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Georgia Power

2023 Semiannual Groundwater Monitoring and Corrective Action Report

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

February 28, 2024

2023 Semiannual Groundwater Monitoring and Corrective Action Report

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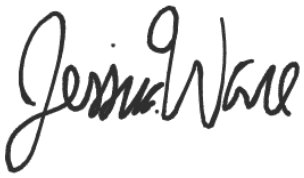

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Summary

This summary of the 2023 Semiannual Groundwater Monitoring and Corrective Action Report provides the status of the groundwater monitoring and corrective action program from July 2023 through December 2023 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 northwestern 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 2023 semiannual reporting period, the site remained in assessment monitoring.

During this reporting period, Arcadis conducted a groundwater sampling event in August 2023. 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].

[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 statistically significant level SSL-related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available, the USEPA RSL, if no MCL is available, or the calculated background interwell prediction limit.

Appendix III Parameter	August 2023
Boron	YGWC-44, YGWC-45, YGWC-46A
Calcium	YGWC-45, YGWC-46A
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.

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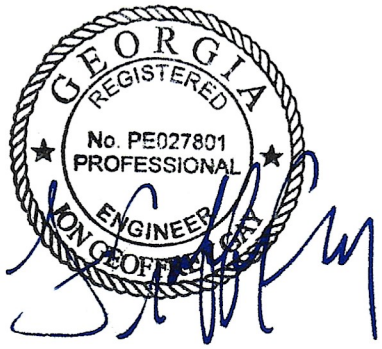
Acronyms and Abbreviations

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 2023 Semiannual Groundwater Monitoring and Corrective Action Report, 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 [CFR] 257 Subpart D), specifically § 257.90(e), and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with Arcadis, U.S., Inc. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management 391-3-4.01.

Arcadis U.S., Inc.



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Date

1 Introduction

This 2023 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 2023 and December 2023. 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 2023.

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 the R6 CCR on-site landfill; a smaller portion was used to establish final grades for a portion of the AMA. 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 installed to supplement 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 2023 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 from July through December 2023. During the August 2023 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 2023, 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.

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 2023 from the CCR monitoring wells were analyzed for Appendix III and Appendix IV constituents. **Table 3** provides a summary of constituents monitored during the events.

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 2023 monitoring event are summarized in **Table 4**. Sitewide and AP-1 potentiometric surface maps are provided in **Figures 4 and 5**, respectively. 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 5**. The calculated flow velocity is approximately 1.3 feet per day (475 feet per year). These calculated groundwater velocities across the site are generally consistent with historical calculations and with expected velocities in the site-specific geology.

3.2 Groundwater Sampling

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

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

- ± 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 2023 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 3** 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 from the semiannual sampling for AP-1, and the upgradient wells collected in compliance with the CCR Rule, are summarized in **Tables 6a and 6b**, respectively. 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 reports, prepared by Arcadis and included in **Appendix A,** summarize 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 validated data meet project objectives and the associated data validation reports are provided in **Appendix A** along with the laboratory reports.

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 2023. 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. When data contained greater than 50 percent non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits are were used. The confidence and coverage levels for non-parametric tolerance limits depend on the number of background samples. The background limits were then used when determining the Groundwater Protection Standards (GWPS) established under 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a).

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

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

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 2023 sampling events along with the GWPS.

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

4.2 Statistical Analysis Results

Appendix III statistical analysis for wells associated with the site was performed to determine whether constituents have returned to background levels. Appendix IV assessment monitoring parameters were evaluated to determine whether concentrations statistically exceed the established GWPS. Analytical data from the August 2023 event 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 2023 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 2023 Annual Groundwater Monitoring and Corrective Action Report was prepared to fulfill the requirements of USEPA's CCR Rule 40 CFR § 257.95 and GAEPD Rule 391-3-4-.10. Statistical evaluations of the groundwater monitoring data for the site identified no exceedance of a GWPS for an Appendix IV constituent.

The next assessment monitoring event is scheduled for February 2024. This monitoring event will include sampling and analysis of all Appendix III and IV constituents.

7 References

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Tables

Table 1
Monitoring Network Well Summary
2023 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)	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	Detection
YGWC-45	7/10/2016	719.36	72.86	643.64	62.86	656.50	Detection
YGWC-46A	6/1/2020	733.04	70.79	659.31	60.79	672.25	Detection
YGWC-52	5/28/2020	755.86	79.22	673.68	69.22	686.64	Detection
Piezometers							
PZ-09S	5/19/2014	712.08	59.28	650.52	48.98	663.10	Water Levels
PZ-09I	5/19/2014	712.13	79.33	630.47	69.03	643.10	Water Levels
PZ-10S	5/19/2014	700.43	18.63	679.47	8.33	692.10	Water Levels
PZ-10I	5/19/2014	700.25	48.95	648.85	38.65	661.60	Water Levels
PZ-53	11/18/2019	732.90	72.00	657.90	61.71	671.19	Water Levels

Notes:
Elevation is presented in U.S. Survey Feet (North American Vertical Datum of 1988).

Acronyms and Abbreviations:
bTOC = below top of casing
ft = feet

Table 2
Groundwater Sampling Event Summary
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates AP-1

Well ID	Hydraulic Location	Semiannual Assessment [1]
		August 2023
YGWA-47	Upgradient	X
YGWA-4I	Upgradient [2]	X
YGWA-5I	Upgradient [2]	X
YGWA-5D	Upgradient [2]	X
YGWA-17S	Upgradient [2]	X
YGWA-18S	Upgradient [2]	X
YGWA-18I	Upgradient [2]	X
YGWA-20S	Upgradient [2]	X
YGWA-21I	Upgradient [2]	X
YGWA-39	Upgradient [2]	X
YGWA-40	Upgradient [2]	X
GWA-2	Upgradient [2]	X
YGWA-1I	Upgradient [2]	X
YGWA-1D	Upgradient [2]	X
YGWA-2I	Upgradient [2]	X
YGWA-3I	Upgradient [2]	X
YGWA-3D	Upgradient [2]	X
YGWA-14S	Upgradient [2]	X
YGWA-30I	Upgradient [2]	X
YGWC-44	Downgradient	X
YGWC-45	Downgradient	X
YGWC-46A	Downgradient	X
YGWC-52	Downgradient	X

Notes
1. All wells analyzed for Appendix III and Appendix IV.
2. Pooled upgradient wells

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
Groundwater Monitoring Parameters
2023 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 4
Summary of Groundwater Elevations
2023 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)
Downgradient Wells - August 2023				
YGWC-44	8/14/2023	758.35	49.52	708.83
YGWC-45	8/14/2023	719.36	22.78	696.58
YGWC-46A	8/14/2023	733.04	39.88	693.16
YGWC-52	8/14/2023	755.86	37.14	718.72
PZ-09S	8/14/2023	712.08	19.29	692.79
PZ-09I	8/14/2023	712.13	19.59	692.54
PZ-10S	8/14/2023	700.43	8.42	692.01
PZ-10I	8/14/2023	700.25	13.38	686.87
PZ-53	8/14/2023	732.90	39.78	693.12
Upgradient Wells - August 2023				
YGWA-4I	8/14/2023	784.21	24.27	759.94
YGWA-5I	8/14/2023	784.54	20.58	763.96
YGWA-5D	8/14/2023	784.53	20.89	763.64
YGWA-17S	8/14/2023	783.05	14.38	768.67
YGWA-18S	8/14/2023	790.57	21.97	768.60
YGWA-18I	8/14/2023	790.57	24.90	765.67
YGWA-20S	8/14/2023	767.12	11.54	755.58
YGWA-21I	8/14/2023	783.70	31.80	751.90
YGWA-39	8/14/2023	818.19	17.61	800.58
YGWA-40	8/14/2023	815.73	23.70	792.03
YGWA-1I	8/14/2023	836.60	37.23	799.37
YGWA-1D	8/14/2023	837.25	49.55	787.70
YGWA-2I	8/14/2023	866.25	44.76	821.49
YGWA-3I	8/14/2023	796.55	53.07	743.48
YGWA-3D	8/14/2023	796.78	31.49	765.29
YGWA-14S	8/14/2023	748.76	18.53	730.23
YGWA-30I	8/14/2023	762.58	42.42	720.16
YGWA-47	8/14/2023	758.22	33.81	724.41
GWA-2	8/14/2023	805.62	36.83	768.79

Notes
Elevation in U.S. Survey Feet (NAVD88)

Acronyms and Abbreviations:
bTOC = below top of casing
ft = feet
NM - not measured
TOC = top of casing

Table 5
Groundwater Flow Velocity Calculations
2023 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 =	0.024	unitless	Hydraulic gradient from: YGWA-47 to YGWC-45 (Aug. 2023); Distance (ft): 1172; Elevations (ft): YGWA-47: 724.41; YGWC-45: 696.58
n_e =	0.20	unitless	See note 2

Average Linear Velocity

$$V_{min} = \frac{(10.5)\,(0.024)}{0.20}$$

Aug. 2023

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 6a
Groundwater Analytical Data - August 2023
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates AP-1

	Analyte Name	Units	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
			8/15/2023	8/15/2023	8/15/2023	8/15/2023
Appendix III	pH	SU	5.79	6.97	7.51	6.05
	Boron	mg/l	0.60	0.36	2.1	0.014 J
	Calcium	mg/l	30.0	46.3	111	34.6
	Chloride	mg/l	13.4	5.6	32.2	3.0
	Fluoride	mg/l	< 0.050	0.070 J	0.12	< 0.050
	Sulfate	mg/l	113	154	419	96.5
	Total Dissolved Solids	mg/l	319	404	945	267
Appendix IV	Antimony	mg/l	0.0023 J	< 0.0012	< 0.0012	< 0.0012
	Arsenic	mg/l	< 0.0037	< 0.0037	< 0.0037	< 0.0037
	Barium	mg/l	0.084	0.049	0.040	0.019
	Beryllium	mg/l	< 0.000054	< 0.000054	< 0.000054	< 0.000054
	Cadmium	mg/l	< 0.00011	< 0.00011	< 0.00011	< 0.00011
	Chromium	mg/l	< 0.0011	< 0.0011	< 0.0011	< 0.0011
	Cobalt	mg/l	0.00084 J	0.00053 J	0.0012 J	0.0017 J
	Fluoride	mg/l	< 0.050	0.070 J	0.12	< 0.050
	Lead	mg/l	< 0.00012	< 0.00012	< 0.00012	< 0.00012
	Lithium	mg/l	0.013 J	0.012 J	0.012 J	0.0040 J
	Mercury	mg/l	< 0.00013	< 0.00013	< 0.00013	< 0.00013
	Molybdenum	mg/l	< 0.00074	0.0011 J	0.0031 J	< 0.00074
	Combined Radium - 226/228	pCi/l	1.15	1.34	1.92	1.07 U
	Selenium	mg/l	< 0.0014	< 0.0014	< 0.0014	< 0.0014
	Thallium	mg/l	< 0.00018	< 0.00018	< 0.00018	< 0.00018

Notes:
Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III
Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV

Acronyms and Abbreviations:
mg/L = milligrams per liter
pCi/L = picoCuries per liter
< = Analyte was not detected above the laboratory method detection limit (MDL)
J: Estimated concentration above the method detection limit and below the reporting limit.
U: the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualifited by the laboratory as estimated.

Table 6b
Upgradient Groundwater Analytical Data - August 2023
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - AP-1

Analyte		Units	GWA-2	YGWA-1I	YGWA-1D	YGWA-2I	YGWA-3I	YGWA-3D	YGWA-4I	YGWA-5I	YGWA-5D
			8/15/2023	8/15/2023	8/15/2023	8/15/2023	8/16/2023	8/15/2023	8/15/2023	8/15/2023	8/15/2023
Appendix III	pH	SU	5.30	5.88	6.98	6.96	7.39	7.69	5.99	5.58	7.34
	Boron	mg/l	< 0.043	0.0094 J	< 0.0086	< 0.043	< 0.043	< 0.043	< 0.0086	< 0.043	< 0.043
	Calcium	mg/l	20.3	1.8	13.5	23.2	24.9	27.4	7.8	2.6	25.0
	Chloride	mg/l	5.6	1.4	1.1	0.93 J	1.1	1.1	4.4	4.1	3.1
	Fluoride	mg/l	0.065 J	< 0.050	0.057 J	0.081 J	0.11	0.42	< 0.050	< 0.050	< 0.050
	Sulfate	mg/l	74.2	4.6	9.6	17.2	20.3	6.8	7.5	2.2	4.8
	Total Dissolved Solids	mg/l	230	65.0	121	157	148	231	99.0	76.0	219
Appendix IV	Antimony	mg/l	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012
	Arsenic	mg/l	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037
	Barium	mg/l	0.030	0.0078	0.0059	0.0031 J	0.0037 J	0.0046 J	0.011	0.018	0.0074
	Beryllium	mg/l	< 0.00027	< 0.000054	< 0.000054	< 0.00027	< 0.00027	< 0.00027	< 0.000054	< 0.00027	< 0.00027
	Cadmium	mg/l	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011
	Chromium	mg/l	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011
	Cobalt	mg/l	0.031	0.00072 J	< 0.00039	< 0.00039	< 0.00039	< 0.00039	< 0.00039	< 0.00039	< 0.00039
	Lead	mg/l	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012
	Lithium	mg/l	< 0.0036	0.0020 J	0.0079 J	< 0.0036	0.025 J	0.023 J	0.0083 J	< 0.0036	0.0059 J
	Mercury	mg/l	< 0.00013	0.00015 J	0.00015 J	0.00015 J	< 0.00013	0.00014 J	0.00013 J	0.00014 J	0.00015 J
	Molybdenum	mg/l	< 0.00074	0.0047 J	0.0098 J	0.0071 J	0.012	0.012	< 0.00074	< 0.00074	0.00090 J
	Combined Radium - 226/228	pCi/l	0.916 U	1.06 U	1.08 U	1.03 U	1.87	2.79	1.14	1.02 U	3.44
	Selenium	mg/l	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
	Thallium	mg/l	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018

Notes:
Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III
Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV

Acronyms and Abbreviations:
mg/L = milligrams per liter
pCi/L = picoCuries per liter
< = Analyte was not detected above the laboratory method detection limit (MDL)
J: Estimated concentration above the method detection limit and below the reporting limit.
U: the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualifited by the laboratory as estimated.

Table 6b
Upgradient Groundwater Analytical Data - August 2023
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - AP-1

Analyte		Units	GWA-2	YGWA-14S	YGWA-17S	YGWA-18I	YGWA-18S	YGWA-20S	YGWA-21I	YGWA-30I	YGWA-39
			8/15/2023	8/15/2023	8/15/2023	8/15/2023	8/15/2023	8/15/2023	8/15/2023	8/16/2023	8/15/2023
Appendix III	pH	SU	5.30	5.03	5.54	5.82	5.20	7.00	6.84	5.55	5.78
	Boron	mg/l	< 0.043	0.017 J	< 0.043	< 0.043	< 0.0086	< 0.043	0.046 J	< 0.043	0.15 J
	Calcium	mg/l	20.3	1.3	2.9	5.1	0.80 J	2.2	6.1	1.4	17.2
	Chloride	mg/l	5.6	4.1	11.6	7.3	6.7	2.8	2.3	1.5	4.5
	Fluoride	mg/l	0.065 J	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.061 J	< 0.050	< 0.050
	Sulfate	mg/l	74.2	6.0	4.6	0.51 J	0.88 J	< 0.50	4.1	0.90 J	7.6
	Total Dissolved Solids	mg/l	230	69.0	74.0	96.0	81.0	62.0	126	48.0	225
Appendix IV	Antimony	mg/l	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012
	Arsenic	mg/l	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037
	Barium	mg/l	0.030	0.0079	0.016	0.020	0.012	0.012	0.0075	0.0066	0.031
	Beryllium	mg/l	< 0.00027	0.00018 J	< 0.00027	< 0.00027	0.000057 J	< 0.00027	< 0.00027	< 0.00027	< 0.00027
	Cadmium	mg/l	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011
	Chromium	mg/l	< 0.0011	< 0.0011	< 0.0011	< 0.0011	0.0013 J	< 0.0011	< 0.0011	< 0.0011	< 0.0011
	Cobalt	mg/l	0.031	< 0.00039	< 0.00039	< 0.00039	< 0.00039	< 0.00039	0.011	0.0028 J	0.00072 J
	Lead	mg/l	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012
	Lithium	mg/l	< 0.0036	< 0.00073	< 0.0036	< 0.0036	0.00077 J	< 0.0036	0.0062 J	< 0.0036	0.0064 J
	Mercury	mg/l	< 0.00013	0.00016 J	< 0.00013	0.00014 J	0.00015 J	< 0.00013	< 0.00013	< 0.00013	< 0.00013
	Molybdenum	mg/l	< 0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074	0.0061 J
	Combined Radium - 226/228	pCi/l	0.916 U	0.924 U	1.23 U	1.11 U	1.04 U	1.29 U	1.68	1.37 U	1.17 U
	Selenium	mg/l	< 0.0014	0.0014 J	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
	Thallium	mg/l	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018

Notes:
Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III
Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV

Acronyms and Abbreviations:
mg/L = milligrams per liter
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U: the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualifited by the laboratory as estimated.

Table 6b
Upgradient Groundwater Analytical Data - August 2023
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - AP-1

Analyte		Units	GWA-2	YGWA-40	YGWA-47
			8/15/2023	8/15/2023	8/15/2023
Appendix III	pH	SU	5.30	5.00	5.69
	Boron	mg/l	< 0.043	0.052 J	< 0.043
	Calcium	mg/l	20.3	5.3	9.6
	Chloride	mg/l	5.6	5.6	3.5
	Fluoride	mg/l	0.065 J	< 0.050	< 0.050
	Sulfate	mg/l	74.2	16.4	47.7
	Total Dissolved Solids	mg/l	230	83.0	186
Appendix IV	Antimony	mg/l	< 0.0012	< 0.0012	< 0.0012
	Arsenic	mg/l	< 0.0037	< 0.0037	< 0.0037
	Barium	mg/l	0.030	0.034	0.032
	Beryllium	mg/l	< 0.00027	< 0.00027	< 0.00027
	Cadmium	mg/l	< 0.00011	< 0.00011	< 0.00011
	Chromium	mg/l	< 0.0011	< 0.0011	< 0.0011
	Cobalt	mg/l	0.031	< 0.00039	0.00072 J
	Lead	mg/l	< 0.00012	< 0.00012	< 0.00012
	Lithium	mg/l	< 0.0036	< 0.0036	0.0040 J
	Mercury	mg/l	< 0.00013	0.00037	0.00014 J
	Molybdenum	mg/l	< 0.00074	< 0.00074	< 0.00074
	Combined Radium - 226/228	pCi/l	0.916 U	1.18 U	1.04 U
	Selenium	mg/l	< 0.0014	< 0.0014	< 0.0014
	Thallium	mg/l	< 0.00018	< 0.00018	< 0.00018

Notes:
Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III
Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV

Acronyms and Abbreviations:
mg/L = milligrams per liter
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J: Estimated concentration above the method detection limit and below the reporting limit.
U: the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualifited by the laboratory as estimated.

