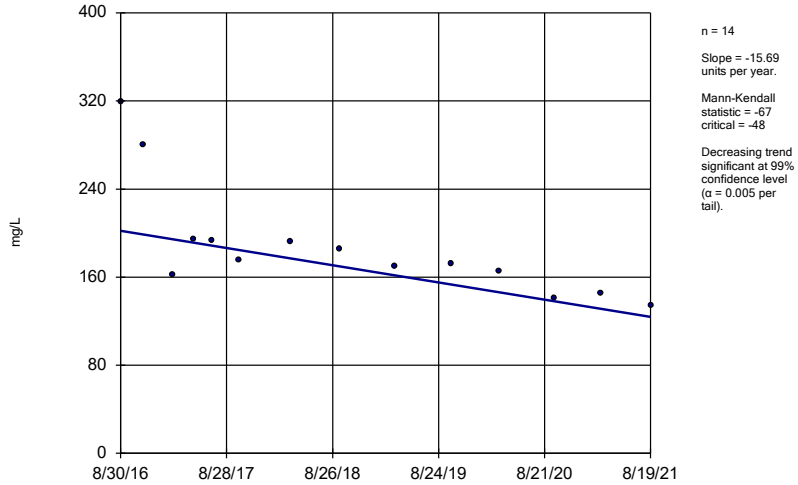
Mann-Kendall statistic = -92 critical = -68

Decreasing trend significant at 99% confidence level (α = 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-47 (bg)



n = 14

Slope = -15.69 units per year.

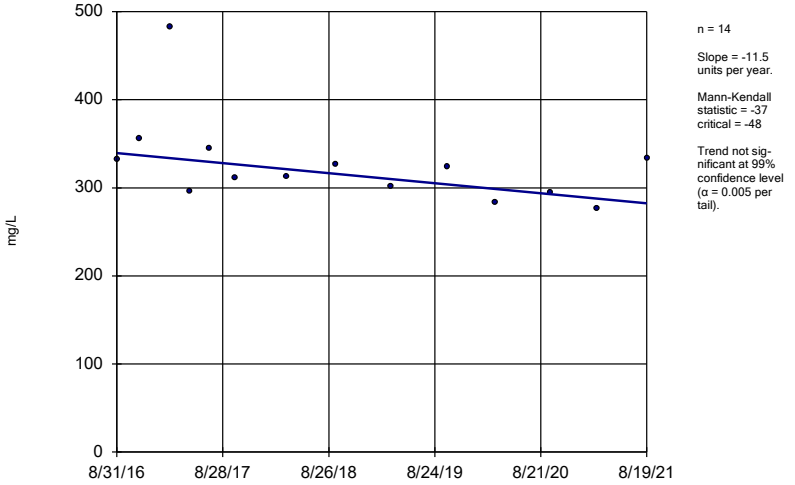
Mann-Kendall statistic = -67 critical = -48

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

YGWC-44



n = 14

Slope = -11.5 units per year.

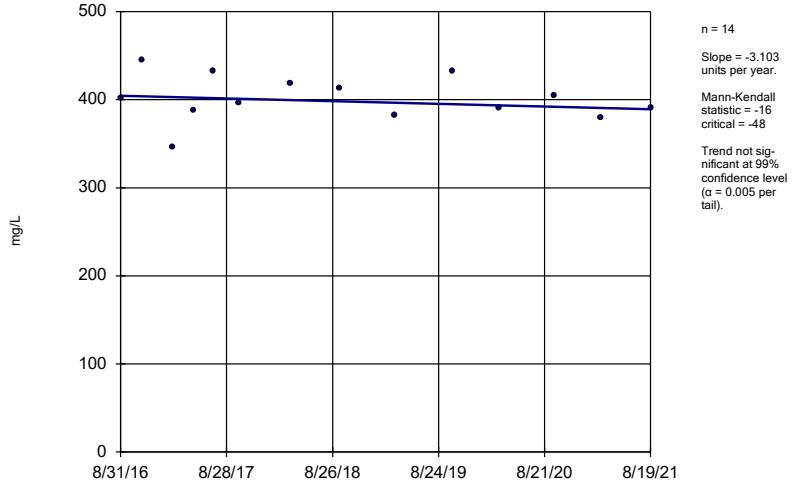
Mann-Kendall statistic = -37 critical = -48

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

YGWC-45



n = 14

Slope = -3.103 units per year.

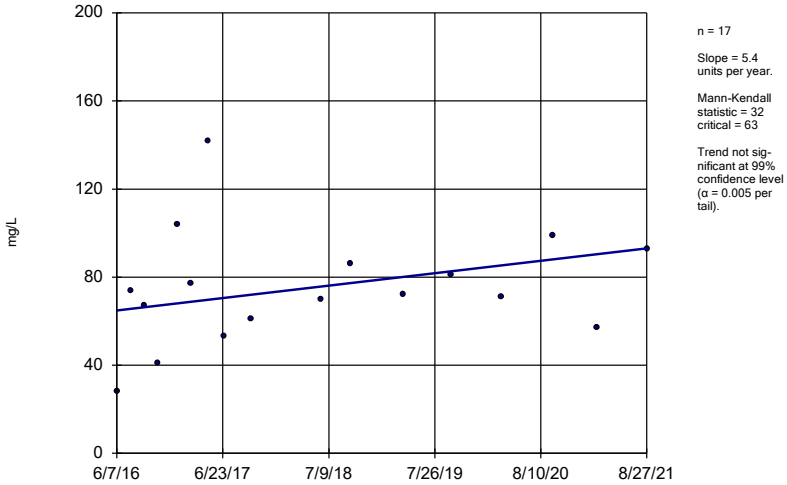
Mann-Kendall statistic = -16 critical = -48

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-17S (bg)



n = 17

Slope = 5.4 units per year.

Mann-Kendall statistic = 32
critical = 63

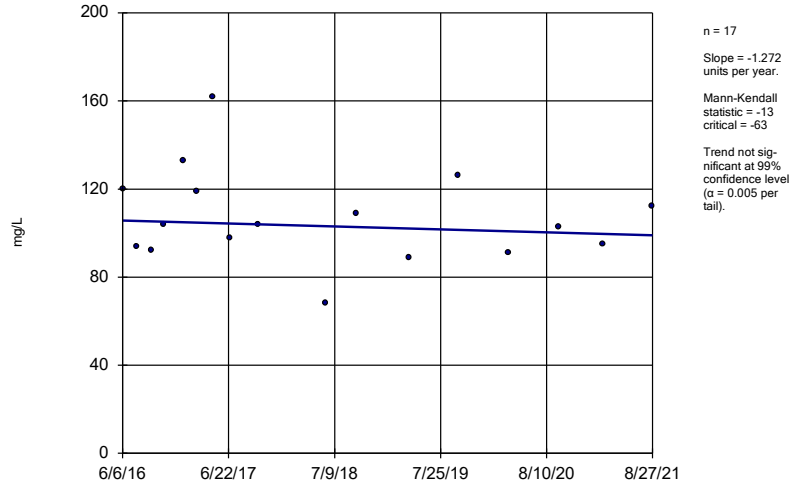
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 17

Slope = -1.272 units per year.