Table 7
Background Levels and Groundwater Protection Standards
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - AP-1

Constituent	Units	Background [1]	GWPS
August 2023			
Antimony	mg/L	0.0047	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.21	2
Beryllium	mg/L	0.0011	0.004
Cadmium	mg/L	0.00063	0.005
Chromium	mg/L	0.0093	0.100
Cobalt	mg/L	0.035	0.035 [2]
Fluoride	mg/L	0.68	4
Lead	mg/L	0.0013	0.015
Lithium	mg/L	0.03	0.04
Mercury	mg/L	0.00064	0.002
Molybdenum	mg/L	0.014	0.1
Selenium	mg/L	0.005	0.05
Thallium	mg/L	0.001	0.002
Combined Radium - 226/228	pCi/L	6.92	6.92 [2]

Notes:

1. Site background: Tolerance limits calculated from pooled upgradient well data.

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

Acronyms and Abbreviations:

GWPS = Groundwater Protection Standard per 40 CFR §257.95(h).
CFR = Code of Federal Regulations
MCL = Maximum Contaminant Level
mg/L = millgrams per liter
pCi/L = picocuries per liter

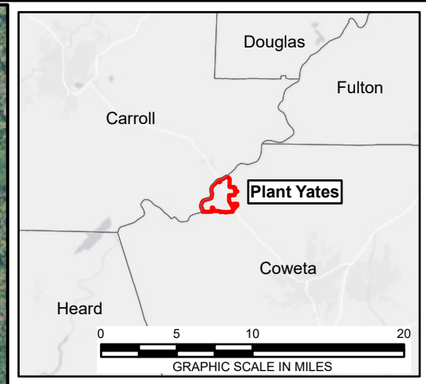
Figures

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

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 84°52'20"W



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- PERMITTED UNIT BOUNDARY

NOTE:
AERIAL IMAGE SOURCES: JULY 17, 2023 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2021 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
2023 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
PZ-06D
YGWA-6S
PZ-48
YGWC-26S
YGWC-26I
AP-2 WEST
YGWC-27S
YGWC-27I
ASH POND 2
FORMER ASH POND A
YGWC-49
YGWC-28I
YGWC-28S
YGWC-29IA
YGWC-24SB
PZ-24IB
PZ-25I
PZ-25S
YGWC-36A
YAMW-1
PZ-35
ASH POND B
YGWA-30I
AP-2 AMAX COVE
PZ-31S
YGWC-50
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-1S
PZ-01S
YGWA-1D
YAMW-3
YAMW-2
YGWC-42
YAMW-4
ASH POND 3
EAST COVE
YGWC-41
PZ-37D
PZ-52D
PZ-37
YGWA-3I
PZ-03S
YGWA-3D
PZ-53D
YGWC-23S
YGWA-2I
YGWC-38
YAMW-5
ASH MANAGEMENT AREA
YGWA-40
YGWA-39
YGWA-21I
YGWA-20S
SOUTH COVE
PZ-04S
YGWA-4I
YGWA-5I
PZ-05S
YGWA-5D

LEGEND

- SAPROLITE DETECTION MONITORING WELL LOCATION
- TRANSITION DETECTION MONITORING WELL LOCATION
- BEDROCK DETECTION MONITORING WELL LOCATION
- SAPROLITE ASSESSMENT WELL/PIEZOMETER
- TRANSITION ASSESSMENT WELL/PIEZOMETER
- BEDROCK ASSESSMENT WELL/PIEZOMETER
- PERMITTED UNIT BOUNDARY
- AREA WHERE ASH HAS BEEN CERTIFIED REMOVED AS OF 2/28/2024

NOTE:
AERIAL IMAGE SOURCES: JULY 17, 2023 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2021 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
2023 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

LEGEND

- TRANSITION DETECTION MONITORING WELL LOCATION
- BEDROCK DETECTION MONITORING WELL LOCATION
- SAPROLITE ASSESSMENT WELL/ PIEZOMETER
- TRANSITION ASSESSMENT WELL/ PIEZOMETER
- BEDROCK ASSESSMENT WELL/ PIEZOMETER
- PERMITTED UNIT BOUNDARY

NOTE:
AERIAL IMAGE SOURCES: JULY 17, 2023 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2021 IMAGERY.

0 112.5 225 450

GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

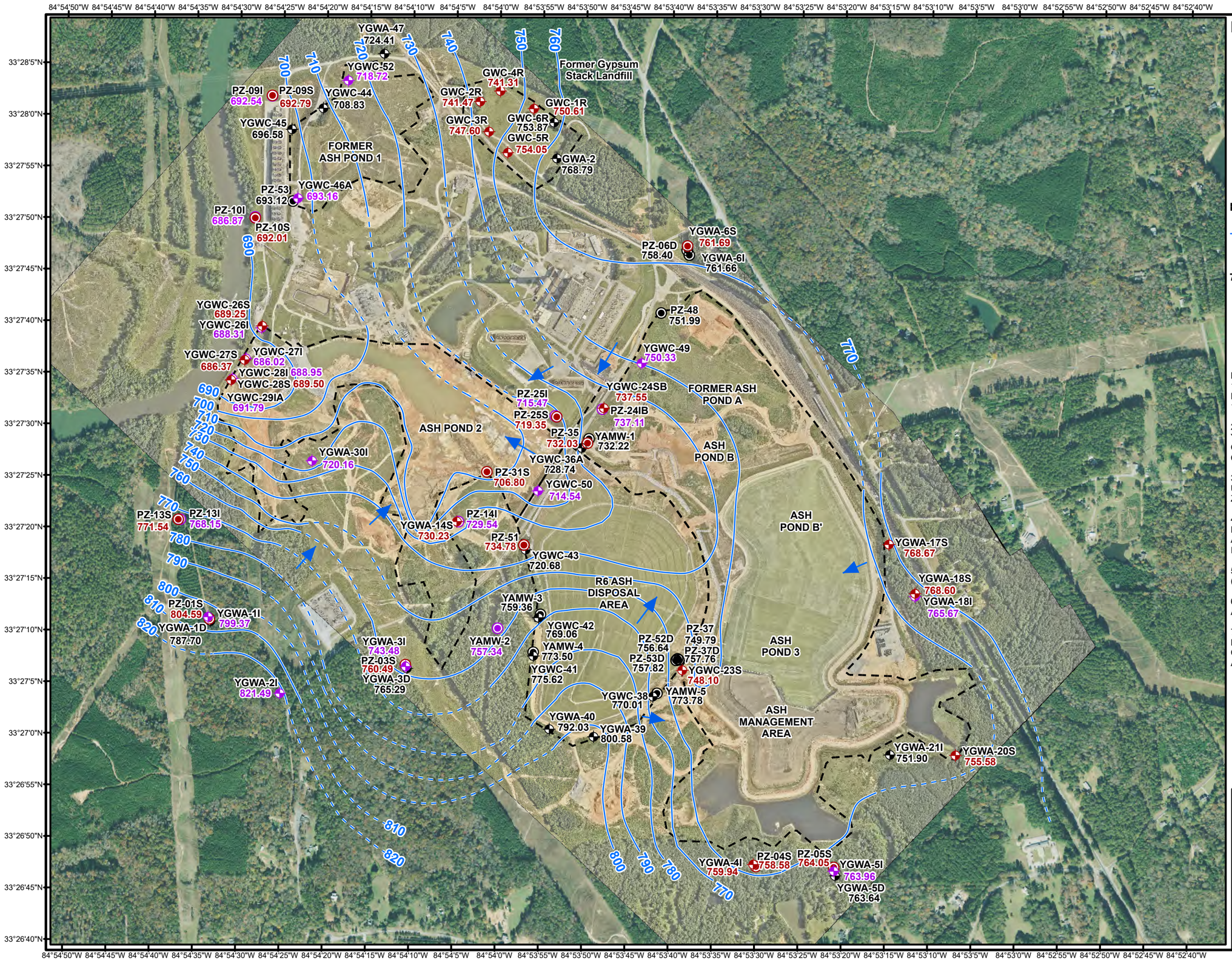
PLANT YATES AP-1
NEWNAN, GA

2023 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

WELL LOCATION MAP

ARCADIS

FIGURE
3



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
- APPROXIMATE POTENTIOMETRIC CONTOUR (FEET) DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- 757.11 GROUNDWATER ELEVATION (FEET)

GEORGIA REGISTERED No. PE027801 PROFESSIONAL ENGINEER

NOTES:

1. SHALLOW GROUNDWATER ELEVATIONS ARE DERIVED FROM SOIL COMPRISED OF SAPROLITE, RANGING FROM 15 - 60 FEET BELOW GROUND SURFACE.

2. BEDROCK WELLS YGWA-40, YGWA-39, YGWC-38, YGWC-41, YGWC-42 USED FOR CONTOURING. ALL OTHER BEDROCK WELLS NOT USED TO CREATE CONTOURS.

3. SAPROLITE WELL GROUNDWATER ELEVATIONS WERE USED FOR CONTOURING FOR SAPROLITE/TRANSITION ZONE/BEDROCK WELL CLUSTER LOCATIONS.

4. AERIAL IMAGE SOURCES: JULY 17, 2023 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2021 IMAGERY.

5. ELEVATION IS PRESENTED IN U.S. SURVEY FEET (NAVD 1988).

6. GROUNDWATER ELEVATIONS COLLECTED ON AUGUST 14, 2023.

7.YGWC-28S AND YGWC-28I WERE INACCESSIBLE DURING THE GAUGING EVENT DUE TO SURROUNDING CONSTRUCTION ACTIVITIES AND RAILINGS FOR WELL ACCESS WELL HAD NOT BEEN CONSTRUCTED.

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

2023 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

SITEWIDE GROUNDWATER ELEVATION MAP AUGUST 2023

ARCADIS

FIGURE **4**

LEGEND

- TRANSITION DETECTION MONITORING WELL LOCATION
- BEDROCK DETECTION MONITORING WELL LOCATION
- SAPROLITE ASSESSMENT WELL/ PIEZOMETER
- TRANSITION ASSESSMENT WELL/ PIEZOMETER
- BEDROCK ASSESSMENT WELL/ PIEZOMETER
- PERMITTED UNIT BOUNDARY
- APPROXIMATE POTENTIOMETRIC CONTOUR (FEET) DASHED WHERE INFERRED

708.94 GROUNDWATER ELEVATION (FEET)

GEORGIA REGISTERED No. PE027801 PROFESSIONAL ENGINEER

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 17, 2023 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2021 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

2023 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP, AUGUST 2023

ARCADIS

FIGURE **5**

Appendix A

Laboratory Analytical and Data Validation Reports

Georgia Power Co. – Plant Yates

Data Review Report

Metals, General Chemistry, and Radium Analyses

SDGs #92683137 and 92683138

Analyses Performed By:
Pace Analytical Services – Asheville, North Carolina
Pace Analytical Services – Peachtree Corners, Georgia
Pace Analytical Services – Greensburg, Pennsylvania

Report #51401R
Review Level: Tier II
Project: 30143607.3B

Summary

This Data Review Report summarizes the review of Sample Delivery Groups (SDGs) #92683137 and 92683138 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
YAT-YGWC-52	92683137001 92683138001	Water	8/15/2023		X	X	X
YAT-YGWC-44	92683137002 92683138002	Water	8/15/2023		X	X	X
YAT-YGWC-45	92683137003 92683138003	Water	8/15/2023		X	X	X
YAT-YGWC-46A	92683137004 92683138004	Water	8/15/2023		X	X	X
YAT-AP1-FD-1	92683137005 92683138005	Water	8/15/2032	YAT-YGWC-46A	X	X	X
YAT-AP1-EB-1	92683137006 92683138006	Water	8/15/2023		X	X	X
YAT-AP1-FB-1	92683137007 92683138007	Water	8/15/2023		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.

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) SM2540C; and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA 542-R-20-006, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, October 2004, as appropriate).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
  - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
  - E The reported value is estimated due to the presence of interference.
  - N Spiked sample recovery is not within control limits.
  - * Duplicate analysis is not within control limits.
- Validation Qualifiers
  - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
  - UB Analyte considered non-detect at the listed value due to associated blank contamination.
  - R The sample results are rejected.

Two facts should be noted by all data users. First, the “R” flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. “R” values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Metals Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010D/6020B	Water	180 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
YAT-YGWC-52	Boron (EB)	Detected sample results <RL and <BAL	“UB” at RL

Notes:
EB = Equipment blank
RL = Reporting limit

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 YAT-YGWC-52 in association with SW-846 6020B analysis exhibited recoveries within the control limits.

MS/MSD analysis was not performed using a sample from this SDG in association with SW846 6010D and SW-846 7470A 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 6020B. 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 7470A 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
YAT-YGWC-46A / YAT-AP1-FD-1	Calcium	111	109	1.8%
	Barium	0.040	0.039	2.5%
	Boron	2.1	2.0	4.9%
	Cobalt	0.0012 J	0.0011 J	AC
	Lithium	0.012 J	0.011 J	
	Molybdenum	0.0031 J	0.0030 J	

Note:
AC = Acceptable

The differences in the results between the parent sample YAT-YGWC-46A and field duplicate sample YAT-AP1-FD-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
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.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
YAT-YGWC-52	TDS (EB)	Detected sample results >RL and <BAL	“UB” at detected sample result

Notes:
FB = Field blank
RL = Reporting limit

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 YAT-YGWC-45 in association with anions analysis exhibited recoveries within the control limits.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

The laboratory duplicate analysis performed using sample YAT-YGWC-45 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 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
YAT-YGWC-46A / YAT-AP1-FD-1	Total Dissolved Solids	945	964	2.0%
	Chloride	32.2	32.4	0.6%
	Fluoride	0.12	0.11	AC
	Sulfate	419	423	1.0%

Note:
AC = Acceptable

The differences in the results between the parent sample YAT-YGWC-46A and field duplicate sample YAT-AP1-FD-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: 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 minimum detectable concentration (MDC).

For blanks to be considered not applicable, verify net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria. If either of these criteria is true, the blank is considered not suspect of contamination (or non-detect).

1. Is the blank result less than the uncertainty and less than the MDC?
2. Does the blank have an uncertainty greater than the result (or indistinguishable from background) or does the blank result fall between its uncertainty and its MDC?

If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used in determining the effect of possible blank contamination on the sample results:

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

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-226 was detected in the method blanks, however, the activity was measured as less than the uncertainty and MDC. Hence, the blank results are considered non-detect and no qualification of the results was required.

Radium-228 was detected in the field blank YAT-AP1-FB-1 at an activity greater than the uncertainty and MDC. The NAD was calculated for each sample. The Radium-228 results in samples YAT-YGWC-44, YAT-YGWC-46A, and YAT-AP1-FD-1 were qualified as "J" since the NAD was less than 1.96. No qualifiers were assigned to the Radium-228 results in samples YAT-YGWC-52 and YAT-YGWC-45 since the activities were less than the MDC.

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.

The laboratory duplicate analysis performed on sample location YAT-YGWC-52 in association with SW-846 9315 analysis exhibited acceptable difference between the results.

Laboratory duplicate analysis was not performed using a sample from this SDG in association with SW-846 8320 analysis.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. There are no specific review criteria for radiological field replicate analyses comparability. The degree of agreement between these replicates is to be used in conjunction with all of the remaining quality control results as an aid in the decision as to the overall quality of the data. Data are not to be qualified due to field replicates alone. To determine the level of agreement between the replicates, the following guidelines have been established:

Data should be considered in agreement if results are within a factor of four of each other. Data between a factor of four and five of each other should be considered as a minor discrepancy and data greater than a factor of five should be considered a major discrepancy.

The field duplicate sample results are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-46A / AP-1-DUP-1	Radium-226	0.640 ± 0.249	0.538 ± 0.222	AC
	Radium-228	1.28 ± 0.522	1.04 ± 0.466	
	Total Radium	1.92 ± 0.771	1.58 ± 0.688	

Note:
AC = Acceptable

The differences in the results between the parent sample YGWC-46A and field duplicate sample AP-DUP-1 were acceptable.

5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to 110% is applied to each sample spiked with either a carrier and/or a tracer.

The tracer and carrier analyses exhibited recoveries within the control limits.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 60% to 135%. In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma.

The numerical performance indicator for a laboratory control sample is calculated by:

$$Z_{LCS} = \frac{x - c}{\sqrt{u^2(x) + u^2(c)}}$$

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

$u^2(x)$ = combined standard uncertainty of the result squared.

$u^2(c)$ = combined standard uncertainty of the LCS value squared.

LCS performance is acceptable when the numerical performance indicator calculation yields a value between ±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:

- YAT-YGWC-45 – Radium-228
- YAT-AP1-FB-1 – Radium-226 and Total Radium
- YAT-YGWC-52 and YAT-AP1-EB-1 – Radium-226, Radium-228, and total Radium

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for Radiologicals

Radiologicals: SW-846 9315/9320	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
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: October 2, 2023

PEER REVIEW: Joseph C. Houser

DATE: October 19, 2023

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:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates AP-1	Pace Project Manager:	Bonnie Vang
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: State / Location: Georgia

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	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	Residual Chlorine (Y/N)	926831137
1	YAT-YGWC-52	WT	G	8/15/23	1123	--	--		6	2		4						X	X	X	X			001
2	YAT-YGWC-44	WT	G	8/15/23	1327	--	--		6	2		4						X	X	X	X			002
3	YAT-YGWC-45	WT	G	8/15/23	1505	--	--		6	2		4						X	X	X	X			003
4	YAT-YGWC-46A	WT	G	8/15/23	1607	--	--		6	2		3						X	X	X	X			004
5	YAT-AP1-FD-1	WT	G	8/15/23	--	--	--		6	2		4						X	X	X	X			005
6	YAT-AP1-EB-1	WT	G	8/15/23	1710	--	--		6	2		4						X	X	X	X			006
7	YAT-AP1-FB-1	WT	G	8/15/23	1350	--	--		6	2		4						X	X	X	X			007
8						--	--																	
9						--	--																	
10						--	--																	
11						--	--																	
12						--	--																	

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)	Mark Chest /Arcadis	8/16/23	0907	Ryan William /Pace	8/16/23	0907	
App III Metals: Boron 6020B, Ca 6010D	Ryan William /Pace	8/16/23	1115	Charles Hardin	8/16/23	1115	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).							

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	(Arcadis) - Mark Chest					
SIGNATURE of SAMPLER:	(Arcadis) - Mark Chest	DATE Signed: 8/16/23				

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92683137	YAT-YGWC-52	SW846 6020B	Boron	0.040	mg/L	UB	Blank contamination
		SM2540C	TDS	267	mg/L	UB	Blank contamination
92683138	YAT-YGWC-44	SW846 9320	Radium-228	0.816 +/- 0.426	pCi/L	J	Blank contamination
	YAT-YGWC-46A	SW846 9320	Radium-228	1.28 +/- 0.522	pCi/L	J	Blank contamination
	YAT-AP1-FD-1	SW846 9320	Radium-228	1.04 +/- 0.466	pCi/L	J	Blank contamination

Abbreviations:

mg/L = milligrams per liter

pCi/L = picoCuries per liter

Qualifiers:

J = estimated result

UB = not detected due to blank contamination

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

August 31, 2023

Lauren Hartley
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Yates AP-1
Pace Project No.: 92683137

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on August 16, 2023. 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 - Peachtree Corners, GA

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Geoffrey Gay, Arcadis-ATL
Laura Midkiff, Southern Company
Alex Simpson, Arcadis
Becky Steever, Arcadis
Jessica Ware, Arcadis
Albert Zumbuhl, Arcadis

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: Plant Yates AP-1
Pace Project No.: 92683137

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

Pace Analytical Services, LLC
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SAMPLE SUMMARY

Project: Plant Yates AP-1
Pace Project No.: 92683137

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92683137001	**YAT-YGWC-52**	Water	08/15/23 11:23	08/16/23 09:07
92683137002	**YAT-YGWC-44**	Water	08/15/23 13:27	08/16/23 09:07
92683137003	**YAT-YGWC-45**	Water	08/15/23 15:05	08/16/23 09:07
92683137004	**YAT-YGWC-46A**	Water	08/15/23 16:07	08/16/23 09:07
92683137005	**YAT-AP1-FD-1**	Water	08/15/23 00:00	08/16/23 09:07
92683137006	**YAT-AP1-EB-1**	Water	08/15/23 17:10	08/16/23 09:07
92683137007	**YAT-AP1-FB-1**	Water	08/15/23 13:50	08/16/23 09:07

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Plant Yates AP-1
Pace Project No.: 92683137

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92683137001	**YAT-YGWC-52**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683137002	**YAT-YGWC-44**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683137003	**YAT-YGWC-45**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683137004	**YAT-YGWC-46A**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683137005	**YAT-AP1-FD-1**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683137006	**YAT-AP1-EB-1**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683137007	**YAT-AP1-FB-1**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Plant Yates AP-1
Pace Project No.: 92683137

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683137001	**YAT-YGWC-52**					
EPA 6010D	Calcium	34.6	mg/L	1.0	08/28/23 22:40	
EPA 6020B	Barium	0.019	mg/L	0.0050	08/29/23 18:02	
EPA 6020B	Boron	0.014J	mg/L	0.040	08/29/23 18:02	
EPA 6020B	Cobalt	0.0017J	mg/L	0.0050	08/29/23 18:02	
EPA 6020B	Lithium	0.0040J	mg/L	0.030	08/29/23 18:02	
SM 2540C-2015	Total Dissolved Solids	267	mg/L	25.0	08/21/23 13:17	
EPA 300.0 Rev 2.1 1993	Chloride	3.0	mg/L	1.0	08/19/23 03:16	
EPA 300.0 Rev 2.1 1993	Sulfate	96.5	mg/L	2.0	08/19/23 10:27	
92683137002	**YAT-YGWC-44**					
EPA 6010D	Calcium	30.0	mg/L	1.0	08/28/23 22:46	
EPA 6020B	Antimony	0.0023J	mg/L	0.0030	08/29/23 18:25	
EPA 6020B	Barium	0.084	mg/L	0.0050	08/29/23 18:25	
EPA 6020B	Boron	0.60	mg/L	0.040	08/29/23 18:25	
EPA 6020B	Cobalt	0.00084J	mg/L	0.0050	08/29/23 18:25	
EPA 6020B	Lithium	0.013J	mg/L	0.030	08/29/23 18:25	
SM 2540C-2015	Total Dissolved Solids	319	mg/L	25.0	08/21/23 13:17	
EPA 300.0 Rev 2.1 1993	Chloride	13.4	mg/L	1.0	08/19/23 03:30	
EPA 300.0 Rev 2.1 1993	Sulfate	113	mg/L	2.0	08/19/23 10:42	
92683137003	**YAT-YGWC-45**					
EPA 6010D	Calcium	46.3	mg/L	1.0	08/28/23 22:51	
EPA 6020B	Barium	0.049	mg/L	0.0050	08/29/23 18:31	
EPA 6020B	Boron	0.36	mg/L	0.040	08/29/23 18:31	
EPA 6020B	Cobalt	0.00053J	mg/L	0.0050	08/29/23 18:31	
EPA 6020B	Lithium	0.012J	mg/L	0.030	08/29/23 18:31	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	08/29/23 18:31	
SM 2540C-2015	Total Dissolved Solids	404	mg/L	25.0	08/21/23 17:35	
EPA 300.0 Rev 2.1 1993	Chloride	5.6	mg/L	1.0	08/19/23 04:13	
EPA 300.0 Rev 2.1 1993	Fluoride	0.070J	mg/L	0.10	08/19/23 04:13	
EPA 300.0 Rev 2.1 1993	Sulfate	154	mg/L	3.0	08/19/23 10:57	M1
92683137004	**YAT-YGWC-46A**					
EPA 6010D	Calcium	111	mg/L	1.0	08/28/23 23:06	
EPA 6020B	Barium	0.040	mg/L	0.0050	08/29/23 18:37	
EPA 6020B	Boron	2.1	mg/L	0.040	08/29/23 18:37	
EPA 6020B	Cobalt	0.0012J	mg/L	0.0050	08/29/23 18:37	
EPA 6020B	Lithium	0.012J	mg/L	0.030	08/29/23 18:37	
EPA 6020B	Molybdenum	0.0031J	mg/L	0.010	08/29/23 18:37	
SM 2540C-2015	Total Dissolved Solids	945	mg/L	25.0	08/21/23 17:35	
EPA 300.0 Rev 2.1 1993	Chloride	32.2	mg/L	1.0	08/19/23 04:57	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	08/19/23 04:57	
EPA 300.0 Rev 2.1 1993	Sulfate	419	mg/L	9.0	08/19/23 11:39	
92683137005	**YAT-AP1-FD-1**					
EPA 6010D	Calcium	109	mg/L	1.0	08/28/23 23:11	
EPA 6020B	Barium	0.039	mg/L	0.0050	08/29/23 19:01	
EPA 6020B	Boron	2.0	mg/L	0.040	08/29/23 19:01	
EPA 6020B	Cobalt	0.0011J	mg/L	0.0050	08/29/23 19:01	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Plant Yates AP-1
Pace Project No.: 92683137

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683137005	**YAT-AP1-FD-1**					
EPA 6020B	Lithium	0.011J	mg/L	0.030	08/29/23 19:01	
EPA 6020B	Molybdenum	0.0030J	mg/L	0.010	08/29/23 19:01	
SM 2540C-2015	Total Dissolved Solids	964	mg/L	25.0	08/21/23 17:35	
EPA 300.0 Rev 2.1 1993	Chloride	32.4	mg/L	1.0	08/19/23 05:11	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	08/19/23 05:11	
EPA 300.0 Rev 2.1 1993	Sulfate	423	mg/L	9.0	08/19/23 11:54	
92683137006	**YAT-AP1-EB-1**					
EPA 6020B	Boron	0.016J	mg/L	0.040	08/29/23 19:07	
92683137007	**YAT-AP1-FB-1**					
SM 2540C-2015	Total Dissolved Solids	57.0	mg/L	25.0	08/21/23 17:36	

Pace Analytical Services, LLC
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(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates AP-1
Pace Project No.: 92683137

Sample: YAT-YGWC-52 **Lab ID: 92683137001** Collected: 08/15/23 11:23 Received: 08/16/23 09:07 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	**34.6**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:40	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	0.0012	1	08/29/23 11:36	08/29/23 18:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/29/23 11:36	08/29/23 18:02	7440-38-2	
Barium	**0.019**	mg/L	0.0050	0.00067	1	08/29/23 11:36	08/29/23 18:02	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/29/23 11:36	08/29/23 18:02	7440-41-7	
Boron	**0.014J**	mg/L	0.040	0.0086	1	08/29/23 11:36	08/29/23 18:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/29/23 11:36	08/29/23 18:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/29/23 11:36	08/29/23 18:02	7440-47-3	
Cobalt	**0.0017J**	mg/L	0.0050	0.00039	1	08/29/23 11:36	08/29/23 18:02	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/29/23 11:36	08/29/23 18:02	7439-92-1	
Lithium	**0.0040J**	mg/L	0.030	0.00073	1	08/29/23 11:36	08/29/23 18:02	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/29/23 11:36	08/29/23 18:02	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/29/23 11:36	08/29/23 18:02	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/29/23 11:36	08/29/23 18:02	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	0.00013	1	08/25/23 10:45	08/25/23 15:11	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**267**	mg/L	25.0	25.0	1		08/21/23 13:17		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.0**	mg/L	1.0	0.60	1		08/19/23 03:16	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 03:16	16984-48-8	
Sulfate	**96.5**	mg/L	2.0	1.0	2		08/19/23 10:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates AP-1
Pace Project No.: 92683137

Sample: YAT-YGWC-44 **Lab ID: 92683137002** Collected: 08/15/23 13:27 Received: 08/16/23 09:07 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	**30.0**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:46	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0023J**	mg/L	0.0030	0.0012	1	08/29/23 11:36	08/29/23 18:25	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/29/23 11:36	08/29/23 18:25	7440-38-2	
Barium	**0.084**	mg/L	0.0050	0.00067	1	08/29/23 11:36	08/29/23 18:25	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/29/23 11:36	08/29/23 18:25	7440-41-7	
Boron	**0.60**	mg/L	0.040	0.0086	1	08/29/23 11:36	08/29/23 18:25	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/29/23 11:36	08/29/23 18:25	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/29/23 11:36	08/29/23 18:25	7440-47-3	
Cobalt	**0.00084J**	mg/L	0.0050	0.00039	1	08/29/23 11:36	08/29/23 18:25	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/29/23 11:36	08/29/23 18:25	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.00073	1	08/29/23 11:36	08/29/23 18:25	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/29/23 11:36	08/29/23 18:25	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/29/23 11:36	08/29/23 18:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/29/23 11:36	08/29/23 18:25	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	0.00013	1	08/25/23 10:45	08/25/23 15:13	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**319**	mg/L	25.0	25.0	1		08/21/23 13:17		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**13.4**	mg/L	1.0	0.60	1		08/19/23 03:30	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 03:30	16984-48-8	
Sulfate	**113**	mg/L	2.0	1.0	2		08/19/23 10:42	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates AP-1
Pace Project No.: 92683137

Sample: YAT-YGWC-45 **Lab ID: 92683137003** Collected: 08/15/23 15:05 Received: 08/16/23 09:07 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	**46.3**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:51	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	0.0012	1	08/29/23 11:36	08/29/23 18:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/29/23 11:36	08/29/23 18:31	7440-38-2	
Barium	**0.049**	mg/L	0.0050	0.00067	1	08/29/23 11:36	08/29/23 18:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/29/23 11:36	08/29/23 18:31	7440-41-7	
Boron	**0.36**	mg/L	0.040	0.0086	1	08/29/23 11:36	08/29/23 18:31	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/29/23 11:36	08/29/23 18:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/29/23 11:36	08/29/23 18:31	7440-47-3	
Cobalt	**0.00053J**	mg/L	0.0050	0.00039	1	08/29/23 11:36	08/29/23 18:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/29/23 11:36	08/29/23 18:31	7439-92-1	
Lithium	**0.012J**	mg/L	0.030	0.00073	1	08/29/23 11:36	08/29/23 18:31	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00074	1	08/29/23 11:36	08/29/23 18:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/29/23 11:36	08/29/23 18:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/29/23 11:36	08/29/23 18:31	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	0.00013	1	08/25/23 10:45	08/25/23 15:16	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**404**	mg/L	25.0	25.0	1		08/21/23 17:35		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.6**	mg/L	1.0	0.60	1		08/19/23 04:13	16887-00-6	
Fluoride	**0.070J**	mg/L	0.10	0.050	1		08/19/23 04:13	16984-48-8	
Sulfate	**154**	mg/L	3.0	1.5	3		08/19/23 10:57	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Plant Yates AP-1
Pace Project No.: 92683137

Sample: YAT-YGWC-46A **Lab ID: 92683137004** Collected: 08/15/23 16:07 Received: 08/16/23 09:07 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	**111**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 23:06	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	0.0012	1	08/29/23 11:36	08/29/23 18:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/29/23 11:36	08/29/23 18:37	7440-38-2	
Barium	**0.040**	mg/L	0.0050	0.00067	1	08/29/23 11:36	08/29/23 18:37	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/29/23 11:36	08/29/23 18:37	7440-41-7	
Boron	**2.1**	mg/L	0.040	0.0086	1	08/29/23 11:36	08/29/23 18:37	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/29/23 11:36	08/29/23 18:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/29/23 11:36	08/29/23 18:37	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0050	0.00039	1	08/29/23 11:36	08/29/23 18:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/29/23 11:36	08/29/23 18:37	7439-92-1	
Lithium	**0.012J**	mg/L	0.030	0.00073	1	08/29/23 11:36	08/29/23 18:37	7439-93-2	
Molybdenum	**0.0031J**	mg/L	0.010	0.00074	1	08/29/23 11:36	08/29/23 18:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/29/23 11:36	08/29/23 18:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/29/23 11:36	08/29/23 18:37	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	0.00013	1	08/25/23 10:45	08/25/23 15:19	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**945**	mg/L	25.0	25.0	1		08/21/23 17:35		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**32.2**	mg/L	1.0	0.60	1		08/19/23 04:57	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		08/19/23 04:57	16984-48-8	
Sulfate	**419**	mg/L	9.0	4.5	9		08/19/23 11:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates AP-1
Pace Project No.: 92683137

Sample: YAT-AP1-FD-1 **Lab ID: 92683137005** Collected: 08/15/23 00:00 Received: 08/16/23 09:07 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	**109**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 23:11	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	0.0012	1	08/29/23 11:36	08/29/23 19:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/29/23 11:36	08/29/23 19:01	7440-38-2	
Barium	**0.039**	mg/L	0.0050	0.00067	1	08/29/23 11:36	08/29/23 19:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/29/23 11:36	08/29/23 19:01	7440-41-7	
Boron	**2.0**	mg/L	0.040	0.0086	1	08/29/23 11:36	08/29/23 19:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/29/23 11:36	08/29/23 19:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/29/23 11:36	08/29/23 19:01	7440-47-3	
Cobalt	**0.0011J**	mg/L	0.0050	0.00039	1	08/29/23 11:36	08/29/23 19:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/29/23 11:36	08/29/23 19:01	7439-92-1	
Lithium	**0.011J**	mg/L	0.030	0.00073	1	08/29/23 11:36	08/29/23 19:01	7439-93-2	
Molybdenum	**0.0030J**	mg/L	0.010	0.00074	1	08/29/23 11:36	08/29/23 19:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/29/23 11:36	08/29/23 19:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/29/23 11:36	08/29/23 19:01	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	0.00013	1	08/25/23 10:45	08/25/23 15:21	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**964**	mg/L	25.0	25.0	1		08/21/23 17:35		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**32.4**	mg/L	1.0	0.60	1		08/19/23 05:11	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		08/19/23 05:11	16984-48-8	
Sulfate	**423**	mg/L	9.0	4.5	9		08/19/23 11:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates AP-1
Pace Project No.: 92683137

Sample: YAT-AP1-EB-1 **Lab ID: 92683137006** Collected: 08/15/23 17:10 Received: 08/16/23 09:07 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	08/26/23 17:26	08/28/23 23:16	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	0.0012	1	08/29/23 11:36	08/29/23 19:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/29/23 11:36	08/29/23 19:07	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/29/23 11:36	08/29/23 19:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/29/23 11:36	08/29/23 19:07	7440-41-7	
Boron	**0.016J**	mg/L	0.040	0.0086	1	08/29/23 11:36	08/29/23 19:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/29/23 11:36	08/29/23 19:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/29/23 11:36	08/29/23 19:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/29/23 11:36	08/29/23 19:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/29/23 11:36	08/29/23 19:07	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/29/23 11:36	08/29/23 19:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/29/23 11:36	08/29/23 19:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/29/23 11:36	08/29/23 19:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/29/23 11:36	08/29/23 19:07	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	0.00013	1	08/25/23 10:45	08/25/23 15:24	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		08/21/23 17:35		
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		08/19/23 05:25	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 05:25	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/19/23 05:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates AP-1
Pace Project No.: 92683137

Sample: YAT-AP1-FB-1 **Lab ID: 92683137007** Collected: 08/15/23 13:50 Received: 08/16/23 09:07 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	08/26/23 17:26	08/28/23 23:22	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	0.0012	1	08/24/23 10:16	08/28/23 19:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/24/23 10:16	08/28/23 19:09	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/24/23 10:16	08/28/23 19:09	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/24/23 10:16	08/28/23 19:09	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/24/23 10:16	08/28/23 19:09	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/24/23 10:16	08/28/23 19:09	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/24/23 10:16	08/28/23 19:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/24/23 10:16	08/28/23 19:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/24/23 10:16	08/28/23 19:09	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/24/23 10:16	08/28/23 19:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/24/23 10:16	08/28/23 19:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/24/23 10:16	08/28/23 19:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/24/23 10:16	08/28/23 19:09	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	0.00013	1	08/25/23 10:45	08/25/23 15:26	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**57.0**	mg/L	25.0	25.0	1		08/21/23 17:36		
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		08/19/23 05:40	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 05:40	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/19/23 05:40	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
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QUALITY CONTROL DATA

Project: Plant Yates AP-1
Pace Project No.: 92683137

QC Batch: 795958
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683137001, 92683137002, 92683137003, 92683137004, 92683137005, 92683137006, 92683137007

METHOD BLANK: 4124394 Matrix: Water
Associated Lab Samples: 92683137001, 92683137002, 92683137003, 92683137004, 92683137005, 92683137006, 92683137007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/28/23 21:02	

LABORATORY CONTROL SAMPLE: 4124395

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4124396 4124397

Parameter	Units	92683124005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	7.8	1	1	8.9	9.1	106	127	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
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(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates AP-1
Pace Project No.: 92683137

QC Batch: 795635
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92683137007

METHOD BLANK: 4122455 Matrix: Water
Associated Lab Samples: 92683137007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/28/23 18:57	
Arsenic	mg/L	ND	0.0050	0.0037	08/28/23 18:57	
Barium	mg/L	ND	0.0050	0.00067	08/28/23 18:57	
Beryllium	mg/L	ND	0.00050	0.000054	08/28/23 18:57	
Boron	mg/L	ND	0.040	0.0086	08/28/23 18:57	
Cadmium	mg/L	ND	0.00050	0.00011	08/28/23 18:57	
Chromium	mg/L	ND	0.0050	0.0011	08/28/23 18:57	
Cobalt	mg/L	ND	0.0050	0.00039	08/28/23 18:57	
Lead	mg/L	ND	0.0010	0.00012	08/28/23 18:57	
Lithium	mg/L	ND	0.030	0.00073	08/28/23 18:57	
Molybdenum	mg/L	ND	0.010	0.00074	08/28/23 18:57	
Selenium	mg/L	ND	0.0050	0.0014	08/28/23 18:57	
Thallium	mg/L	ND	0.0010	0.00018	08/28/23 18:57	

LABORATORY CONTROL SAMPLE: 4122456

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	109	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.098	98	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4123340 4123341

Parameter	Units	92683383001 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	110	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates AP-1
Pace Project No.: 92683137