Mann-Kendall statistic = -13
critical = -63

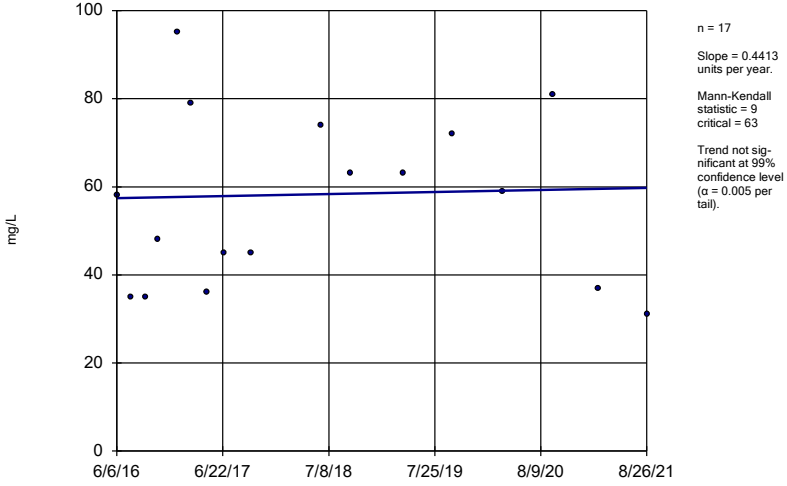
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 17

Slope = 0.4413 units per year.

Mann-Kendall statistic = 9
critical = 63

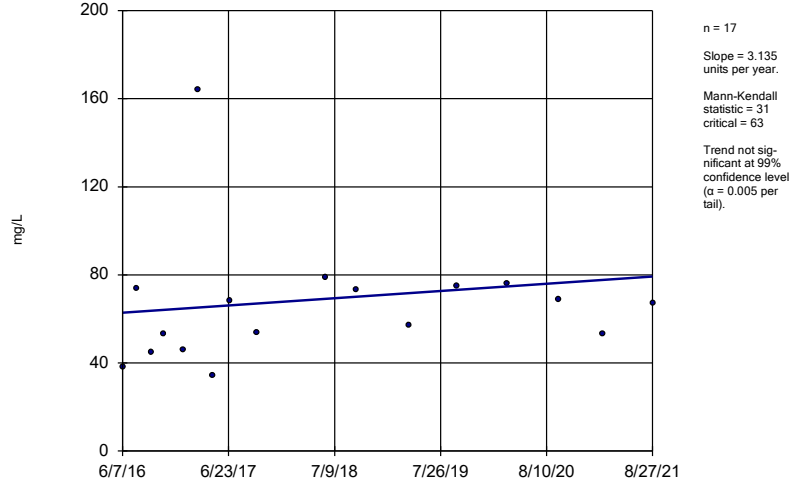
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 17

Slope = 3.135 units per year.

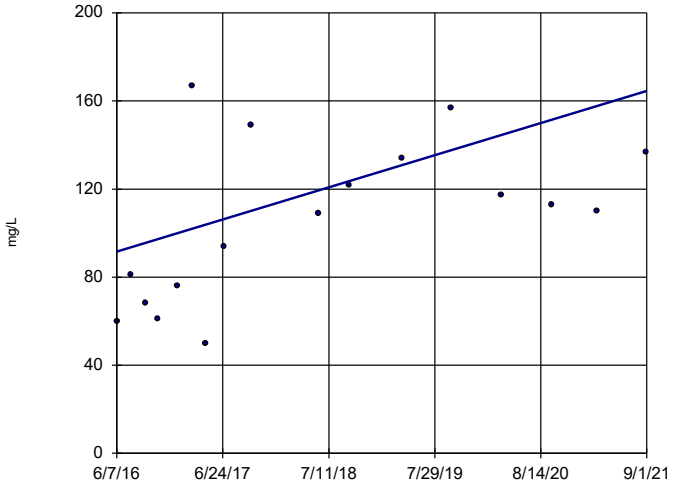
Mann-Kendall statistic = 31
critical = 63

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-21I (bg)



n = 17

Slope = 13.94 units per year.

Mann-Kendall statistic = 56
critical = 63

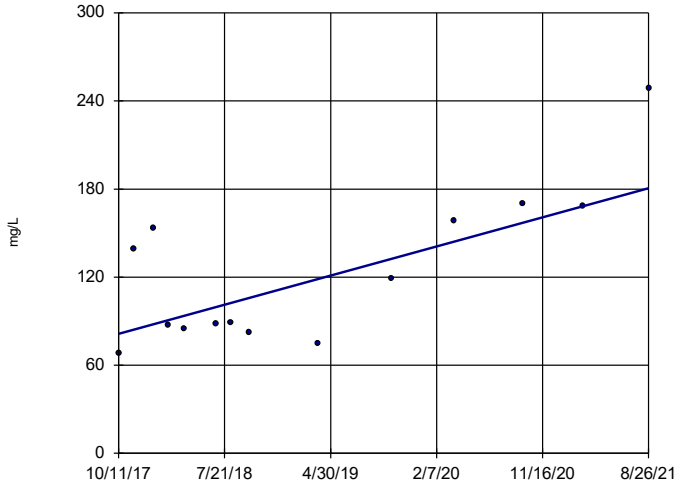
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 14

Slope = 25.58 units per year.

Mann-Kendall statistic = 41
critical = 48

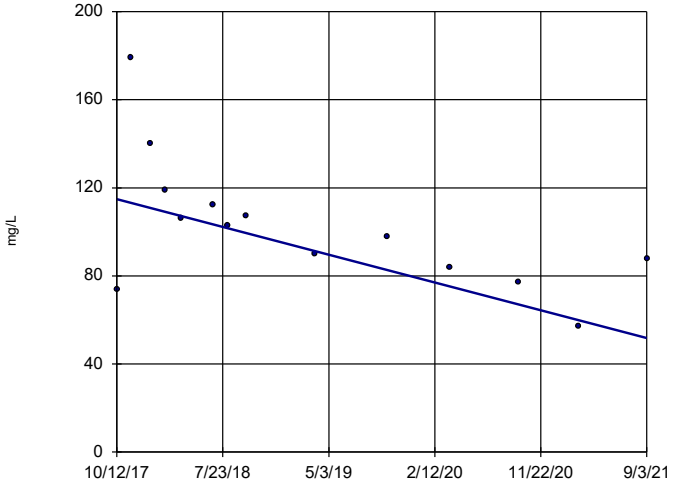
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 14

Slope = -16.17 units per year.

Mann-Kendall statistic = -53
critical = -48

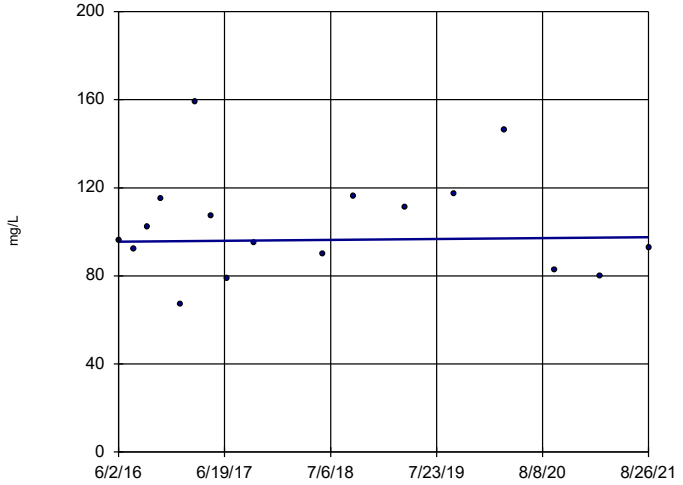
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 17

Slope = 0.3992 units per year.