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4123340 4123341

Parameter	Units	92683383001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.21	0.1	0.1	0.30	0.30	90	91	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.093	0.093	93	93	75-125	0	20	
Boron	mg/L	2.1	1	1	3.0	2.9	84	78	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	103	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20	
Cobalt	mg/L	0.00080J	0.1	0.1	0.096	0.095	96	94	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.093	0.094	93	94	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	1	20	
Molybdenum	mg/L	0.00077J	0.1	0.1	0.097	0.10	96	99	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.094	92	94	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates AP-1
Pace Project No.: 92683137

QC Batch: 796162
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683137001, 92683137002, 92683137003, 92683137004, 92683137005, 92683137006

METHOD BLANK: 4125426 Matrix: Water
Associated Lab Samples: 92683137001, 92683137002, 92683137003, 92683137004, 92683137005, 92683137006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/29/23 17:50	
Arsenic	mg/L	ND	0.0050	0.0037	08/29/23 17:50	
Barium	mg/L	ND	0.0050	0.00067	08/29/23 17:50	
Beryllium	mg/L	ND	0.00050	0.000054	08/29/23 17:50	
Boron	mg/L	ND	0.040	0.0086	08/29/23 17:50	
Cadmium	mg/L	ND	0.00050	0.00011	08/29/23 17:50	
Chromium	mg/L	ND	0.0050	0.0011	08/29/23 17:50	
Cobalt	mg/L	ND	0.0050	0.00039	08/29/23 17:50	
Lead	mg/L	ND	0.0010	0.00012	08/29/23 17:50	
Lithium	mg/L	ND	0.030	0.00073	08/29/23 17:50	
Molybdenum	mg/L	ND	0.010	0.00074	08/29/23 17:50	
Selenium	mg/L	ND	0.0050	0.0014	08/29/23 17:50	
Thallium	mg/L	ND	0.0010	0.00018	08/29/23 17:50	

LABORATORY CONTROL SAMPLE: 4125427

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	106	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	1.0	102	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4125428 4125429

Parameter	Units	92683137001 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	109	106	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.099	105	97	75-125	8	20	

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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QUALITY CONTROL DATA

Project: Plant Yates AP-1
Pace Project No.: 92683137

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4125428 4125429

Parameter	Units	92683137001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.019	0.1	0.1	0.13	0.12	108	105	75-125	2	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.096	103	96	75-125	7	20	
Boron	mg/L	0.014J	1	1	1.1	0.98	105	97	75-125	8	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.099	103	99	75-125	4	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	106	99	75-125	7	20	
Cobalt	mg/L	0.0017J	0.1	0.1	0.11	0.10	107	99	75-125	8	20	
Lead	mg/L	ND	0.1	0.1	0.098	0.093	98	93	75-125	5	20	
Lithium	mg/L	0.0040J	0.1	0.1	0.11	0.099	104	95	75-125	9	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	107	103	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	105	100	75-125	5	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.090	96	90	75-125	6	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Yates AP-1
Pace Project No.: 92683137

QC Batch: 795928 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683137001, 92683137002, 92683137003, 92683137004, 92683137005, 92683137006, 92683137007

METHOD BLANK: 4124279 Matrix: Water
Associated Lab Samples: 92683137001, 92683137002, 92683137003, 92683137004, 92683137005, 92683137006, 92683137007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/25/23 14:18	

LABORATORY CONTROL SAMPLE: 4124280

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0022	86	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4124726 4124727

Parameter	Units	92683383001 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	0.0023	0.0023	92	91	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates AP-1
Pace Project No.: 92683137

QC Batch: 794901
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683137001, 92683137002

METHOD BLANK: 4118686 Matrix: Water
Associated Lab Samples: 92683137001, 92683137002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/21/23 13:08	

LABORATORY CONTROL SAMPLE: 4118687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	402	100	80-120	

SAMPLE DUPLICATE: 4118688

Parameter	Units	92683065001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	669	640	4	10	

SAMPLE DUPLICATE: 4118689

Parameter	Units	92683124010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	69.0	68.0	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Yates AP-1
Pace Project No.: 92683137

QC Batch: 794903 | Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683137003, 92683137004, 92683137005, 92683137006, 92683137007

METHOD BLANK: 4118696 Matrix: Water
Associated Lab Samples: 92683137003, 92683137004, 92683137005, 92683137006, 92683137007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/21/23 17:34	

LABORATORY CONTROL SAMPLE: 4118697

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	381	95	80-120	

SAMPLE DUPLICATE: 4118698

Parameter	Units	92683137003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	404	434	7	10	

SAMPLE DUPLICATE: 4118699

Parameter	Units	92683141011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	267	261	2	10	

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates AP-1
Pace Project No.: 92683137

QC Batch: 794488
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: 92683137001, 92683137002, 92683137003, 92683137004, 92683137005, 92683137006, 92683137007

METHOD BLANK: 4116660 Matrix: Water
Associated Lab Samples: 92683137001, 92683137002, 92683137003, 92683137004, 92683137005, 92683137006, 92683137007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/18/23 23:54	
Fluoride	mg/L	ND	0.10	0.050	08/18/23 23:54	
Sulfate	mg/L	ND	1.0	0.50	08/18/23 23:54	

LABORATORY CONTROL SAMPLE: 4116661

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.7	99	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	48.2	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116662 4116663

Parameter	Units	92683124010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.1	50	50	51.8	53.2	96	98	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.3	2.4	93	96	90-110	4	10	
Sulfate	mg/L	6.0	50	50	52.3	53.7	93	95	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116664 4116665

Parameter	Units	92683137003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.6	50	50	53.8	54.5	96	98	90-110	1	10	
Fluoride	mg/L	0.070J	2.5	2.5	2.3	2.4	91	93	90-110	2	10	
Sulfate	mg/L	154	50	50	194	194	79	79	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Yates AP-1
Pace Project No.: 92683137

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates AP-1
Pace Project No.: 92683137

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683137001	**YAT-YGWC-52**	EPA 3010A	795958	EPA 6010D	796217
92683137002	**YAT-YGWC-44**	EPA 3010A	795958	EPA 6010D	796217
92683137003	**YAT-YGWC-45**	EPA 3010A	795958	EPA 6010D	796217
92683137004	**YAT-YGWC-46A**	EPA 3010A	795958	EPA 6010D	796217
92683137005	**YAT-AP1-FD-1**	EPA 3010A	795958	EPA 6010D	796217
92683137006	**YAT-AP1-EB-1**	EPA 3010A	795958	EPA 6010D	796217
92683137007	**YAT-AP1-FB-1**	EPA 3010A	795958	EPA 6010D	796217
92683137001	**YAT-YGWC-52**	EPA 3005A	796162	EPA 6020B	796690
92683137002	**YAT-YGWC-44**	EPA 3005A	796162	EPA 6020B	796690
92683137003	**YAT-YGWC-45**	EPA 3005A	796162	EPA 6020B	796690
92683137004	**YAT-YGWC-46A**	EPA 3005A	796162	EPA 6020B	796690
92683137005	**YAT-AP1-FD-1**	EPA 3005A	796162	EPA 6020B	796690
92683137006	**YAT-AP1-EB-1**	EPA 3005A	796162	EPA 6020B	796690
92683137007	**YAT-AP1-FB-1**	EPA 3005A	795635	EPA 6020B	795763
92683137001	**YAT-YGWC-52**	EPA 7470A	795928	EPA 7470A	796015
92683137002	**YAT-YGWC-44**	EPA 7470A	795928	EPA 7470A	796015
92683137003	**YAT-YGWC-45**	EPA 7470A	795928	EPA 7470A	796015
92683137004	**YAT-YGWC-46A**	EPA 7470A	795928	EPA 7470A	796015
92683137005	**YAT-AP1-FD-1**	EPA 7470A	795928	EPA 7470A	796015
92683137006	**YAT-AP1-EB-1**	EPA 7470A	795928	EPA 7470A	796015
92683137007	**YAT-AP1-FB-1**	EPA 7470A	795928	EPA 7470A	796015
92683137001	**YAT-YGWC-52**	SM 2540C-2015	794901		
92683137002	**YAT-YGWC-44**	SM 2540C-2015	794901		
92683137003	**YAT-YGWC-45**	SM 2540C-2015	794903		
92683137004	**YAT-YGWC-46A**	SM 2540C-2015	794903		
92683137005	**YAT-AP1-FD-1**	SM 2540C-2015	794903		
92683137006	**YAT-AP1-EB-1**	SM 2540C-2015	794903		
92683137007	**YAT-AP1-FB-1**	SM 2540C-2015	794903		
92683137001	**YAT-YGWC-52**	EPA 300.0 Rev 2.1 1993	794488		
92683137002	**YAT-YGWC-44**	EPA 300.0 Rev 2.1 1993	794488		
92683137003	**YAT-YGWC-45**	EPA 300.0 Rev 2.1 1993	794488		
92683137004	**YAT-YGWC-46A**	EPA 300.0 Rev 2.1 1993	794488		
92683137005	**YAT-AP1-FD-1**	EPA 300.0 Rev 2.1 1993	794488		
92683137006	**YAT-AP1-EB-1**	EPA 300.0 Rev 2.1 1993	794488		
92683137007	**YAT-AP1-FB-1**	EPA 300.0 Rev 2.1 1993	794488		

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Off Power

Project #:

WO# : 92683137

92683137

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

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

Date/Initials Person Examining Contents: 8/16/23 DM

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: 2.3 Correction Factor: Add/Subtract (°C) 0.0

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

Cooler Temp Corrected (°C): 2.3

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

***Check all unpreserved Nitrates for chlorine

Project # WO#: 92683137

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
2		1	1			2																			2				
3		1	1			2																			2				
4		1	1			2																			2				
5		1	1			2																			2				
6		1	1			2																			2				
7		1	1			2																			2				
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 DENR 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:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates AP-1	Pace Project Manager:	Bonnie Vang
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: State / Location: Georgia

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	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	Residual Chlorine (Y/N)	92683137
1	YAT-YGWC-52	WT	G	8/15/23	1123	--	--		6	2		4						X	X	X	X			001
2	YAT-YGWC-44	WT	G	8/15/23	1327	--	--		6	2		4						X	X	X	X			002
3	YAT-YGWC-45	WT	G	8/15/23	1505	--	--		6	2		4						X	X	X	X			003
4	YAT-YGWC-46A	WT	G	8/15/23	1607	--	--		6	2		3						X	X	X	X			004
5	YAT-AP1-FD-1	WT	G	8/15/23	--	--	--		6	2		4						X	X	X	X			005
6	YAT-AP1-EB-1	WT	G	8/15/23	1710	--	--		6	2		4						X	X	X	X			006
7	YAT-AP1-FB-1	WT	G	8/15/23	1350	--	--		6	2		4						X	X	X	X			007
8						--	--																	
9						--	--																	
10						--	--																	
11						--	--																	
12						--	--																	

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)	Mark Chest /Arcadis	8/16/23	0907	Ryan William /Pace	8/16/23	0907	
App III Metals: Boron 6020B, Ca 6010D	Ryan William /Pace	8/16/23	1115	Charles Hardin	8/16/23	1115	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).							

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	(Arcadis) - Mark Chest					
SIGNATURE of SAMPLER:	(Arcadis) - Mark Chest	DATE Signed: 8/16/23				

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

September 12, 2023

Lauren Hartley
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on August 16, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Geoffrey Gay, Arcadis-ATL
Laura Midkiff, Southern Company
Alex Simpson, Arcadis
Becky Steever, Arcadis
Jessica Ware, Arcadis
Albert Zumbuhl, Arcadis

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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SAMPLE SUMMARY

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92683138001	**YAT-YGWC-52**	Water	08/15/23 11:23	08/16/23 09:07
92683138002	**YAT-YGWC-44**	Water	08/15/23 13:27	08/16/23 09:07
92683138003	**YAT-YGWC-45**	Water	08/15/23 15:05	08/16/23 09:07
92683138004	**YAT-YGWC-46A**	Water	08/15/23 16:07	08/16/23 09:07
92683138005	**YAT-AP1-FD-1**	Water	08/15/23 00:00	08/16/23 09:07
92683138006	**YAT-AP1-EB-1**	Water	08/15/23 17:10	08/16/23 09:07
92683138007	**YAT-AP1-FB-1**	Water	08/15/23 13:50	08/16/23 09:07

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SAMPLE ANALYTE COUNT

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92683138001	**YAT-YGWC-52**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683138002	**YAT-YGWC-44**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683138003	**YAT-YGWC-45**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683138004	**YAT-YGWC-46A**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683138005	**YAT-AP1-FD-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683138006	**YAT-AP1-EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683138007	**YAT-AP1-FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683138001	**YAT-YGWC-52**					
EPA 9315	Radium-226	0.119U ± 0.138 (0.288) C:94% T:NA	pCi/L		09/08/23 11:32	
EPA 9320	Radium-228	0.200U ± 0.359 (0.785) C:81% T:88%	pCi/L		09/06/23 12:40	
Total Radium Calculation	Total Radium	0.319U ± 0.497 (1.07)	pCi/L		09/08/23 17:23	
92683138002	**YAT-YGWC-44**					
EPA 9315	Radium-226	0.337 ± 0.177 (0.250) C:90% T:NA	pCi/L		09/08/23 11:34	
EPA 9320	Radium-228	0.816 ± 0.426 (0.764) C:81% T:87%	pCi/L		09/06/23 12:41	
Total Radium Calculation	Total Radium	1.15 ± 0.603 (1.01)	pCi/L		09/08/23 17:29	
92683138003	**YAT-YGWC-45**					
EPA 9315	Radium-226	0.677 ± 0.252 (0.280) C:83% T:NA	pCi/L		09/08/23 11:34	
EPA 9320	Radium-228	0.659U ± 0.395 (0.734) C:77% T:88%	pCi/L		09/06/23 12:41	
Total Radium Calculation	Total Radium	1.34 ± 0.647 (1.01)	pCi/L		09/08/23 17:29	
92683138004	**YAT-YGWC-46A**					
EPA 9315	Radium-226	0.640 ± 0.249 (0.290) C:82% T:NA	pCi/L		09/08/23 11:34	
EPA 9320	Radium-228	1.28 ± 0.522 (0.844) C:75% T:88%	pCi/L		09/06/23 12:41	
Total Radium Calculation	Total Radium	1.92 ± 0.771 (1.13)	pCi/L		09/08/23 17:29	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683138005	**YAT-AP1-FD-1**					
EPA 9315	Radium-226	0.538 ± 0.222 (0.245) C:82% T:NA	pCi/L		09/08/23 11:35	
EPA 9320	Radium-228	1.04 ± 0.466 (0.799) C:82% T:88%	pCi/L		09/06/23 12:41	
Total Radium Calculation	Total Radium	1.58 ± 0.688 (1.04)	pCi/L		09/08/23 17:29	
92683138006	**YAT-AP1-EB-1**					
EPA 9315	Radium-226	0.126U ± 0.133 (0.263) C:82% T:NA	pCi/L		09/08/23 11:35	
EPA 9320	Radium-228	0.504U ± 0.354 (0.690) C:83% T:93%	pCi/L		09/06/23 12:41	
Total Radium Calculation	Total Radium	0.630U ± 0.487 (0.953)	pCi/L		09/08/23 17:29	
92683138007	**YAT-AP1-FB-1**					
EPA 9315	Radium-226	0.145U ± 0.144 (0.283) C:80% T:NA	pCi/L		09/08/23 13:11	
EPA 9320	Radium-228	0.798 ± 0.396 (0.689) C:80% T:93%	pCi/L		09/06/23 12:41	
Total Radium Calculation	Total Radium	0.943U ± 0.540 (0.972)	pCi/L		09/08/23 17:29	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Sample: YAT-YGWC-52 **Lab ID: 92683138001** Collected: 08/15/23 11:23 Received: 08/16/23 09:07 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	**0.119U ± 0.138 (0.288) C:94% T:NA**	pCi/L	09/08/23 11:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.200U ± 0.359 (0.785) C:81% T:88%**	pCi/L	09/06/23 12:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.319U ± 0.497 (1.07)**	pCi/L	09/08/23 17:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Sample: YAT-YGWC-44 **Lab ID: 92683138002** Collected: 08/15/23 13:27 Received: 08/16/23 09:07 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	**0.337 ± 0.177 (0.250) C:90% T:NA**	pCi/L	09/08/23 11:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.816 ± 0.426 (0.764) C:81% T:87%**	pCi/L	09/06/23 12:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.15 ± 0.603 (1.01)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Sample: YAT-YGWC-45 **Lab ID: 92683138003** Collected: 08/15/23 15:05 Received: 08/16/23 09:07 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	**0.677 ± 0.252 (0.280) C:83% T:NA**	pCi/L	09/08/23 11:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.659U ± 0.395 (0.734) C:77% T:88%**	pCi/L	09/06/23 12:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.34 ± 0.647 (1.01)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Sample: YAT-YGWC-46A **Lab ID: 92683138004** Collected: 08/15/23 16:07 Received: 08/16/23 09:07 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	**0.640 ± 0.249 (0.290) C:82% T:NA**	pCi/L	09/08/23 11:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.28 ± 0.522 (0.844) C:75% T:88%**	pCi/L	09/06/23 12:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.92 ± 0.771 (1.13)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Sample: YAT-AP1-FD-1 **Lab ID: 92683138005** Collected: 08/15/23 00:00 Received: 08/16/23 09:07 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	**0.538 ± 0.222 (0.245) C:82% T:NA**	pCi/L	09/08/23 11:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.04 ± 0.466 (0.799) C:82% T:88%**	pCi/L	09/06/23 12:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.58 ± 0.688 (1.04)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Sample: YAT-AP1-EB-1 **Lab ID: 92683138006** Collected: 08/15/23 17:10 Received: 08/16/23 09:07 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	**0.126U ± 0.133 (0.263) C:82% T:NA**	pCi/L	09/08/23 11:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.504U ± 0.354 (0.690) C:83% T:93%**	pCi/L	09/06/23 12:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.630U ± 0.487 (0.953)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Sample: YAT-AP1-FB-1 **Lab ID: 92683138007** Collected: 08/15/23 13:50 Received: 08/16/23 09:07 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	**0.145U ± 0.144 (0.283) C:80% T:NA**	pCi/L	09/08/23 13:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.798 ± 0.396 (0.689) C:80% T:93%**	pCi/L	09/06/23 12:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.943U ± 0.540 (0.972)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

QC Batch: 611649
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683138002, 92683138003, 92683138004, 92683138005, 92683138006, 92683138007

METHOD BLANK: 2977146 Matrix: Water
Associated Lab Samples: 92683138002, 92683138003, 92683138004, 92683138005, 92683138006, 92683138007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.101 ± 0.125 (0.261) C:93% T:NA	pCi/L	09/08/23 11:33	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

QC Batch: 611584
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683138001, 92683138002, 92683138003, 92683138004, 92683138005, 92683138006, 92683138007

METHOD BLANK: 2976835
Matrix: Water
Associated Lab Samples: 92683138001, 92683138002, 92683138003, 92683138004, 92683138005, 92683138006, 92683138007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.100 ± 0.312 (0.703) C:75% T:95%	pCi/L	09/06/23 12:40	