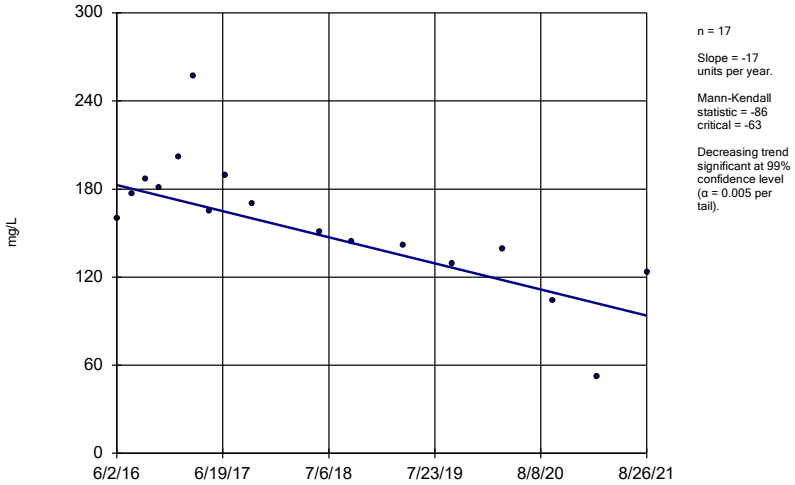
Mann-Kendall statistic = 4
critical = 63

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)



n = 17

Slope = -17 units per year.

Mann-Kendall statistic = -86
critical = -63

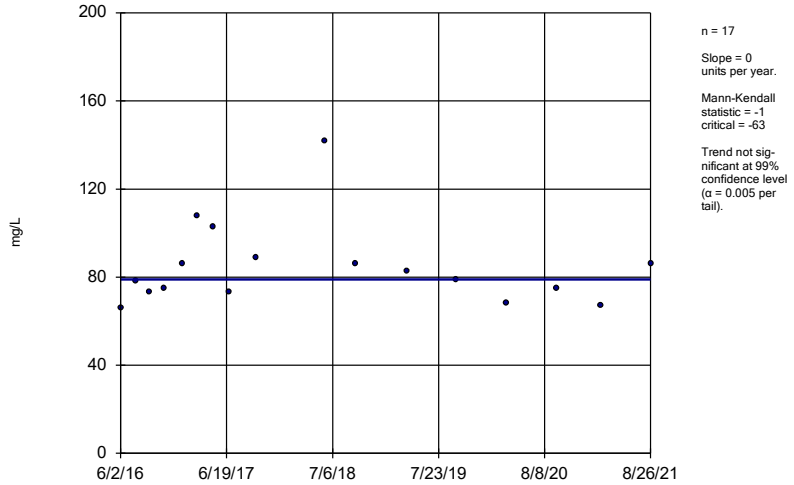
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -63

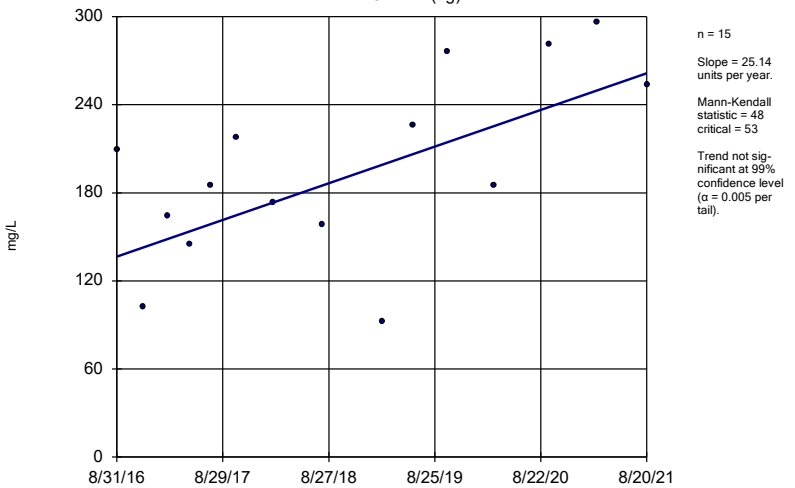
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2 (bg)



n = 15

Slope = 25.14 units per year.

Mann-Kendall statistic = 48
critical = 53

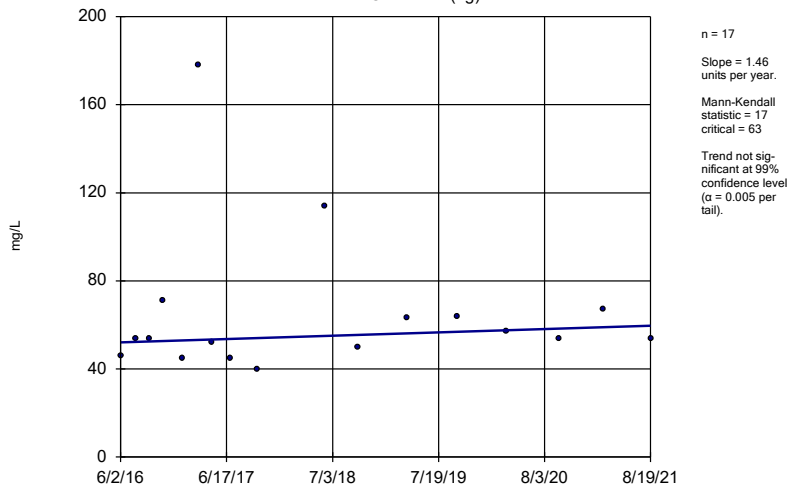
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 17

Slope = 1.46 units per year.

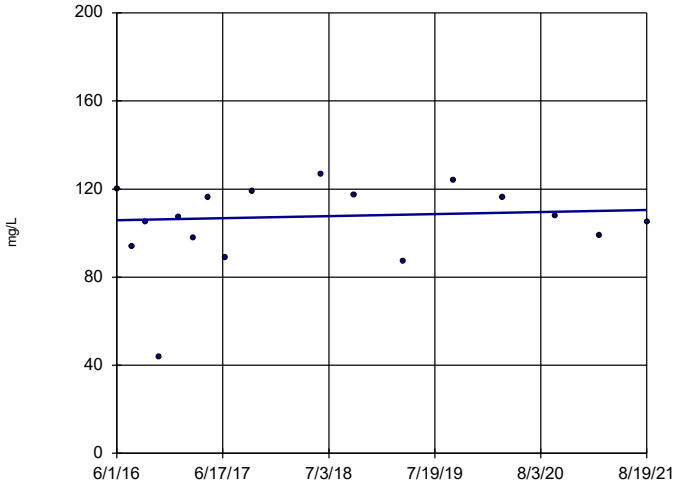
Mann-Kendall statistic = 17
critical = 63

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-1D (bg)



n = 17

Slope = 0.915 units per year.

Mann-Kendall statistic = 10 critical = 63

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

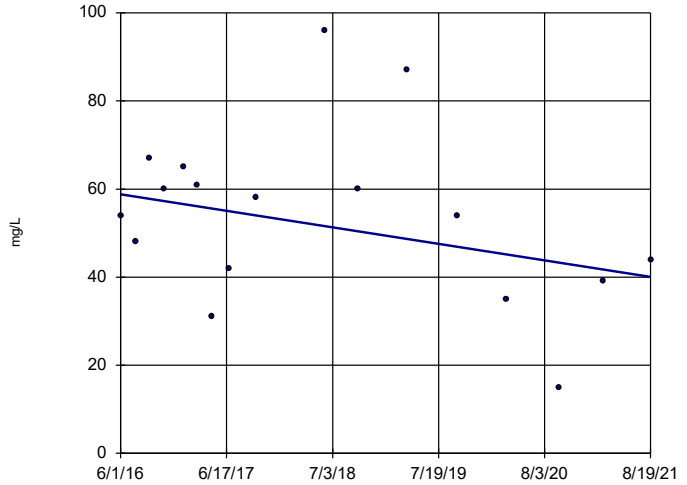
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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 (α = 0.005 per tail).

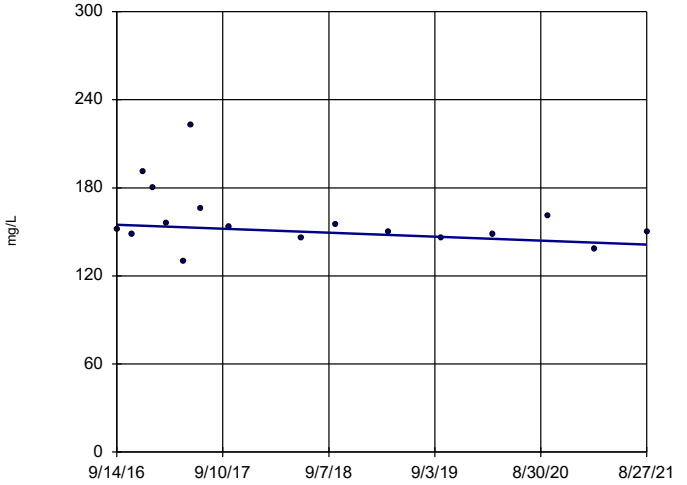
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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 (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes

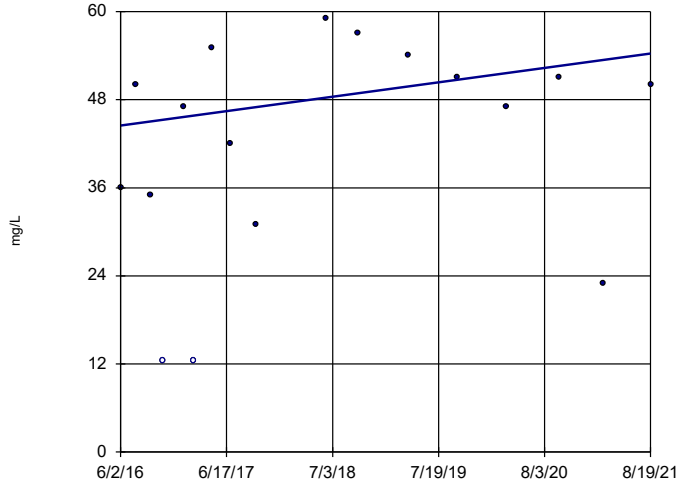
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 17

Slope = 1.885 units per year.

Mann-Kendall statistic = 20 critical = 63

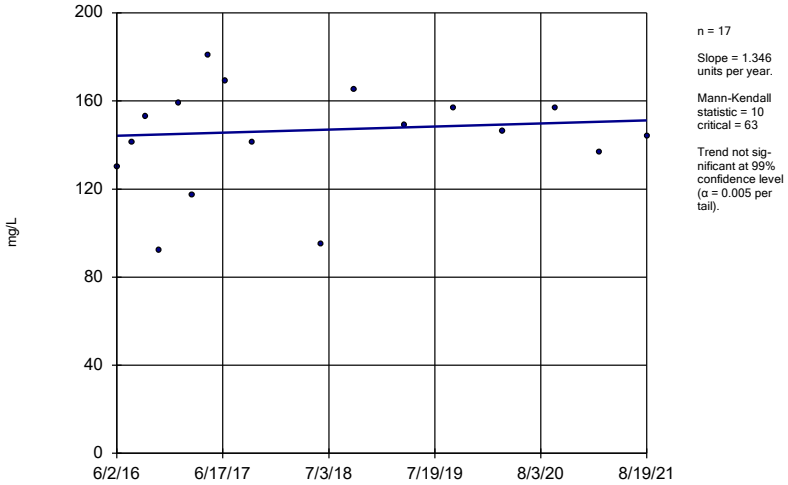
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

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-3D (bg)



n = 17

Slope = 1.346 units per year.

Mann-Kendall statistic = 10 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

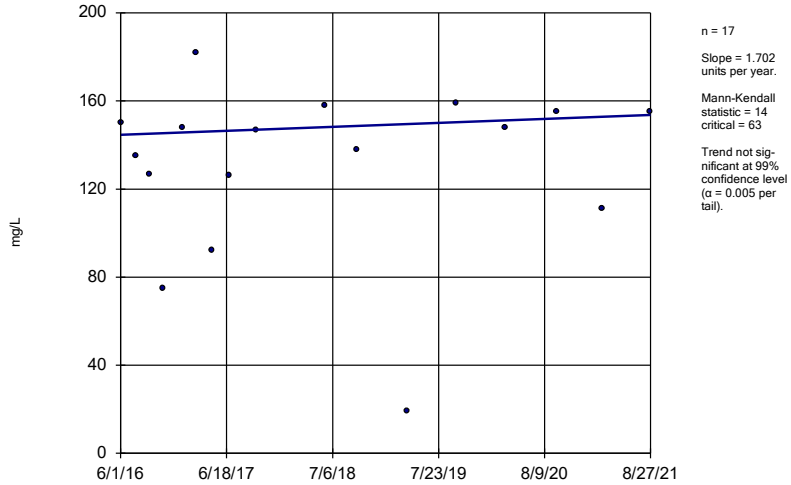
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 17

Slope = 1.702 units per year.

Mann-Kendall statistic = 14 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

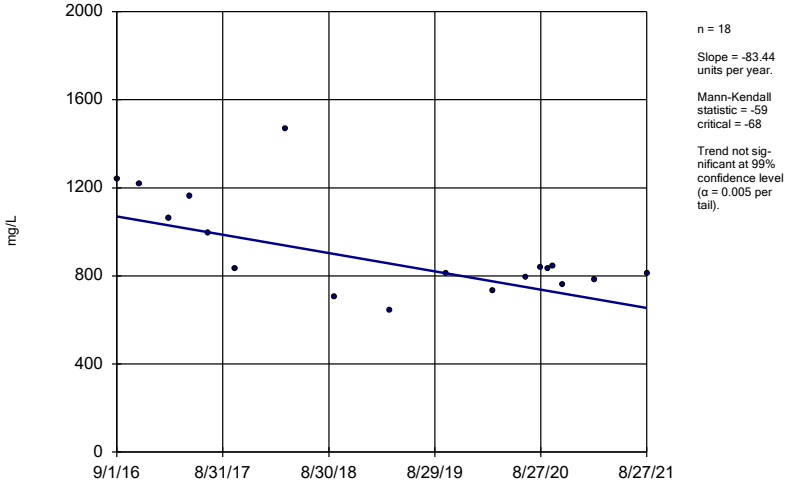
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-46A



n = 18

Slope = -83.44 units per year.