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

QC Batch: 611647
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683138001

METHOD BLANK: 2977138 Matrix: Water
Associated Lab Samples: 92683138001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0931 ± 0.137 (0.301) C:88% T:NA	pCi/L	09/08/23 10:01	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates AP-1- RADs
Pace Project No.: 92683138

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683138001	**YAT-YGWC-52**	EPA 9315	611647		
92683138002	**YAT-YGWC-44**	EPA 9315	611649		
92683138003	**YAT-YGWC-45**	EPA 9315	611649		
92683138004	**YAT-YGWC-46A**	EPA 9315	611649		
92683138005	**YAT-AP1-FD-1**	EPA 9315	611649		
92683138006	**YAT-AP1-EB-1**	EPA 9315	611649		
92683138007	**YAT-AP1-FB-1**	EPA 9315	611649		
92683138001	**YAT-YGWC-52**	EPA 9320	611584		
92683138002	**YAT-YGWC-44**	EPA 9320	611584		
92683138003	**YAT-YGWC-45**	EPA 9320	611584		
92683138004	**YAT-YGWC-46A**	EPA 9320	611584		
92683138005	**YAT-AP1-FD-1**	EPA 9320	611584		
92683138006	**YAT-AP1-EB-1**	EPA 9320	611584		
92683138007	**YAT-AP1-FB-1**	EPA 9320	611584		
92683138001	**YAT-YGWC-52**	Total Radium Calculation	614331		
92683138002	**YAT-YGWC-44**	Total Radium Calculation	614334		
92683138003	**YAT-YGWC-45**	Total Radium Calculation	614334		
92683138004	**YAT-YGWC-46A**	Total Radium Calculation	614334		
92683138005	**YAT-AP1-FD-1**	Total Radium Calculation	614334		
92683138006	**YAT-AP1-EB-1**	Total Radium Calculation	614334		
92683138007	**YAT-AP1-FB-1**	Total Radium Calculation	614334		

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Gft Power

Project #: WO# : 92683138

92683138

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

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

Date/Initials Person Examining Contents: 8/16/23 DH

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: 2.3 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 2.3

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: _____

WO# : 92683138

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

Project #

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

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

***Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
2		1	1			2																			2				
3		1	1			2																			2				
4		1	1			2																			2				
5		1	1			2																			2				
6		1	1			2																			2				
7		1	1			2																			2				
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 DENR 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:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates AP-1	Pace Project Manager:	Bonnie Vang
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: | State / Location: Georgia

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	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	Residual Chlorine (Y/N)	
1	YAT-YGWC-52	WT	G	8/15/23	1123	--	--		6	2		4						X	X	X	X		926631360
2	YAT-YGWC-44	WT	G	8/15/23	1327	--	--		6	2		4						X	X	X	X		
3	YAT-YGWC-45	WT	G	8/15/23	1505	--	--		6	2		4						X	X	X	X		
4	YAT-YGWC-46A	WT	G	8/15/23	1607	--	--		6	2		3						X	X	X	X		
5	YAT-AP1-FD-1	WT	G	8/15/23	--	--	--		6	2		4						X	X	X	X		
6	YAT-AP1-EB-1	WT	G	8/15/23	1710	--	--		6	2		4						X	X	X	X		
7	YAT-AP1-FB-1	WT	G	8/15/23	1350	--	--		6	2		4						X	X	X	X		
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)	Mark Chest /Arcadis	8/16/23	0907	Ryan Willm /Pace	8/16/23	0907	
App III Metals: Boron 6020B, Ca 6010D	Ryan Willm /Pace	8/16/23	1115	Charles Hardin	8/16/23	1115	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).							

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	(Arcadis) - Mark Chest					
SIGNATURE of SAMPLER:	(Arcadis) -	DATE Signed: 8/16/23				

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-228
Analyst: JJS1
Date: 8/31/2023
Worklist: 75028
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2976835
MB concentration:	0.100
M/B 2 Sigma CSU:	0.312
MB MDC:	0.703
MB Numerical Performance Indicator:	0.63
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75028	LCSD75028
Count Date:	9/6/2023	9/6/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.931	39.931
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.820	0.817
Target Conc. (pCi/L, g, F):	4.871	4.885
Uncertainty (Calculated):	0.239	0.239
Result (pCi/L, g, F):	4.767	3.683
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.036	0.867
Numerical Performance Indicator:	-0.19	-2.62
Percent Recovery:	97.85%	75.39%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS75028	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75028	
Sample Result (pCi/L, g, F):	4.767	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.036	
Sample Duplicate Result (pCi/L, g, F):	3.683	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.867	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.573	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	25.93%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(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:

VAL
9/8/23

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/2/2023
Worklist:	75041
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2977138
MB concentration:	0.093
M/B 2 Sigma CSU:	0.137
MB MDC:	0.301
MB Numerical Performance Indicator:	1.33
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75041	LCSD75041
Count Date:	9/8/2023	9/8/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.013	24.013
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.509
Target Conc. (pCi/L, g, F):	4.723	4.719
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	6.089	5.435
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.073	0.974
Numerical Performance Indicator:	2.49	1.44
Percent Recovery:	128.92%	115.19%
Status vs Numerical Indicator:	Warning	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS75041	92683138001
Duplicate Sample I.D.	LCSD75041	92683138001DUP
Sample Result (pCi/L, g, F):	6.089	0.119
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.073	0.138
Sample Duplicate Result (pCi/L, g, F):	5.435	0.263
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.974	0.147
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.884	-1.390
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	11.25%	74.93%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% 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 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:

9/8/23

LAM 9/8/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/2/2023
Worklist:	75042
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2977146
MB concentration:	0.101
M/B 2 Sigma CSU:	0.125
MB MDC:	0.261
MB Numerical Performance Indicator:	1.59
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75042	LCSD75042
Count Date:	9/8/2023	9/8/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.013	24.013
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.503
Target Conc. (pCi/L, g, F):	4.790	4.775
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	6.088	6.235
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.071	1.103
Numerical Performance Indicator:	2.37	2.59
Percent Recovery:	127.10%	130.59%
Status vs Numerical Indicator:	Warning	Warning
Status vs Recovery:	N/A	N/A
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 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.:	LCS75042	92683140002
Duplicate Sample I.D.	LCSD75042	92683140002DUP
Sample Result (pCi/L, g, F):	6.088	0.160
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.071	0.135
Sample Duplicate Result (pCi/L, g, F):	6.235	0.280
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.103	0.167
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.187	-1.090
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.70%	54.18%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% 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 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:

9/8/23

LAM 9/8/23

Upgradient Wells

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

August 31, 2023

Lauren Hartley
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between August 16, 2023 and August 17, 2023. 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 - Peachtree Corners, GA

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Geoffrey Gay, Arcadis-ATL
Laura Midkiff, Southern Company
Alex Simpson, Arcadis
Becky Steever, Arcadis
Jessica Ware, Arcadis
Albert Zumbuhl, Arcadis

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CERTIFICATIONS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92683124001	**YAT-YGWA-1I**	Water	08/15/23 13:45	08/16/23 09:07
92683124002	**YAT-YGWA-1D**	Water	08/15/23 11:20	08/16/23 09:07
92683124003	**YAT-YGWA-2I**	Water	08/15/23 15:45	08/16/23 09:07
92683124004	**YAT-YGWA-3D**	Water	08/15/23 17:10	08/16/23 09:07
92683124005	**YAT-YGWA-4I**	Water	08/15/23 12:25	08/16/23 09:07
92683124006	**YAT-YGWA-5I**	Water	08/15/23 10:20	08/16/23 09:07
92683124007	**YAT-YGWA-5D**	Water	08/15/23 11:13	08/16/23 09:07
92683124008	**YAT-YGWA-18S**	Water	08/15/23 11:35	08/16/23 09:07
92683124009	**YAT-YGWA-18I**	Water	08/15/23 15:40	08/16/23 09:07
92683124010	**YAT-YGWA-14S**	Water	08/15/23 17:30	08/16/23 09:07
92683124011	**YAT-YGWA-47**	Water	08/15/23 09:43	08/16/23 09:07
92683124012	**YAT-GWA-2**	Water	08/15/23 10:20	08/16/23 09:07
92683124013	**YAT-YGWA-17S**	Water	08/15/23 14:50	08/16/23 09:07
92683124014	**YAT-YGWA-20S**	Water	08/15/23 12:25	08/16/23 09:07
92683124015	**YAT-YGWA-21I**	Water	08/15/23 10:35	08/16/23 09:07
92683124016	**YAT-YGWA-39**	Water	08/15/23 16:11	08/16/23 09:07
92683124017	**YAT-YGWA-40**	Water	08/15/23 17:20	08/16/23 09:07
92683124018	**YAT-YGWA-30I**	Water	08/16/23 12:20	08/17/23 09:55
92683124019	**YAT-YGWA-3I**	Water	08/16/23 10:50	08/17/23 09:55

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SAMPLE ANALYTE COUNT

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92683124001	**YAT-YGWA-1I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124002	**YAT-YGWA-1D**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124003	**YAT-YGWA-2I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124004	**YAT-YGWA-3D**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124005	**YAT-YGWA-4I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124006	**YAT-YGWA-5I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124007	**YAT-YGWA-5D**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124008	**YAT-YGWA-18S**	EPA 6010D	MS	1
		EPA 6020B	CW1	13

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124009	**YAT-YGWA-18I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124010	**YAT-YGWA-14S**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124011	**YAT-YGWA-47**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124012	**YAT-GWA-2**	EPA 6010D	MS	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124013	**YAT-YGWA-17S**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124014	**YAT-YGWA-20S**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124015	**YAT-YGWA-21I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124016	**YAT-YGWA-39**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124017	**YAT-YGWA-40**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124018	**YAT-YGWA-30I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92683124019	**YAT-YGWA-3I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683124001	**YAT-YGWA-1I**					
EPA 6010D	Calcium	1.8	mg/L	1.0	08/24/23 19:18	
EPA 6020B	Barium	0.0078	mg/L	0.0050	08/25/23 17:09	
EPA 6020B	Boron	0.0094J	mg/L	0.040	08/25/23 17:09	
EPA 6020B	Cobalt	0.00072J	mg/L	0.0050	08/25/23 17:09	
EPA 6020B	Lithium	0.0020J	mg/L	0.030	08/25/23 17:09	
EPA 6020B	Molybdenum	0.0047J	mg/L	0.010	08/25/23 17:09	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	08/22/23 17:17	
SM 2540C-2015	Total Dissolved Solids	65.0	mg/L	25.0	08/21/23 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.4	mg/L	1.0	08/18/23 21:15	
EPA 300.0 Rev 2.1 1993	Sulfate	4.6	mg/L	1.0	08/18/23 21:15	
92683124002	**YAT-YGWA-1D**					
EPA 6010D	Calcium	13.5	mg/L	1.0	08/24/23 19:23	
EPA 6020B	Barium	0.0059	mg/L	0.0050	08/25/23 17:12	
EPA 6020B	Lithium	0.0079J	mg/L	0.030	08/25/23 17:12	
EPA 6020B	Molybdenum	0.0098J	mg/L	0.010	08/25/23 17:12	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	08/22/23 17:20	
SM 2540C-2015	Total Dissolved Solids	121	mg/L	25.0	08/21/23 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	08/18/23 21:29	
EPA 300.0 Rev 2.1 1993	Fluoride	0.057J	mg/L	0.10	08/18/23 21:29	
EPA 300.0 Rev 2.1 1993	Sulfate	9.6	mg/L	1.0	08/18/23 21:29	
92683124003	**YAT-YGWA-2I**					
EPA 6010D	Calcium	23.2	mg/L	1.0	08/24/23 19:29	
EPA 6020B	Barium	0.0031J	mg/L	0.0050	08/25/23 17:16	
EPA 6020B	Molybdenum	0.0071J	mg/L	0.010	08/25/23 17:16	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	08/22/23 17:22	
SM 2540C-2015	Total Dissolved Solids	157	mg/L	25.0	08/21/23 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	0.93J	mg/L	1.0	08/18/23 21:44	
EPA 300.0 Rev 2.1 1993	Fluoride	0.081J	mg/L	0.10	08/18/23 21:44	
EPA 300.0 Rev 2.1 1993	Sulfate	17.2	mg/L	1.0	08/18/23 21:44	
92683124004	**YAT-YGWA-3D**					
EPA 6010D	Calcium	27.4	mg/L	1.0	08/24/23 19:34	
EPA 6020B	Barium	0.0046J	mg/L	0.0050	08/25/23 17:31	
EPA 6020B	Lithium	0.023J	mg/L	0.15	08/28/23 13:28	D3
EPA 6020B	Molybdenum	0.012	mg/L	0.010	08/25/23 17:31	
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	08/22/23 17:25	
SM 2540C-2015	Total Dissolved Solids	231	mg/L	25.0	08/21/23 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	08/18/23 22:27	
EPA 300.0 Rev 2.1 1993	Fluoride	0.42	mg/L	0.10	08/18/23 22:27	
EPA 300.0 Rev 2.1 1993	Sulfate	6.8	mg/L	1.0	08/18/23 22:27	
92683124005	**YAT-YGWA-4I**					
EPA 6010D	Calcium	7.8	mg/L	1.0	08/28/23 21:13	M1
EPA 6020B	Barium	0.011	mg/L	0.0050	08/25/23 17:35	
EPA 6020B	Lithium	0.0083J	mg/L	0.030	08/25/23 17:35	
EPA 7470A	Mercury	0.00013J	mg/L	0.00020	08/22/23 17:28	
SM 2540C-2015	Total Dissolved Solids	99.0	mg/L	25.0	08/21/23 13:11	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683124005	**YAT-YGWA-4I**					
EPA 300.0 Rev 2.1 1993	Chloride	4.4	mg/L	1.0	08/18/23 22:41	
EPA 300.0 Rev 2.1 1993	Sulfate	7.5	mg/L	1.0	08/18/23 22:41	
92683124006	**YAT-YGWA-5I**					
EPA 6010D	Calcium	2.6	mg/L	1.0	08/28/23 21:33	
EPA 6020B	Barium	0.018	mg/L	0.0050	08/25/23 17:46	
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	08/22/23 17:30	
SM 2540C-2015	Total Dissolved Solids	76.0	mg/L	25.0	08/21/23 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	08/18/23 22:56	
EPA 300.0 Rev 2.1 1993	Sulfate	2.2	mg/L	1.0	08/18/23 22:56	
92683124007	**YAT-YGWA-5D**					
EPA 6010D	Calcium	25.0	mg/L	1.0	08/28/23 21:39	
EPA 6020B	Barium	0.0074	mg/L	0.0050	08/25/23 17:50	
EPA 6020B	Lithium	0.0059J	mg/L	0.15	08/28/23 13:40	D3
EPA 6020B	Molybdenum	0.00090J	mg/L	0.010	08/25/23 17:50	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	08/22/23 17:33	
SM 2540C-2015	Total Dissolved Solids	219	mg/L	25.0	08/21/23 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	3.1	mg/L	1.0	08/18/23 23:10	
EPA 300.0 Rev 2.1 1993	Sulfate	4.8	mg/L	1.0	08/18/23 23:10	
92683124008	**YAT-YGWA-18S**					
EPA 6010D	Calcium	0.80J	mg/L	1.0	08/28/23 21:44	
EPA 6020B	Barium	0.012	mg/L	0.0050	08/25/23 17:53	
EPA 6020B	Beryllium	0.000057J	mg/L	0.00050	08/25/23 17:53	
EPA 6020B	Chromium	0.0013J	mg/L	0.0050	08/25/23 17:53	
EPA 6020B	Lithium	0.00077J	mg/L	0.030	08/25/23 17:53	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	08/22/23 17:44	
SM 2540C-2015	Total Dissolved Solids	81.0	mg/L	25.0	08/21/23 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	6.7	mg/L	1.0	08/18/23 23:25	
EPA 300.0 Rev 2.1 1993	Sulfate	0.88J	mg/L	1.0	08/18/23 23:25	
92683124009	**YAT-YGWA-18I**					
EPA 6010D	Calcium	5.1	mg/L	1.0	08/28/23 21:49	
EPA 6020B	Barium	0.020	mg/L	0.0050	08/25/23 17:57	
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	08/22/23 17:46	
SM 2540C-2015	Total Dissolved Solids	96.0	mg/L	25.0	08/21/23 13:12	
EPA 300.0 Rev 2.1 1993	Chloride	7.3	mg/L	1.0	08/18/23 23:39	
EPA 300.0 Rev 2.1 1993	Sulfate	0.51J	mg/L	1.0	08/18/23 23:39	
92683124010	**YAT-YGWA-14S**					
EPA 6010D	Calcium	1.3	mg/L	1.0	08/28/23 22:04	
EPA 6020B	Barium	0.0079	mg/L	0.0050	08/25/23 18:01	
EPA 6020B	Beryllium	0.00018J	mg/L	0.00050	08/25/23 18:01	
EPA 6020B	Boron	0.017J	mg/L	0.040	08/25/23 18:01	
EPA 6020B	Selenium	0.0014J	mg/L	0.0050	08/25/23 18:01	
EPA 7470A	Mercury	0.00016J	mg/L	0.00020	08/22/23 17:49	
SM 2540C-2015	Total Dissolved Solids	69.0	mg/L	25.0	08/21/23 13:14	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	08/19/23 00:22	

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683124010	**YAT-YGWA-14S**					
EPA 300.0 Rev 2.1 1993	Sulfate	6.0	mg/L	1.0	08/19/23 00:22	
92683124011	**YAT-YGWA-47**					
EPA 6010D	Calcium	9.6	mg/L	1.0	08/28/23 22:10	
EPA 6020B	Barium	0.032	mg/L	0.0050	08/25/23 18:04	
EPA 6020B	Cobalt	0.00072J	mg/L	0.0050	08/25/23 18:04	
EPA 6020B	Lithium	0.0040J	mg/L	0.15	08/28/23 13:58	D3
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	08/22/23 17:52	
SM 2540C-2015	Total Dissolved Solids	186	mg/L	25.0	08/21/23 13:15	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	08/19/23 01:35	
EPA 300.0 Rev 2.1 1993	Sulfate	47.7	mg/L	1.0	08/19/23 01:35	
92683124012	**YAT-GWA-2**					
EPA 6010D	Calcium	20.3	mg/L	1.0	08/24/23 19:39	
EPA 6020B	Barium	0.030	mg/L	0.0050	08/25/23 18:08	
EPA 6020B	Cobalt	0.031	mg/L	0.0050	08/25/23 18:08	
EPA 6020B	Copper	0.0011J	mg/L	0.0050	08/25/23 18:08	B
EPA 6020B	Nickel	0.0098	mg/L	0.0050	08/25/23 18:08	
EPA 6020B	Zinc	0.0080J	mg/L	0.010	08/25/23 18:08	
SM 2540C-2015	Total Dissolved Solids	230	mg/L	25.0	08/21/23 13:15	
EPA 300.0 Rev 2.1 1993	Chloride	5.6	mg/L	1.0	08/19/23 01:49	
EPA 300.0 Rev 2.1 1993	Fluoride	0.065J	mg/L	0.10	08/19/23 01:49	
EPA 300.0 Rev 2.1 1993	Sulfate	74.2	mg/L	1.0	08/19/23 01:49	
92683124013	**YAT-YGWA-17S**					
EPA 6010D	Calcium	2.9	mg/L	1.0	08/28/23 22:15	
EPA 6020B	Barium	0.016	mg/L	0.0050	08/25/23 18:12	
SM 2540C-2015	Total Dissolved Solids	74.0	mg/L	25.0	08/21/23 13:16	
EPA 300.0 Rev 2.1 1993	Chloride	11.6	mg/L	1.0	08/19/23 02:04	
EPA 300.0 Rev 2.1 1993	Sulfate	4.6	mg/L	1.0	08/19/23 02:04	
92683124014	**YAT-YGWA-20S**					
EPA 6010D	Calcium	2.2	mg/L	1.0	08/28/23 22:20	
EPA 6020B	Barium	0.012	mg/L	0.0050	08/25/23 18:16	
SM 2540C-2015	Total Dissolved Solids	62.0	mg/L	25.0	08/21/23 13:16	
EPA 300.0 Rev 2.1 1993	Chloride	2.8	mg/L	1.0	08/19/23 02:18	
92683124015	**YAT-YGWA-21I**					
EPA 6010D	Calcium	6.1	mg/L	1.0	08/28/23 22:25	
EPA 6020B	Barium	0.0075	mg/L	0.0050	08/25/23 18:19	
EPA 6020B	Boron	0.046J	mg/L	0.20	08/29/23 17:06	D3
EPA 6020B	Cobalt	0.011	mg/L	0.0050	08/25/23 18:19	
EPA 6020B	Lithium	0.0062J	mg/L	0.15	08/29/23 17:06	D3
SM 2540C-2015	Total Dissolved Solids	126	mg/L	25.0	08/21/23 13:16	
EPA 300.0 Rev 2.1 1993	Chloride	2.3	mg/L	1.0	08/19/23 02:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.061J	mg/L	0.10	08/19/23 02:32	
EPA 300.0 Rev 2.1 1993	Sulfate	4.1	mg/L	1.0	08/19/23 02:32	
92683124016	**YAT-YGWA-39**					
EPA 6010D	Calcium	17.2	mg/L	1.0	08/28/23 22:30	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683124016	**YAT-YGWA-39**					
EPA 6020B	Barium	0.031	mg/L	0.0050	08/25/23 18:31	
EPA 6020B	Boron	0.15J	mg/L	0.20	08/28/23 14:36	D3
EPA 6020B	Cobalt	0.00072J	mg/L	0.0050	08/25/23 18:31	
EPA 6020B	Lithium	0.0064J	mg/L	0.15	08/28/23 14:36	D3
EPA 6020B	Molybdenum	0.0061J	mg/L	0.010	08/25/23 18:31	
SM 2540C-2015	Total Dissolved Solids	225	mg/L	25.0	08/21/23 13:16	
EPA 300.0 Rev 2.1 1993	Chloride	4.5	mg/L	1.0	08/19/23 02:47	
EPA 300.0 Rev 2.1 1993	Sulfate	7.6	mg/L	1.0	08/19/23 02:47	
92683124017	**YAT-YGWA-40**					
EPA 6010D	Calcium	5.3	mg/L	1.0	08/28/23 22:35	
EPA 6020B	Barium	0.034	mg/L	0.0050	08/25/23 18:34	
EPA 6020B	Boron	0.052J	mg/L	0.20	08/28/23 14:42	D3
EPA 7470A	Mercury	0.00037	mg/L	0.00020	08/22/23 18:07	
SM 2540C-2015	Total Dissolved Solids	83.0	mg/L	25.0	08/21/23 13:17	
EPA 300.0 Rev 2.1 1993	Chloride	5.6	mg/L	1.0	08/19/23 03:01	
EPA 300.0 Rev 2.1 1993	Sulfate	16.4	mg/L	1.0	08/19/23 03:01	
92683124018	**YAT-YGWA-30I**					
EPA 6010D	Calcium	1.4	mg/L	1.0	08/29/23 22:45	
EPA 6020B	Barium	0.0066	mg/L	0.0050	08/25/23 18:42	
EPA 6020B	Cobalt	0.0028J	mg/L	0.0050	08/25/23 18:42	
SM 2540C-2015	Total Dissolved Solids	48.0	mg/L	25.0	08/22/23 16:00	
EPA 300.0 Rev 2.1 1993	Chloride	1.5	mg/L	1.0	08/19/23 18:58	
EPA 300.0 Rev 2.1 1993	Sulfate	0.90J	mg/L	1.0	08/19/23 18:58	
92683124019	**YAT-YGWA-3I**					
EPA 6010D	Calcium	24.9	mg/L	1.0	08/29/23 22:55	
EPA 6020B	Barium	0.0037J	mg/L	0.0050	08/25/23 18:45	
EPA 6020B	Lithium	0.025J	mg/L	0.15	08/28/23 15:00	D3
EPA 6020B	Molybdenum	0.012	mg/L	0.010	08/25/23 18:45	
SM 2540C-2015	Total Dissolved Solids	148	mg/L	25.0	08/22/23 16:00	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	08/19/23 19:43	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	08/19/23 19:43	M1
EPA 300.0 Rev 2.1 1993	Sulfate	20.3	mg/L	1.0	08/19/23 19:43	

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-1I **Lab ID: 92683124001** Collected: 08/15/23 13:45 Received: 08/16/23 09:07 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	**1.8**	mg/L	1.0	0.12	1	08/24/23 09:50	08/24/23 19:18	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	0.0012	1	08/21/23 18:00	08/25/23 17:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:09	7440-38-2	
Barium	**0.0078**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:09	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/25/23 17:09	7440-41-7	
Boron	**0.0094J**	mg/L	0.040	0.0086	1	08/21/23 18:00	08/25/23 17:09	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:09	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:09	7440-47-3	
Cobalt	**0.00072J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:09	7439-92-1	
Lithium	**0.0020J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/25/23 17:09	7439-93-2	
Molybdenum	**0.0047J**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:09	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:17	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**65.0**	mg/L	25.0	25.0	1		08/21/23 13:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.4**	mg/L	1.0	0.60	1		08/18/23 21:15	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 21:15	16984-48-8	
Sulfate	**4.6**	mg/L	1.0	0.50	1		08/18/23 21:15	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-1D **Lab ID: 92683124002** Collected: 08/15/23 11:20 Received: 08/16/23 09:07 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	**13.5**	mg/L	1.0	0.12	1	08/24/23 09:50	08/24/23 19:23	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	0.0012	1	08/21/23 18:00	08/25/23 17:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:12	7440-38-2	
Barium	**0.0059**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:12	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/25/23 17:12	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/21/23 18:00	08/25/23 17:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:12	7439-92-1	
Lithium	**0.0079J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/25/23 17:12	7439-93-2	
Molybdenum	**0.0098J**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:12	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:20	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**121**	mg/L	25.0	25.0	1		08/21/23 13:10		
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		08/18/23 21:29	16887-00-6	
Fluoride	**0.057J**	mg/L	0.10	0.050	1		08/18/23 21:29	16984-48-8	
Sulfate	**9.6**	mg/L	1.0	0.50	1		08/18/23 21:29	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-2I **Lab ID: 92683124003** Collected: 08/15/23 15:45 Received: 08/16/23 09:07 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	**23.2**	mg/L	1.0	0.12	1	08/24/23 09:50	08/24/23 19:29	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	0.0012	1	08/21/23 18:00	08/25/23 17:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:16	7440-38-2	
Barium	**0.0031J**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:16	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:11	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:11	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:16	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:11	7439-93-2	D3
Molybdenum	**0.0071J**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:16	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**157**	mg/L	25.0	25.0	1		08/21/23 13:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**0.93J**	mg/L	1.0	0.60	1		08/18/23 21:44	16887-00-6	
Fluoride	**0.081J**	mg/L	0.10	0.050	1		08/18/23 21:44	16984-48-8	
Sulfate	**17.2**	mg/L	1.0	0.50	1		08/18/23 21:44	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-3D **Lab ID: 92683124004** Collected: 08/15/23 17:10 Received: 08/16/23 09:07 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	**27.4**	mg/L	1.0	0.12	1	08/24/23 09:50	08/24/23 19:34	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	0.0012	1	08/21/23 18:00	08/25/23 17:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:31	7440-38-2	
Barium	**0.0046J**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:31	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:28	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:28	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:31	7439-92-1	
Lithium	**0.023J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:28	7439-93-2	D3
Molybdenum	**0.012**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00014J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:25	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**231**	mg/L	25.0	25.0	1		08/21/23 13:10		
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		08/18/23 22:27	16887-00-6	
Fluoride	**0.42**	mg/L	0.10	0.050	1		08/18/23 22:27	16984-48-8	
Sulfate	**6.8**	mg/L	1.0	0.50	1		08/18/23 22:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-4I **Lab ID: 92683124005** Collected: 08/15/23 12:25 Received: 08/16/23 09:07 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	**7.8**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 21:13	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	0.0012	1	08/21/23 18:00	08/25/23 17:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:35	7440-38-2	
Barium	**0.011**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/25/23 17:35	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/21/23 18:00	08/25/23 17:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:35	7439-92-1	
Lithium	**0.0083J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/25/23 17:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00013J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:28	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**99.0**	mg/L	25.0	25.0	1		08/21/23 13:11		
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		08/18/23 22:41	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 22:41	16984-48-8	
Sulfate	**7.5**	mg/L	1.0	0.50	1		08/18/23 22:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-5I **Lab ID: 92683124006** Collected: 08/15/23 10:20 Received: 08/16/23 09:07 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	**2.6**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 21:33	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	0.0012	1	08/21/23 18:00	08/25/23 17:46	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:46	7440-38-2	
Barium	**0.018**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:46	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:34	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:34	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:46	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:46	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:46	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:46	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:34	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:46	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:46	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00014J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:30	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**76.0**	mg/L	25.0	25.0	1		08/21/23 13:11		
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		08/18/23 22:56	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 22:56	16984-48-8	
Sulfate	**2.2**	mg/L	1.0	0.50	1		08/18/23 22:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-5D **Lab ID: 92683124007** Collected: 08/15/23 11:13 Received: 08/16/23 09:07 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	**25.0**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 21:39	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	0.0012	1	08/21/23 18:00	08/25/23 17:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:50	7440-38-2	
Barium	**0.0074**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:50	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:40	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:40	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:50	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:50	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:50	7439-92-1	
Lithium	**0.0059J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:40	7439-93-2	D3
Molybdenum	**0.00090J**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:50	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:50	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:50	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:33	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**219**	mg/L	25.0	25.0	1		08/21/23 13:11		
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		08/18/23 23:10	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 23:10	16984-48-8	
Sulfate	**4.8**	mg/L	1.0	0.50	1		08/18/23 23:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-18S **Lab ID: 92683124008** Collected: 08/15/23 11:35 Received: 08/16/23 09:07 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	**0.80J**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 21:44	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	0.0012	1	08/21/23 18:00	08/25/23 17:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:53	7440-38-2	
Barium	**0.012**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:53	7440-39-3	
Beryllium	**0.000057J**	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/25/23 17:53	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/21/23 18:00	08/25/23 17:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:53	7440-43-9	
Chromium	**0.0013J**	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:53	7439-92-1	
Lithium	**0.00077J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/25/23 17:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:53	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:44	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**81.0**	mg/L	25.0	25.0	1		08/21/23 13:11		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.7**	mg/L	1.0	0.60	1		08/18/23 23:25	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 23:25	16984-48-8	
Sulfate	**0.88J**	mg/L	1.0	0.50	1		08/18/23 23:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-18I **Lab ID: 92683124009** Collected: 08/15/23 15:40 Received: 08/16/23 09:07 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	**5.1**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 21:49	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	0.0012	1	08/21/23 18:00	08/25/23 17:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:57	7440-38-2	
Barium	**0.020**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:57	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:46	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:46	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:57	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:57	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:57	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:57	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:46	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:57	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:57	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00014J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:46	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**96.0**	mg/L	25.0	25.0	1		08/21/23 13:12		
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		08/18/23 23:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 23:39	16984-48-8	
Sulfate	**0.51J**	mg/L	1.0	0.50	1		08/18/23 23:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-14S **Lab ID: 92683124010** Collected: 08/15/23 17:30 Received: 08/16/23 09:07 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	08/26/23 17:26	08/28/23 22:04	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	0.0012	1	08/21/23 18:00	08/25/23 18:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:01	7440-38-2	
Barium	**0.0079**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:01	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/25/23 18:01	7440-41-7	
Boron	**0.017J**	mg/L	0.040	0.0086	1	08/21/23 18:00	08/25/23 18:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:01	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/21/23 18:00	08/25/23 18:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:01	7439-98-7	
Selenium	**0.0014J**	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:01	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00016J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:49	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**69.0**	mg/L	25.0	25.0	1		08/21/23 13:14		
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		08/19/23 00:22	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 00:22	16984-48-8	
Sulfate	**6.0**	mg/L	1.0	0.50	1		08/19/23 00:22	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-47 **Lab ID: 92683124011** Collected: 08/15/23 09:43 Received: 08/16/23 09:07 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	**9.6**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:10	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	0.0012	1	08/21/23 18:00	08/25/23 18:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:04	7440-38-2	
Barium	**0.032**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:04	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:58	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:58	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:04	7440-47-3	
Cobalt	**0.00072J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:04	7439-92-1	
Lithium	**0.0040J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:58	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:04	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00014J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:52	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**186**	mg/L	25.0	25.0	1		08/21/23 13:15		
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		08/19/23 01:35	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 01:35	16984-48-8	
Sulfate	**47.7**	mg/L	1.0	0.50	1		08/19/23 01:35	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-GWA-2 **Lab ID: 92683124012** Collected: 08/15/23 10:20 Received: 08/16/23 09:07 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	**20.3**	mg/L	1.0	0.12	1	08/24/23 09:50	08/24/23 19:39	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	0.0012	1	08/21/23 18:00	08/25/23 18:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:08	7440-38-2	
Barium	**0.030**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:08	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:04	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:04	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:08	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:08	7440-47-3	
Cobalt	**0.031**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:08	7440-48-4	
Copper	**0.0011J**	mg/L	0.0050	0.0010	1	08/21/23 18:00	08/25/23 18:08	7440-50-8	B
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:08	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:04	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:08	7439-98-7	
Nickel	**0.0098**	mg/L	0.0050	0.00071	1	08/21/23 18:00	08/25/23 18:08	7440-02-0	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:08	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/21/23 18:00	08/25/23 18:08	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:08	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0025	1	08/21/23 18:00	08/25/23 18:08	7440-62-2	
Zinc	**0.0080J**	mg/L	0.010	0.0070	1	08/21/23 18:00	08/25/23 18:08	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	0.00013	1	08/22/23 11:20	08/22/23 17:54	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**230**	mg/L	25.0	25.0	1		08/21/23 13:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.6**	mg/L	1.0	0.60	1		08/19/23 01:49	16887-00-6	
Fluoride	**0.065J**	mg/L	0.10	0.050	1		08/19/23 01:49	16984-48-8	
Sulfate	**74.2**	mg/L	1.0	0.50	1		08/19/23 01:49	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-17S **Lab ID: 92683124013** Collected: 08/15/23 14:50 Received: 08/16/23 09:07 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	**2.9**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:15	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	0.0012	1	08/21/23 18:00	08/25/23 18:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:12	7440-38-2	
Barium	**0.016**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:12	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:24	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:24	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:12	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:24	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:12	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	0.00013	1	08/22/23 11:20	08/22/23 17:57	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**74.0**	mg/L	25.0	25.0	1		08/21/23 13:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**11.6**	mg/L	1.0	0.60	1		08/19/23 02:04	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 02:04	16984-48-8	
Sulfate	**4.6**	mg/L	1.0	0.50	1		08/19/23 02:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-20S **Lab ID: 92683124014** Collected: 08/15/23 12:25 Received: 08/16/23 09:07 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	**2.2**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:20	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	0.0012	1	08/21/23 18:00	08/25/23 18:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:16	7440-38-2	
Barium	**0.012**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:16	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:30	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:30	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:16	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:30	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:16	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	0.00013	1	08/22/23 11:20	08/22/23 17:59	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**62.0**	mg/L	25.0	25.0	1		08/21/23 13:16		
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		08/19/23 02:18	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 02:18	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/19/23 02:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-21I **Lab ID: 92683124015** Collected: 08/15/23 10:35 Received: 08/16/23 09:07 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	**6.1**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:25	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	0.0012	1	08/21/23 18:00	08/25/23 18:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:19	7440-38-2	
Barium	**0.0075**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:19	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/29/23 17:06	7440-41-7	D3
Boron	**0.046J**	mg/L	0.20	0.043	5	08/21/23 18:00	08/29/23 17:06	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:19	7440-47-3	
Cobalt	**0.011**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:19	7439-92-1	
Lithium	**0.0062J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/29/23 17:06	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:19	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	0.00013	1	08/22/23 11:20	08/22/23 18:02	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**126**	mg/L	25.0	25.0	1		08/21/23 13:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.3**	mg/L	1.0	0.60	1		08/19/23 02:32	16887-00-6	
Fluoride	**0.061J**	mg/L	0.10	0.050	1		08/19/23 02:32	16984-48-8	
Sulfate	**4.1**	mg/L	1.0	0.50	1		08/19/23 02:32	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-39 **Lab ID: 92683124016** Collected: 08/15/23 16:11 Received: 08/16/23 09:07 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	**17.2**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:30	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	0.0012	1	08/21/23 18:00	08/25/23 18:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:31	7440-38-2	
Barium	**0.031**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:31	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:36	7440-41-7	D3
Boron	**0.15J**	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:36	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:31	7440-47-3	
Cobalt	**0.00072J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:31	7439-92-1	
Lithium	**0.0064J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:36	7439-93-2	D3
Molybdenum	**0.0061J**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:31	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	0.00013	1	08/22/23 11:20	08/22/23 18:05	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**225**	mg/L	25.0	25.0	1		08/21/23 13:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.5**	mg/L	1.0	0.60	1		08/19/23 02:47	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 02:47	16984-48-8	
Sulfate	**7.6**	mg/L	1.0	0.50	1		08/19/23 02:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-40 **Lab ID: 92683124017** Collected: 08/15/23 17:20 Received: 08/16/23 09:07 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	**5.3**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:35	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	0.0012	1	08/21/23 18:00	08/25/23 18:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:34	7440-38-2	
Barium	**0.034**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:34	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:42	7440-41-7	D3
Boron	**0.052J**	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:42	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:34	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:42	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:34	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:34	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00037**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 18:07	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**83.0**	mg/L	25.0	25.0	1		08/21/23 13:17		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.6**	mg/L	1.0	0.60	1		08/19/23 03:01	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 03:01	16984-48-8	
Sulfate	**16.4**	mg/L	1.0	0.50	1		08/19/23 03:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-30I **Lab ID: 92683124018** Collected: 08/16/23 12:20 Received: 08/17/23 09:55 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	**1.4**	mg/L	1.0	0.12	1	08/29/23 09:23	08/29/23 22:45	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	0.0012	1	08/21/23 18:00	08/25/23 18:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:42	7440-38-2	
Barium	**0.0066**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:42	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:54	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:54	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:42	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:42	7440-47-3	
Cobalt	**0.0028J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:42	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:54	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:42	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	0.00013	1	08/22/23 13:00	08/22/23 19:00	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**48.0**	mg/L	25.0	25.0	1		08/22/23 16:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.5**	mg/L	1.0	0.60	1		08/19/23 18:58	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 18:58	16984-48-8	
Sulfate	**0.90J**	mg/L	1.0	0.50	1		08/19/23 18:58	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-3I **Lab ID: 92683124019** Collected: 08/16/23 10:50 Received: 08/17/23 09:55 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	**24.9**	mg/L	1.0	0.12	1	08/29/23 09:23	08/29/23 22:55	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	0.0012	1	08/21/23 18:00	08/25/23 18:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:45	7440-38-2	
Barium	**0.0037J**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:45	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 15:00	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 15:00	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:45	7439-92-1	
Lithium	**0.025J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 15:00	7439-93-2	D3
Molybdenum	**0.012**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:45	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:45	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	0.00013	1	08/22/23 13:00	08/22/23 19:02	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**148**	mg/L	25.0	25.0	1		08/22/23 16:00		
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		08/19/23 19:43	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		08/19/23 19:43	16984-48-8	M1
Sulfate	**20.3**	mg/L	1.0	0.50	1		08/19/23 19:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 795463
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124012