Mann-Kendall statistic = -59 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

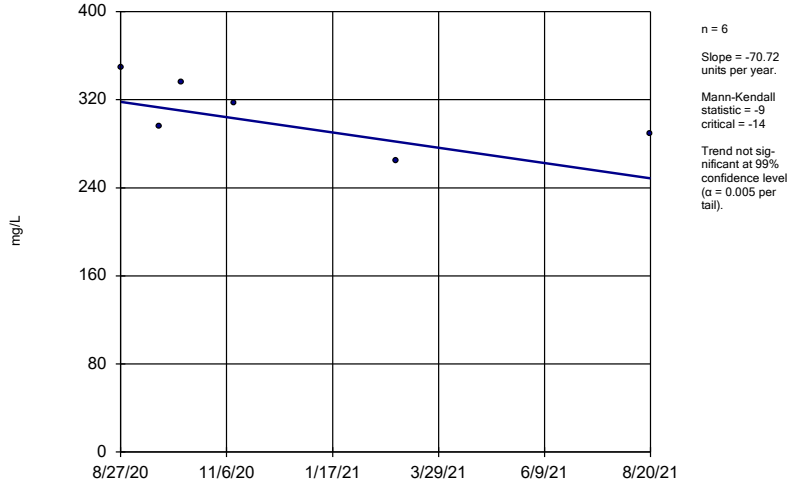
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/2/2021 5:01 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-52



n = 6

Slope = -70.72 units per year.

Mann-Kendall statistic = -9 critical = -14

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

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.

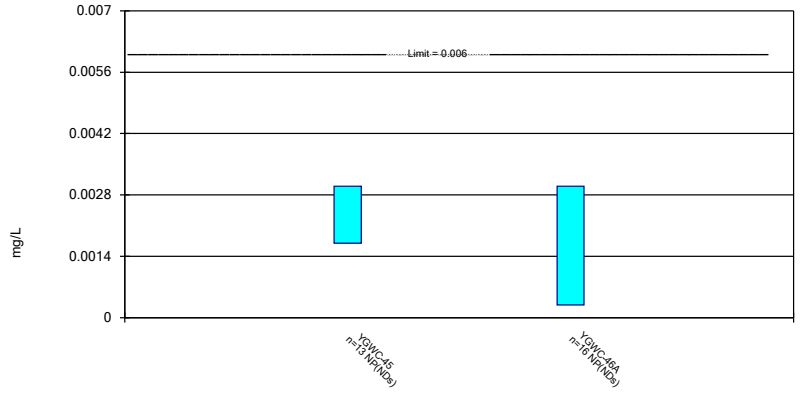
Federal Confidence Intervals - All Results (No Significant)

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)

Non-Parametric Confidence Interval

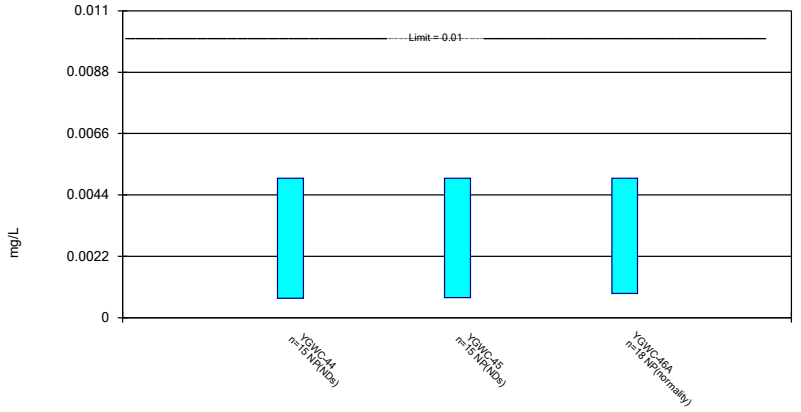
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 11/2/2021 5:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

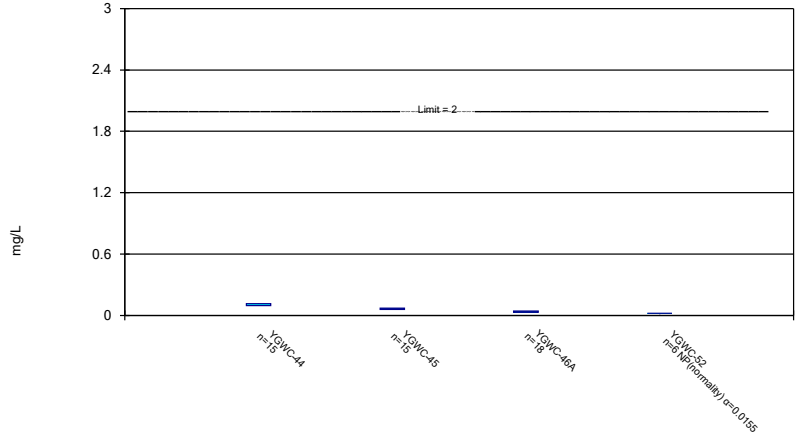
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic 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

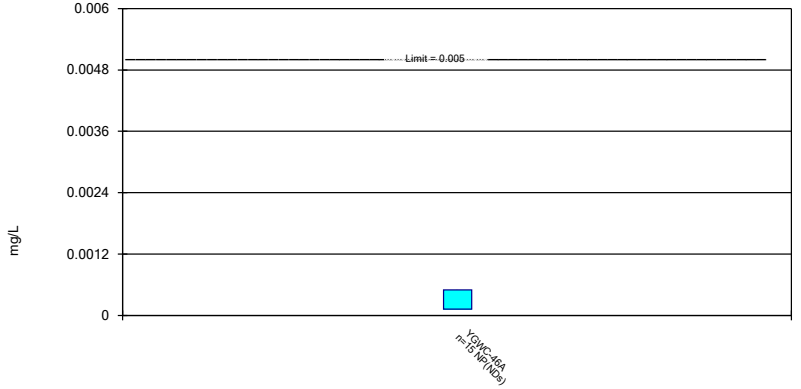
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium 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: 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

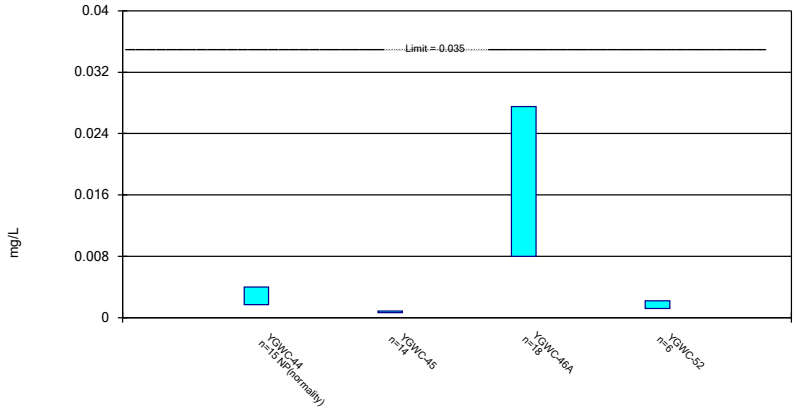
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

Constituent: Chromium Analysis Run 11/2/2021 5:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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.