METHOD BLANK: 4121755 Matrix: Water
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/24/23 18:37	

LABORATORY CONTROL SAMPLE: 4121756

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4121757 4121758

Parameter	Units	92682927022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	107	1	1	100	103	-623	-414	75-125	2	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 795958
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

METHOD BLANK: 4124394 Matrix: Water
Associated Lab Samples: 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/28/23 21:02	

LABORATORY CONTROL SAMPLE: 4124395

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4124396 4124397

Parameter	Units	92683124005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	7.8	1	1	8.9	9.1	106	127	75-125	2	20	M1

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 796454
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124018, 92683124019

METHOD BLANK: 4126638 Matrix: Water
Associated Lab Samples: 92683124018, 92683124019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/29/23 20:25	

LABORATORY CONTROL SAMPLE: 4126639

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4126640 4126641

Parameter	Units	92683139003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	34.6	1	1	34.9	36.9	31	227	75-125	5	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794949
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017, 92683124018, 92683124019

METHOD BLANK: 4119064
Matrix: Water
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017, 92683124018, 92683124019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/25/23 17:01	
Arsenic	mg/L	ND	0.0050	0.0037	08/25/23 17:01	
Barium	mg/L	ND	0.0050	0.00067	08/25/23 17:01	
Beryllium	mg/L	ND	0.00050	0.000054	08/25/23 17:01	
Boron	mg/L	ND	0.040	0.0086	08/25/23 17:01	
Cadmium	mg/L	ND	0.00050	0.00011	08/25/23 17:01	
Chromium	mg/L	ND	0.0050	0.0011	08/25/23 17:01	
Cobalt	mg/L	ND	0.0050	0.00039	08/25/23 17:01	
Copper	mg/L	ND	0.0050	0.0010	08/25/23 17:01	
Lead	mg/L	ND	0.0010	0.00012	08/25/23 17:01	
Lithium	mg/L	ND	0.030	0.00073	08/25/23 17:01	
Molybdenum	mg/L	ND	0.010	0.00074	08/25/23 17:01	
Nickel	mg/L	ND	0.0050	0.00071	08/25/23 17:01	
Selenium	mg/L	ND	0.0050	0.0014	08/25/23 17:01	
Silver	mg/L	ND	0.0050	0.00044	08/25/23 17:01	
Thallium	mg/L	ND	0.0010	0.00018	08/25/23 17:01	
Vanadium	mg/L	ND	0.010	0.0025	08/25/23 17:01	
Zinc	mg/L	ND	0.010	0.0070	08/25/23 17:01	

LABORATORY CONTROL SAMPLE: 4119065

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.11	109	80-120	
Boron	mg/L	1	1.0	103	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	104	80-120	
Copper	mg/L	0.1	0.10	105	80-120	
Lead	mg/L	0.1	0.10	104	80-120	
Lithium	mg/L	0.1	0.11	113	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

LABORATORY CONTROL SAMPLE: 4119065

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	0.1	0.10	104	80-120	
Silver	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.10	104	80-120	
Vanadium	mg/L	0.1	0.10	101	80-120	
Zinc	mg/L	0.1	0.10	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4119066 4119067

Parameter	Units	92683124003 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	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Barium	mg/L	0.0031J	0.1	0.1	0.11	0.11	103	103	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	103	105	75-125	2	20	
Boron	mg/L	ND	1	1	1.1	1.1	105	106	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Copper	mg/L	0.0011J	0.1	0.1	0.099	0.10	98	102	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.11J	0.11J	103	104	75-125		20	
Molybdenum	mg/L	0.0071J	0.1	0.1	0.11	0.11	104	105	75-125	0	20	
Nickel	mg/L	ND	0.1	0.1	0.099	0.10	99	102	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Silver	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	100	103	75-125	3	20	
Zinc	mg/L	ND	0.1	0.1	0.099	0.10	96	99	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 795036
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

METHOD BLANK: 4119606 Matrix: Water
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/22/23 16:32	

LABORATORY CONTROL SAMPLE: 4119607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4119608 4119609

Parameter	Units	92682398009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00013J	0.0025	0.0025	0.0034	0.0034	131	132	75-125	0	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 795037
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124018, 92683124019

METHOD BLANK: 4119610 Matrix: Water
Associated Lab Samples: 92683124018, 92683124019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/22/23 18:15	

LABORATORY CONTROL SAMPLE: 4119611

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0027	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4119612 4119613

Parameter	Units	92683139001 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	0.0028	0.0028	111	112	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794901
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

METHOD BLANK: 4118686 Matrix: Water
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/21/23 13:08	

LABORATORY CONTROL SAMPLE: 4118687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	402	100	80-120	

SAMPLE DUPLICATE: 4118688

Parameter	Units	92683065001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	669	640	4	10	

SAMPLE DUPLICATE: 4118689

Parameter	Units	92683124010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	69.0	68.0	1	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 795117
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124018, 92683124019

METHOD BLANK: 4119882 Matrix: Water
Associated Lab Samples: 92683124018, 92683124019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/22/23 15:56	

LABORATORY CONTROL SAMPLE: 4119883

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	385	96	80-120	

SAMPLE DUPLICATE: 4119884

Parameter	Units	92683139008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 4119885

Parameter	Units	92683384007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	97.0	89.0	9	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794487
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: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009

METHOD BLANK: 4116654 Matrix: Water
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/18/23 16:41	
Fluoride	mg/L	ND	0.10	0.050	08/18/23 16:41	
Sulfate	mg/L	ND	1.0	0.50	08/18/23 16:41	

LABORATORY CONTROL SAMPLE: 4116655

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	2.5	101	90-110	
Sulfate	mg/L	50	48.1	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116656 4116657

Parameter	Units	92683111001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	101	50	50	140	143	79	84	90-110	2	10	M1
Fluoride	mg/L	8.0	2.5	2.5	9.2	9.3	48	53	90-110	1	10	M1
Sulfate	mg/L	555	50	50	590	596	70	82	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116658 4116659

Parameter	Units	92682998003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	216	50	50	259	257	86	81	90-110	1	10	M1
Fluoride	mg/L	0.12	2.5	2.5	2.4	2.4	91	93	90-110	2	10	
Sulfate	mg/L	96.1	50	50	128	127	64	62	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794488
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: 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

METHOD BLANK: 4116660 Matrix: Water
Associated Lab Samples: 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/18/23 23:54	
Fluoride	mg/L	ND	0.10	0.050	08/18/23 23:54	
Sulfate	mg/L	ND	1.0	0.50	08/18/23 23:54	

LABORATORY CONTROL SAMPLE: 4116661

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.7	99	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	48.2	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116662 4116663

Parameter	Units	92683124010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.1	50	50	51.8	53.2	96	98	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.3	2.4	93	96	90-110	4	10	
Sulfate	mg/L	6.0	50	50	52.3	53.7	93	95	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116664 4116665

Parameter	Units	92683137003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.6	50	50	53.8	54.5	96	98	90-110	1	10	
Fluoride	mg/L	0.070J	2.5	2.5	2.3	2.4	91	93	90-110	2	10	
Sulfate	mg/L	154	50	50	194	194	79	79	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794746
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: 92683124018

METHOD BLANK: 4118285 Matrix: Water
Associated Lab Samples: 92683124018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/19/23 11:26	
Fluoride	mg/L	ND	0.10	0.050	08/19/23 11:26	
Sulfate	mg/L	ND	1.0	0.50	08/19/23 11:26	

LABORATORY CONTROL SAMPLE: 4118286

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Sulfate	mg/L	50	49.5	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118287 4118288

Parameter	Units	92683419001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.0	50	50	55.4	57.3	97	101	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.8	105	108	90-110	3	10	
Sulfate	mg/L	2.8	50	50	50.7	52.7	96	100	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118289 4118290

Parameter	Units	92683310003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	237	50	50	279	280	84	86	90-110	0	10	M1
Fluoride	mg/L	0.13	2.5	2.5	3.0	3.0	113	116	90-110	2	10	M1
Sulfate	mg/L	97.5	50	50	138	139	81	83	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794747
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: 92683124019

METHOD BLANK: 4118291 Matrix: Water
Associated Lab Samples: 92683124019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/19/23 19:13	
Fluoride	mg/L	ND	0.10	0.050	08/19/23 19:13	
Sulfate	mg/L	ND	1.0	0.50	08/19/23 19:13	

LABORATORY CONTROL SAMPLE: 4118292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Sulfate	mg/L	50	49.7	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118293 4118294

Parameter	Units	92683124019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.1	50	50	50.4	50.8	99	99	90-110	1	10	
Fluoride	mg/L	0.11	2.5	2.5	2.9	2.9	110	112	90-110	2	10	M1
Sulfate	mg/L	20.3	50	50	68.5	69.0	96	97	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118295 4118296

Parameter	Units	92683384010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.3	50	50	51.7	52.3	99	100	90-110	1	10	
Fluoride	mg/L	0.062J	2.5	2.5	3.2	3.3	126	130	90-110	3	10	M1
Sulfate	mg/L	151	50	50	194	194	86	87	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683124001	**YAT-YGWA-1I**	EPA 3010A	795463	EPA 6010D	795706
92683124002	**YAT-YGWA-1D**	EPA 3010A	795463	EPA 6010D	795706
92683124003	**YAT-YGWA-2I**	EPA 3010A	795463	EPA 6010D	795706
92683124004	**YAT-YGWA-3D**	EPA 3010A	795463	EPA 6010D	795706
92683124005	**YAT-YGWA-4I**	EPA 3010A	795958	EPA 6010D	796217
92683124006	**YAT-YGWA-5I**	EPA 3010A	795958	EPA 6010D	796217
92683124007	**YAT-YGWA-5D**	EPA 3010A	795958	EPA 6010D	796217
92683124008	**YAT-YGWA-18S**	EPA 3010A	795958	EPA 6010D	796217
92683124009	**YAT-YGWA-18I**	EPA 3010A	795958	EPA 6010D	796217
92683124010	**YAT-YGWA-14S**	EPA 3010A	795958	EPA 6010D	796217
92683124011	**YAT-YGWA-47**	EPA 3010A	795958	EPA 6010D	796217
92683124012	**YAT-GWA-2**	EPA 3010A	795463	EPA 6010D	795706
92683124013	**YAT-YGWA-17S**	EPA 3010A	795958	EPA 6010D	796217
92683124014	**YAT-YGWA-20S**	EPA 3010A	795958	EPA 6010D	796217
92683124015	**YAT-YGWA-21I**	EPA 3010A	795958	EPA 6010D	796217
92683124016	**YAT-YGWA-39**	EPA 3010A	795958	EPA 6010D	796217
92683124017	**YAT-YGWA-40**	EPA 3010A	795958	EPA 6010D	796217
92683124018	**YAT-YGWA-30I**	EPA 3010A	796454	EPA 6010D	796604
92683124019	**YAT-YGWA-3I**	EPA 3010A	796454	EPA 6010D	796604
92683124001	**YAT-YGWA-1I**	EPA 3005A	794949	EPA 6020B	795122
92683124002	**YAT-YGWA-1D**	EPA 3005A	794949	EPA 6020B	795122
92683124003	**YAT-YGWA-2I**	EPA 3005A	794949	EPA 6020B	795122
92683124004	**YAT-YGWA-3D**	EPA 3005A	794949	EPA 6020B	795122
92683124005	**YAT-YGWA-4I**	EPA 3005A	794949	EPA 6020B	795122
92683124006	**YAT-YGWA-5I**	EPA 3005A	794949	EPA 6020B	795122
92683124007	**YAT-YGWA-5D**	EPA 3005A	794949	EPA 6020B	795122
92683124008	**YAT-YGWA-18S**	EPA 3005A	794949	EPA 6020B	795122
92683124009	**YAT-YGWA-18I**	EPA 3005A	794949	EPA 6020B	795122
92683124010	**YAT-YGWA-14S**	EPA 3005A	794949	EPA 6020B	795122
92683124011	**YAT-YGWA-47**	EPA 3005A	794949	EPA 6020B	795122
92683124012	**YAT-GWA-2**	EPA 3005A	794949	EPA 6020B	795122
92683124013	**YAT-YGWA-17S**	EPA 3005A	794949	EPA 6020B	795122
92683124014	**YAT-YGWA-20S**	EPA 3005A	794949	EPA 6020B	795122
92683124015	**YAT-YGWA-21I**	EPA 3005A	794949	EPA 6020B	795122
92683124016	**YAT-YGWA-39**	EPA 3005A	794949	EPA 6020B	795122
92683124017	**YAT-YGWA-40**	EPA 3005A	794949	EPA 6020B	795122
92683124018	**YAT-YGWA-30I**	EPA 3005A	794949	EPA 6020B	795122
92683124019	**YAT-YGWA-3I**	EPA 3005A	794949	EPA 6020B	795122
92683124001	**YAT-YGWA-1I**	EPA 7470A	795036	EPA 7470A	795161
92683124002	**YAT-YGWA-1D**	EPA 7470A	795036	EPA 7470A	795161
92683124003	**YAT-YGWA-2I**	EPA 7470A	795036	EPA 7470A	795161
92683124004	**YAT-YGWA-3D**	EPA 7470A	795036	EPA 7470A	795161
92683124005	**YAT-YGWA-4I**	EPA 7470A	795036	EPA 7470A	795161
92683124006	**YAT-YGWA-5I**	EPA 7470A	795036	EPA 7470A	795161
92683124007	**YAT-YGWA-5D**	EPA 7470A	795036	EPA 7470A	795161
92683124008	**YAT-YGWA-18S**	EPA 7470A	795036	EPA 7470A	795161

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683124009	**YAT-YGWA-18I**	EPA 7470A	795036	EPA 7470A	795161
92683124010	**YAT-YGWA-14S**	EPA 7470A	795036	EPA 7470A	795161
92683124011	**YAT-YGWA-47**	EPA 7470A	795036	EPA 7470A	795161
92683124012	**YAT-GWA-2**	EPA 7470A	795036	EPA 7470A	795161
92683124013	**YAT-YGWA-17S**	EPA 7470A	795036	EPA 7470A	795161
92683124014	**YAT-YGWA-20S**	EPA 7470A	795036	EPA 7470A	795161
92683124015	**YAT-YGWA-21I**	EPA 7470A	795036	EPA 7470A	795161
92683124016	**YAT-YGWA-39**	EPA 7470A	795036	EPA 7470A	795161
92683124017	**YAT-YGWA-40**	EPA 7470A	795036	EPA 7470A	795161
92683124018	**YAT-YGWA-30I**	EPA 7470A	795037	EPA 7470A	795162
92683124019	**YAT-YGWA-3I**	EPA 7470A	795037	EPA 7470A	795162
92683124001	**YAT-YGWA-1I**	SM 2540C-2015	794901		
92683124002	**YAT-YGWA-1D**	SM 2540C-2015	794901		
92683124003	**YAT-YGWA-2I**	SM 2540C-2015	794901		
92683124004	**YAT-YGWA-3D**	SM 2540C-2015	794901		
92683124005	**YAT-YGWA-4I**	SM 2540C-2015	794901		
92683124006	**YAT-YGWA-5I**	SM 2540C-2015	794901		
92683124007	**YAT-YGWA-5D**	SM 2540C-2015	794901		
92683124008	**YAT-YGWA-18S**	SM 2540C-2015	794901		
92683124009	**YAT-YGWA-18I**	SM 2540C-2015	794901		
92683124010	**YAT-YGWA-14S**	SM 2540C-2015	794901		
92683124011	**YAT-YGWA-47**	SM 2540C-2015	794901		
92683124012	**YAT-GWA-2**	SM 2540C-2015	794901		
92683124013	**YAT-YGWA-17S**	SM 2540C-2015	794901		
92683124014	**YAT-YGWA-20S**	SM 2540C-2015	794901		
92683124015	**YAT-YGWA-21I**	SM 2540C-2015	794901		
92683124016	**YAT-YGWA-39**	SM 2540C-2015	794901		
92683124017	**YAT-YGWA-40**	SM 2540C-2015	794901		
92683124018	**YAT-YGWA-30I**	SM 2540C-2015	795117		
92683124019	**YAT-YGWA-3I**	SM 2540C-2015	795117		
92683124001	**YAT-YGWA-1I**	EPA 300.0 Rev 2.1 1993	794487		
92683124002	**YAT-YGWA-1D**	EPA 300.0 Rev 2.1 1993	794487		
92683124003	**YAT-YGWA-2I**	EPA 300.0 Rev 2.1 1993	794487		
92683124004	**YAT-YGWA-3D**	EPA 300.0 Rev 2.1 1993	794487		
92683124005	**YAT-YGWA-4I**	EPA 300.0 Rev 2.1 1993	794487		
92683124006	**YAT-YGWA-5I**	EPA 300.0 Rev 2.1 1993	794487		
92683124007	**YAT-YGWA-5D**	EPA 300.0 Rev 2.1 1993	794487		
92683124008	**YAT-YGWA-18S**	EPA 300.0 Rev 2.1 1993	794487		
92683124009	**YAT-YGWA-18I**	EPA 300.0 Rev 2.1 1993	794487		
92683124010	**YAT-YGWA-14S**	EPA 300.0 Rev 2.1 1993	794488		
92683124011	**YAT-YGWA-47**	EPA 300.0 Rev 2.1 1993	794488		
92683124012	**YAT-GWA-2**	EPA 300.0 Rev 2.1 1993	794488		
92683124013	**YAT-YGWA-17S**	EPA 300.0 Rev 2.1 1993	794488		
92683124014	**YAT-YGWA-20S**	EPA 300.0 Rev 2.1 1993	794488		
92683124015	**YAT-YGWA-21I**	EPA 300.0 Rev 2.1 1993	794488		
92683124016	**YAT-YGWA-39**	EPA 300.0 Rev 2.1 1993	794488		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683124017	**YAT-YGWA-40**	EPA 300.0 Rev 2.1 1993	794488		
92683124018	**YAT-YGWA-30I**	EPA 300.0 Rev 2.1 1993	794746		
92683124019	**YAT-YGWA-3I**	EPA 300.0 Rev 2.1 1993	794747		