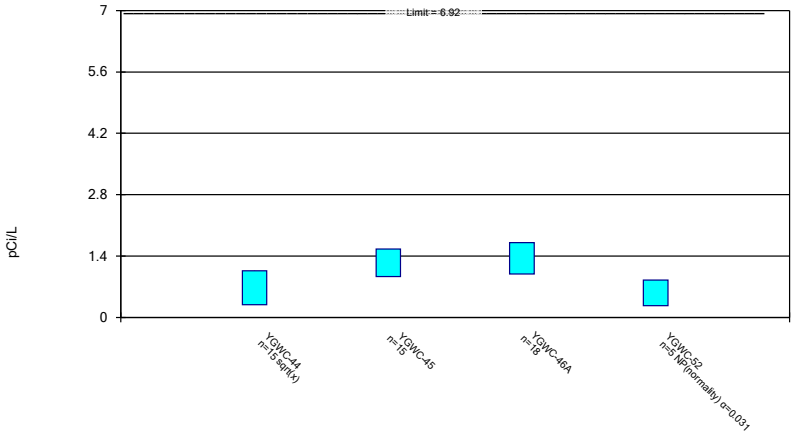


Constituent: Cobalt Analysis Run 11/2/2021 5:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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.

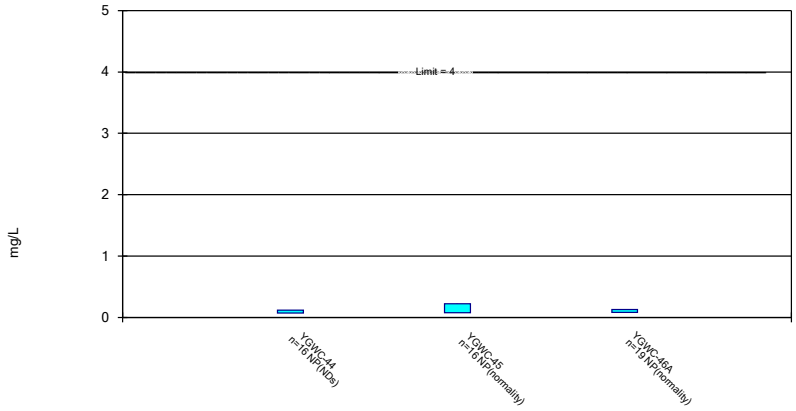


Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 5:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

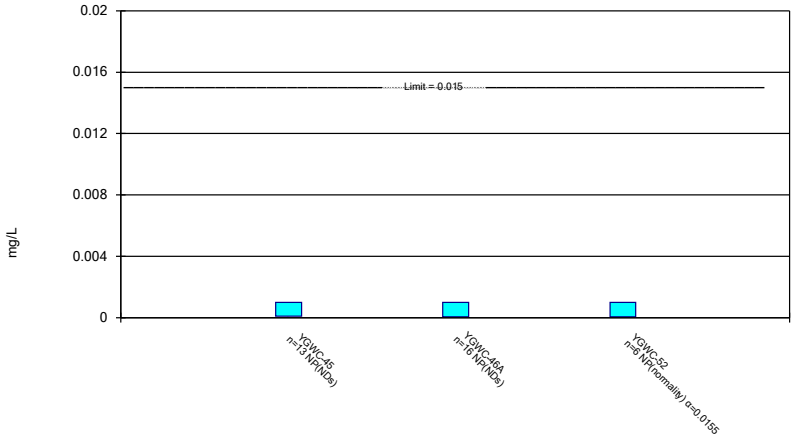
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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.

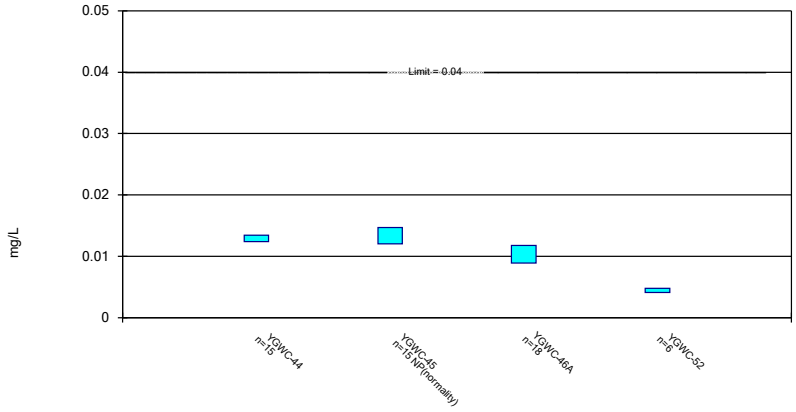


Constituent: Lead Analysis Run 11/2/2021 5:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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.

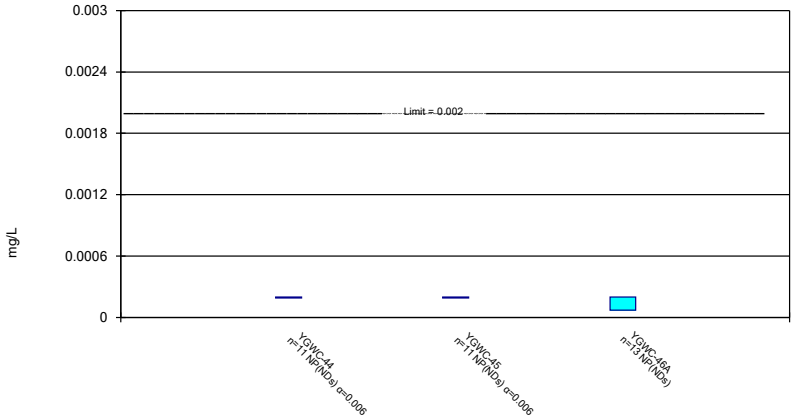


Constituent: Lithium Analysis Run 11/2/2021 5:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

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

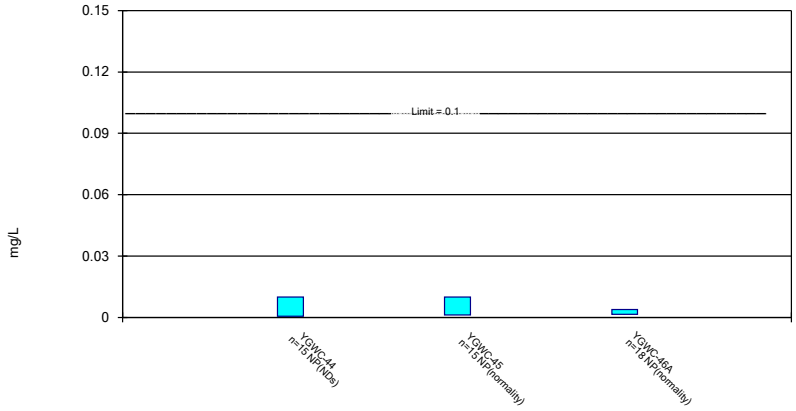


Constituent: Mercury Analysis Run 11/2/2021 5:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond1

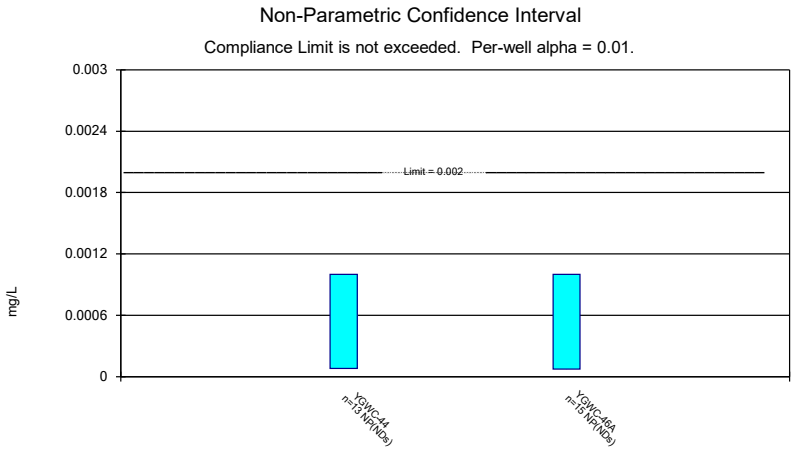
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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



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.

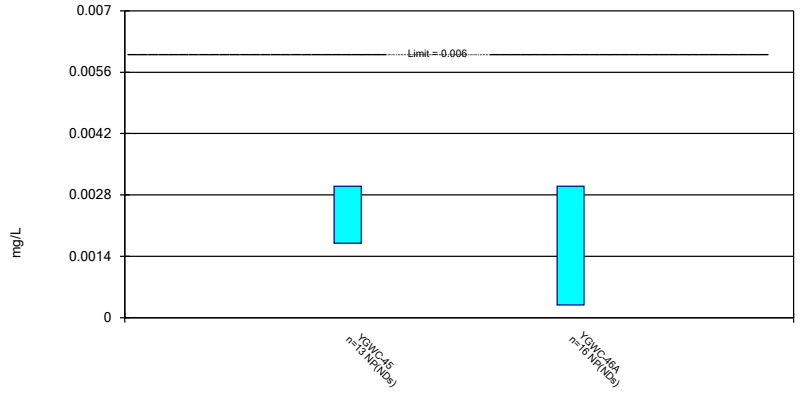
State Confidence Intervals - All Results (No Significant)

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)

Non-Parametric Confidence Interval

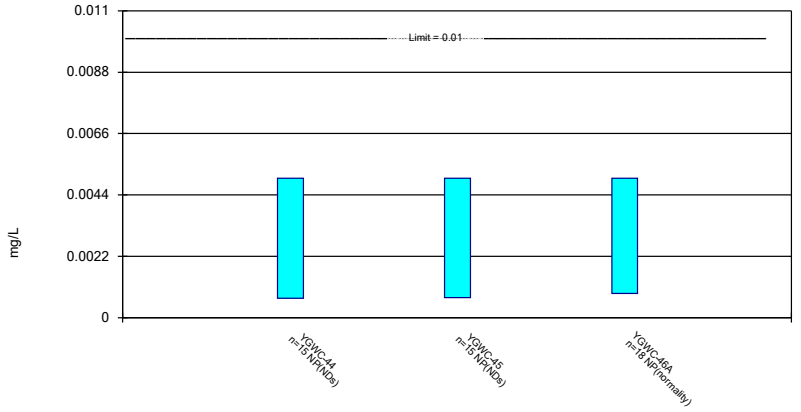
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 11/2/2021 5:24 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

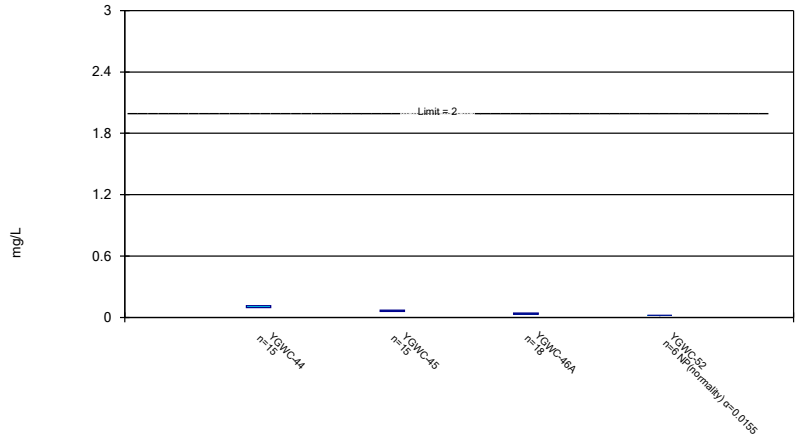
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic 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

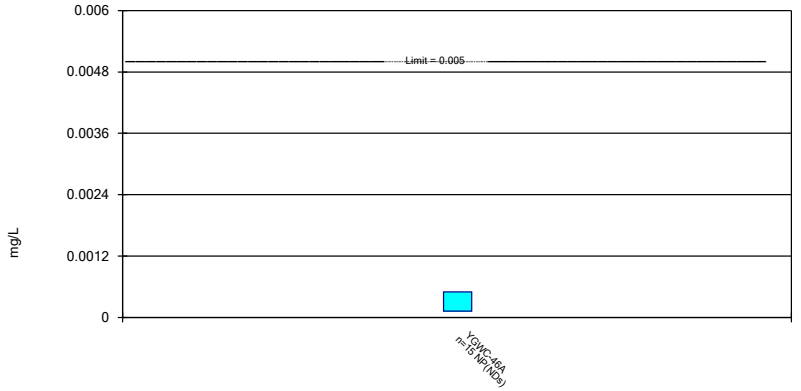
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium 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: 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

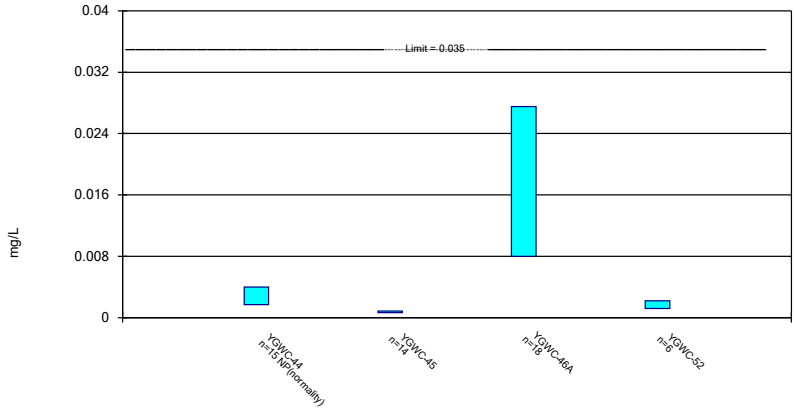
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

Constituent: Chromium Analysis Run 11/2/2021 5:24 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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.

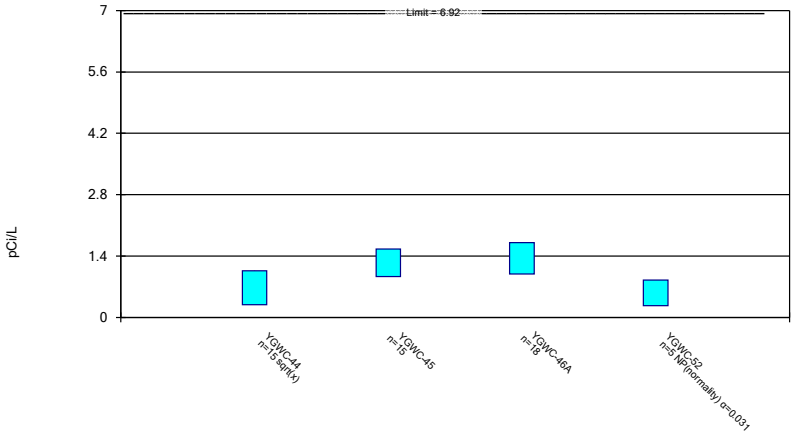


Constituent: Cobalt Analysis Run 11/2/2021 5:24 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

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.

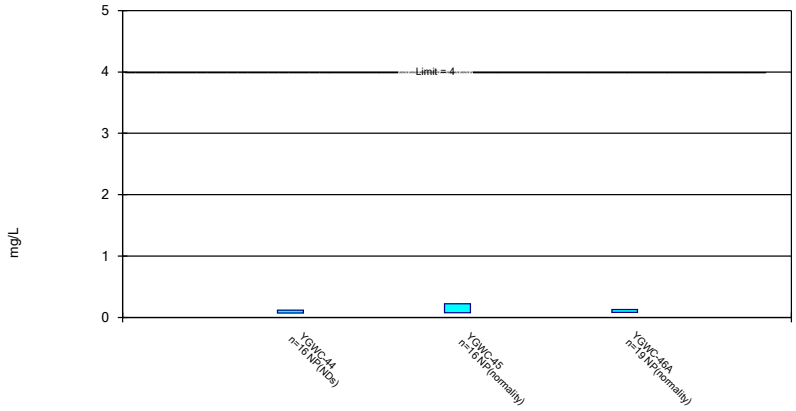


Constituent: Combined Radium 226 + 228 Analysis Run 11/2/2021 5:24 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

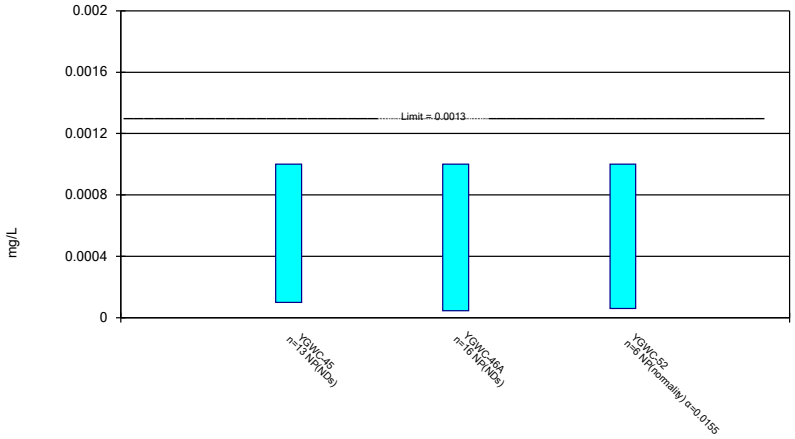
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

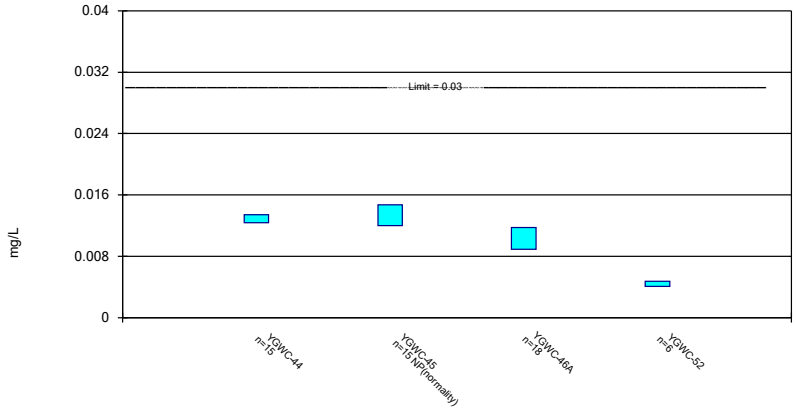
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



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

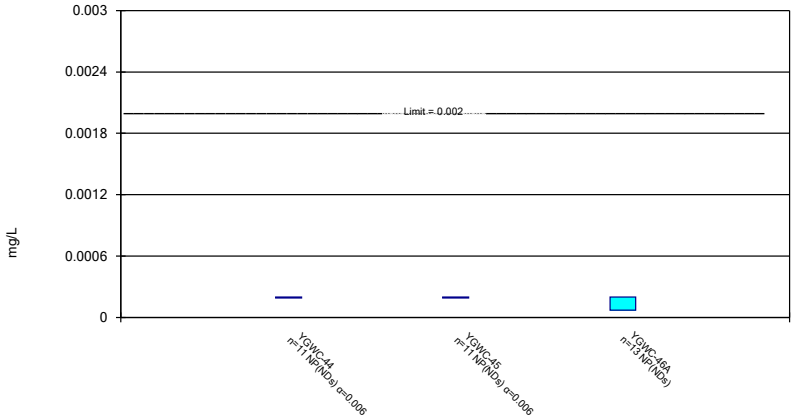
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

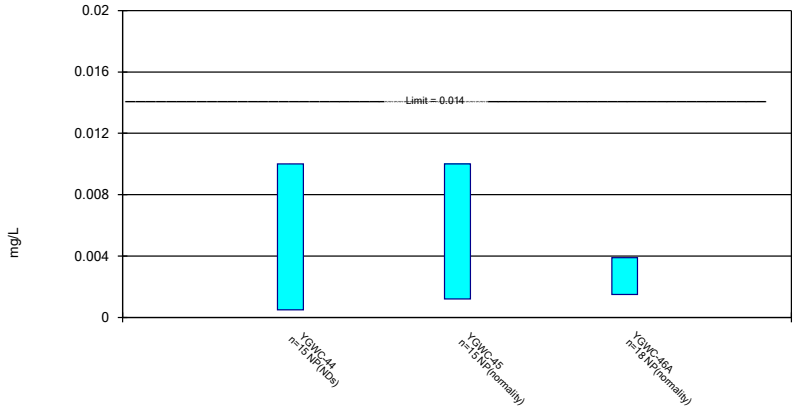
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



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

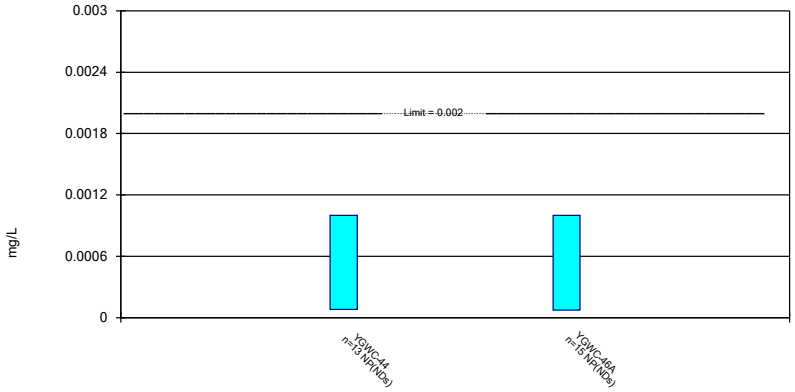
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

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