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Off Power

Project #: WO# : 92683124

92683124

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

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

Date/Initials Person Examining Contents: 8/16/23 CMH

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: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 2.3

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**

*****Check all unpreserved Nitrates for chlorine**

Project #

WO#: 92683124

PM: BV **Due Date: 08/30/23**

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
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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 DENR 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:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B
Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-2023S2
Purchase Order #:	
Project Name:	Plant Yates Pooled Upgradient
Project Number:	

Section C
Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	~~Nicole D'Oleo~~ Bonne
Pace Profile #:	~~10840~~ 1656

Regulatory Agency	
State / Location	Georgia

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	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Metals ~~+ Ca, Na, K~~	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App III (gypsum only)	Residual Chlorine (Y/N)	72683124
1	YAT-YGWA-39	WG	G			–	–		6	2		4							X	X	X	X			
2	YAT-YGWA-40	WG	G			–	–		6	2		4							X	X	X	X			
3	YAT-YGWA-1I	WG	G	8/15/23	1345	–	–		6	2		4							X	X	X	X			001
4	YAT-YGWA-1D	WG	G	8/15/23	1120	–	–		6	2		4							X	X	X	X			002
5	YAT-YGWA-2I	WG	G	8/15/23	1545	–	–		6	2		4							X	X	X	X			003
6	YAT-YGWA-3I	WG	G			–	–		6	2		4							X	X	X	X			
7	YAT-YGWA-3D	WG	G	8/15/23	1710	–	–		6	2		4							X	X	X	X			004
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)	[signature] /Arcadis	8/15/23	1805	[signature] /Pace	8/15/23	1805	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	[signature] /Arcadis	8/16/23	0907	Ryan William / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)	Ryan William / Pace	8/16/23	1115	[signature]	8/16/23	1115	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: (Arcadis) - David Prouty

SIGNATURE of SAMPLER: (Arcadis) [signature] DATE Signed: 8/15/23

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

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Gft Power

Project # WO#: 92683124

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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

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

Date/Initials Person Examining Contents: 8/14/23 CMH

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: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 2.3

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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92683124**

PM: BV **Due Date: 08/30/23**

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
2		1	1			2																			2				
3		1	1			2																			2				
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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 DENR 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:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Olier~~ Barnes
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840 Jay

Regulatory Agency: Georgia

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	App III/IV Metals + Boron, Ca	Cl, F, SO4	TDS (2540C)	RAD 9315/8320	App I (gypsum only)	Residual Chlorine (Y/N)	92683124
1	YAT-YGWA-47	WG	G			--	--		6	2		4							X	X	X	X				
2	YAT-GWA-2	WG	G			--	--		6	2		4							X	X	X	X	X			
3	YAT-YGWA-4I	WG	G	8/15/23	1725	--	--		6	2		4							X	X	X	X				005
4	YAT-YGWA-5I	WG	G	8/15/23	1020	--	--		6	2		4							X	X	X	X				006
5	YAT-YGWA-5D	WG	G	8/15/23	1113	--	--		6	2		4							X	X	X	X				007
6	YAT-YGWA-17S	WG	G			--	--		6	2		4							X	X	X	X				
7	YAT-YGWA-18S	WG	G	8/15/23	1455	--	--		6	2		4							X	X	X	X				008
8	YAT-YGWA-18I	WG	G	8/15/23	1540	--	--		6	2		4							X	X	X	X				009
9	YAT-YGWA-20S	WG	G			--	--		6	2		4							X	X	X	X				
10	YAT-YGWA-21I	WG	G			--	--		6	2		4							X	X	X	X				
11	YAT-YGWA-30I	WG	G			--	--		6	2		4							X	X	X	X				
12	YAT-YGWA-14S	WG	G	8/15/23	1730	--	--		6	2		4							X	X	X	X				010

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/16/23	0755		8/16/23	0755	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Arcadis	8/16/23	0901	Ryan Williams / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)	Ryan Williams / Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Kim Lapsevynski					
SIGNATURE of SAMPLER:		DATE Signed: 8/16/23				

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

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Off Power

Project #: **WO# : 92683124**

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

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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

Date/Initials Person Examining Contents: 8/16/23 CMH

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: 2.3 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92683124**

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
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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 DENR 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:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176
Fax	
Requested Due Date:	Standard

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-2023S2
Purchase Order #:	
Project Name:	Plant Yates Pooled Upgradient
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	~~Nicole D'Oleo~~ Ronnie Uwag
Pace Profile #:	10840

Regulatory Agency

State / Location: Georgia

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	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Metals ~~+ Ca, Na, K~~	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gpysum only)	Residual Chlorine (Y/N)	92683124
1	YAT-YGWA-47	WG	G	8/15/23	0943	-	-		6	2		4							X	X	X	X			011
2	YAT-GWA-2	WG	G			-	-		6	2		4							X	X	X	X	X		
3	YAT-YGWA-4I	WG	G			-	-		6	2		4							X	X	X	X			
4	YAT-YGWA-5I	WG	G			-	-		6	2		4							X	X	X	X			
5	YAT-YGWA-5D	WG	G			-	-		6	2		4							X	X	X	X			
6	YAT-YGWA-17S	WG	G			-	-		6	2		4							X	X	X	X			
7	YAT-YGWA-18S	WG	G			-	-		6	2		4							X	X	X	X			
8	YAT-YGWA-18I	WG	G			-	-		6	2		4							X	X	X	X			
9	YAT-YGWA-20S	WG	G			-	-		6	2		4							X	X	X	X			
10	YAT-YGWA-21I	WG	G			-	-		6	2		4							X	X	X	X			
11	YAT-YGWA-30I	WG	G			-	-		6	2		4							X	X	X	X			
12	YAT-YGWA-14S	WG	G			-	-		6	2		4							X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	Mark Chest / Arcadis	8/16/23	0907	Ryan William / Pace	8/16/23	0907	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Ryan William / Pace	8/16/23	1115	[illegible signature]	8/16/23	1115	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Chest

SIGNATURE of SAMPLER: [signature]

DATE Signed: 8/16/23

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

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Off Power

Project #:

WO#: 92683124

PM: BV **Due Date: 08/30/23**

CLIENT: 92-GP-Yates

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

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

Date/Initials Person Examining Contents: 8/16/23 DM

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: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 2.3

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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO# : 92683124**

PM: BV **Due Date: 08/30/23**

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		—	—			2																			2				
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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 DENR 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:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	lgucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: Georgia

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	App III/IV Metals + Cl, NO3, F	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	926831Z4
1	YAT-YGWA-47	WG	G			--	--		6	2		4							X	X	X	X			
2	YAT-GWA-2	WG	G	8/15/23	1020	--	--		6	2		4							X	X	X	X	X			-012
3	YAT-YGWA-4I	WG	G			--	--		6	2		4							X	X	X	X				
4	YAT-YGWA-5I	WG	G			--	--		6	2		4							X	X	X	X				
5	YAT-YGWA-5D	WG	G			--	--		6	2		4							X	X	X	X				
6	YAT-YGWA-17S	WG	G			--	--		6	2		4							X	X	X	X				
7	YAT-YGWA-18S	WG	G			--	--		6	2		4							X	X	X	X				
8	YAT-YGWA-18I	WG	G			--	--		6	2		4							X	X	X	X				
9	YAT-YGWA-20S	WG	G			--	--		6	2		4							X	X	X	X				
10	YAT-YGWA-21I	WG	G			--	--		6	2		4							X	X	X	X				
11	YAT-YGWA-30I	WG	G			--	--		6	2		4							X	X	X	X				
12	YAT-YGWA-14S	WG	G			--	--		6	2		4							X	X	X	X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/16/23	0900		8/16/23	0800	
App III Metals: Boron 6020B, Ca 6010D; App III 6020B: Zn, Ag, Ni, V		8/16/23	0907		8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).		8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Jake Swanson					
SIGNATURE of SAMPLER:		DATE Signed: 8/15/23				

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO#: 92683124

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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

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

Date/Initials Person Examining Contents: 8/16/23 CM

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: 2.3 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 2.3

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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92683124**

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG8U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
2		1	1			2																			2				
3		1	1			2																			2				
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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 DENR 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 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	jaucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole DiCicco~~ Brian Jang
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: Georgia

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	Analysis Test Y/N	App III/IV Metals + Sb+Ba+Be	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	92683124
1	YAT-YGWA-47	WG	G			--	--		6	2		4							X	X	X	X			
2	YAT-GWA-2	WG	G			--	--		6	2		4							X	X	X	X	X		
3	YAT-YGWA-4I	WG	G			--	--		6	2		4							X	X	X	X			
4	YAT-YGWA-5I	WG	G			--	--		6	2		4							X	X	X	X			
5	YAT-YGWA-5D	WG	G			--	--		6	2		4							X	X	X	X			
6	YAT-YGWA-17S	WG	G	8/15	1450	--	--		6	2		4							X	X	X	X			013
7	YAT-YGWA-18S	WG	G			--	--		6	2		4							X	X	X	X			
8	YAT-YGWA-18I	WG	G			--	--		6	2		4							X	X	X	X			
9	YAT-YGWA-20S	WG	G	8/15	1225	--	--		6	2		4							X	X	X	X			014
10	YAT-YGWA-21I	WG	G	8/15	1035	--	--		6	2		4							X	X	X	X			015
11	YAT-YGWA-30I	WG	G			--	--		6	2		4							X	X	X	X			
12	YAT-YGWA-14S	WG	G			--	--		6	2		4							X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/15/23	1805	/Arcadis	8/15/23	1805	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Arcadis	8/16/23	0907	Ryan Williams/Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan Williams/Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Jessica Ware					
SIGNATURE of SAMPLER:		DATE Signed: 8/15/23				

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 2 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-202392	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Olso~~ Barnis
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: State / Location: Georgia

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	Analysis Test Y/N	App III/IV Metals-Sec/NEK	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	92683124
1	YAT-YGWA-39	WG	G	8/15	1611	–	–		6	2		4							X	X	X	X			016
2	YAT-YGWA-40	WG	G	8/15	1720	–	–		6	2		4							X	X	X	X			017
3	YAT-YGWA-1I	WG	G			–	–		6	2		4							X	X	X	X			
4	YAT-YGWA-1D	WG	G			–	–		6	2		4							X	X	X	X			
5	YAT-YGWA-2I	WG	G			–	–		6	2		4							X	X	X	X			
6	YAT-YGWA-3I	WG	G			–	–		6	2		4							X	X	X	X			
7	YAT-YGWA-3D	WG	G			–	–		6	2		4							X	X	X	X			
8						–	–																		
9						–	–																		
10						–	–																		
11						–	–																		
12						–	–																		

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	8/15/23	1805	/Arcadis	8/15/23	1805	
App III Metals: Boron 6020B, Ca 6010D; App IV 6020B: Zn, Ag, Ni, V	/Arcadis	8/16/23	0907	Ryan Williams / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se); 7040A: Mercury (Hg)	Ryan Williams / Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE							
PRINT Name of SAMPLER:	(Arcadis) Jessica Ware						
SIGNATURE of SAMPLER:	(Arcadis)	DATE Signed:	8/15/23	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Tamaqua ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO#: 92683124

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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

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

Date/Initials Person Examining Contents: 2-17-23 AY

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: 5.7 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 5.7

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? -Includes Date/Time/ID/Analysis Matrix: WG	☑ 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 split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

WO#: 92683124

Project #

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

**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

***Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR 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 2

Section A
Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B
Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-202392
Purchase Order #:	
Project Name:	Plant Yates Pooled Upgradient
Project Number:	

Section C
Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	~~Nicole D'Oleo~~ Bonnie Vang
Pace Profile #:	~~10840~~

Georgia

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	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)
	YAT-YGWA-47	WG	G			–	–		6	2		4						X	X	X	X		
	YAT-GWA-2	WG	G			–	–		6	2		4						X	X	X	X	X	
	YAT-YGWA-4I	WG	G			–	–		6	2		4						X	X	X	X		
	YAT-YGWA-5I	WG	G			–	–		6	2		4						X	X	X	X		
	YAT-YGWA-5D	WG	G			–	–		6	2		4						X	X	X	X		
	YAT-YGWA-17S	WG	G			–	–		6	2		4						X	X	X	X		
	YAT-YGWA-18S	WG	G			–	–		6	2		4						X	X	X	X		
	YAT-YGWA-18I	WG	G			–	–		6	2		4						X	X	X	X		
	YAT-YGWA-20S	WG	G			–	–		6	2		4						X	X	X	X		
10	YAT-YGWA-21I	WG	G			–	–		6	2		4						X	X	X	X		
	YAT-YGWA-30I	WG	G	8/14/23	1220	–	–		6	2		4						X	X	X	X		
	YAT-YGWA-14S	WG	G			–	–		6	2		4						X	X	X	X		

92683124

018

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] /Arcadis	8/17/23	0833	[signature] /Pace	8/17/23	0833
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	[signature] /Arcadis	8/17/23		Ryan William /Pace	8/17/23	0955
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se); 7040A: Mercury (Hg)	Ryan William /Pace	8/17/23	1254	[signature]	8-17	1254

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:	David Traut
SIGNATURE of SAMPLER:	[signature]
DATE Signed:	8/16/23

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

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ [illegible] ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92683124**

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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

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

Date/Initials Person Examining Contents: 8-17-23 AY

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: 5.7 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 5.7

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? -includes Date/Time/ID/Analysis Matrix: WG	☑ 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 split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Quality ID: 00011

***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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92683124**

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A — Required Client Information:
Company: GA Power
Address: Atlanta, GA
Email To: lauonker@southernco.com
Phone: 470.620.6176 Fax:
Requested Due Date: Standard

Section B — Required Project Information:
Report To: SCS Contacts
Copy To: Arcadis Contacts
Task No: YAT-CCR-ASSMT-202382
Purchase Order #:
Project Name: Plant Yates Pooled Upgradient
Project Number:

Section C — Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote:
Pace Project Manager: Nicole D'Oleo
Pace Profile #: 10840

State / Location: Georgia

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	92683124
	YAT-YGWA-39	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-40	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-1I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-1D	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-2I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-3I	WG	G	8/16/23	1050	–	–		6	2		4						X	X	X	X			019
	YAT-YGWA-3D	WG	G			–	–		6	2		4						X	X	X	X			

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

Additional Comments	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] (Arcadis)	8/17/23	0833	[signature] Arcadis	8/17/23	0832
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	[signature] Arcadis	8/17/23		Ryan Williams / Pace	8/17/23	0955
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se); 7040A: Mercury (Hg)	Ryan Williams / Pace	8/17/23	1254	[signature]	8/17	1254

PRINT Name of SAMPLER: (Arcadis) - David Prouty
SIGNATURE of SAMPLER: (Arcadis) [signature] DATE Signed: 8/16/23

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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

September 14, 2023

Lauren Hartley
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between August 16, 2023 and August 17, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Geoffrey Gay, Arcadis-ATL
Laura Midkiff, Southern Company
Alex Simpson, Arcadis
Becky Steever, Arcadis
Jessica Ware, Arcadis
Albert Zumbuhl, Arcadis

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92683132001	**YAT-YGWA-1I**	Water	08/15/23 13:45	08/16/23 09:07
92683132002	**YAT-YGWA-1D**	Water	08/15/23 11:20	08/16/23 09:07
92683132003	**YAT-YGWA-2I**	Water	08/15/23 15:45	08/16/23 09:07
92683132004	**YAT-YGWA-3D**	Water	08/15/23 17:10	08/16/23 09:07
92683132005	**YAT-YGWA-4I**	Water	08/15/23 12:25	08/16/23 09:07
92683132006	**YAT-YGWA-5I**	Water	08/15/23 10:20	08/16/23 09:07
92683132007	**YAT-YGWA-5D**	Water	08/15/23 11:13	08/16/23 09:07
92683132008	**YAT-YGWA-18S**	Water	08/15/23 11:35	08/16/23 09:07
92683132009	**YAT-YGWA-18I**	Water	08/15/23 15:40	08/16/23 09:07
92683132010	**YAT-YGWA-14S**	Water	08/15/23 17:30	08/16/23 09:07
92683132011	**YAT-YGWA-47**	Water	08/15/23 09:43	08/16/23 09:07
92683132012	**YAT-GWA-2**	Water	08/15/23 10:20	08/16/23 09:07
92683132013	**YAT-YGWA-17S**	Water	08/15/23 14:50	08/16/23 09:07
92683132014	**YAT-YGWA-20S**	Water	08/15/23 12:25	08/16/23 09:07
92683132015	**YAT-YGWA-21I**	Water	08/15/23 10:35	08/16/23 09:07
92683132016	**YAT-YGWA-39**	Water	08/15/23 16:11	08/16/23 09:07
92683132017	**YAT-YGWA-40**	Water	08/15/23 17:20	08/16/23 09:07
92683132018	**YAT-YGWA-30I**	Water	08/16/23 12:20	08/17/23 09:55
92683132019	**YAT-YGWA-3I**	Water	08/16/23 10:50	08/17/23 09:55

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92683132001	**YAT-YGWA-1I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132002	**YAT-YGWA-1D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132003	**YAT-YGWA-2I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132004	**YAT-YGWA-3D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132005	**YAT-YGWA-4I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132006	**YAT-YGWA-5I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132007	**YAT-YGWA-5D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132008	**YAT-YGWA-18S**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132009	**YAT-YGWA-18I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132010	**YAT-YGWA-14S**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132011	**YAT-YGWA-47**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132012	**YAT-GWA-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132013	**YAT-YGWA-17S**	EPA 9315	SLC	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132014	**YAT-YGWA-20S**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132015	**YAT-YGWA-21I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132016	**YAT-YGWA-39**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132017	**YAT-YGWA-40**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132018	**YAT-YGWA-30I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132019	**YAT-YGWA-3I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683132001	**YAT-YGWA-1I**					
EPA 9315	Radium-226	0.150U ± 0.130 (0.239) C:91% T:NA	pCi/L		09/08/23 13:11	
EPA 9320	Radium-228	0.576U ± 0.415 (0.817) C:80% T:89%	pCi/L		09/06/23 12:41	
Total Radium Calculation	Total Radium	0.726U ± 0.545 (1.06)	pCi/L		09/08/23 17:29	
92683132002	**YAT-YGWA-1D**					
EPA 9315	Radium-226	0.273U ± 0.177 (0.294) C:87% T:NA	pCi/L		09/08/23 13:11	
EPA 9320	Radium-228	0.662U ± 0.411 (0.782) C:82% T:95%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	0.935U ± 0.588 (1.08)	pCi/L		09/08/23 17:29	
92683132003	**YAT-YGWA-2I**					
EPA 9315	Radium-226	0.355 ± 0.194 (0.299) C:86% T:NA	pCi/L		09/08/23 13:11	
EPA 9320	Radium-228	0.256U ± 0.340 (0.726) C:85% T:87%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	0.611U ± 0.534 (1.03)	pCi/L		09/08/23 17:29	
92683132004	**YAT-YGWA-3D**					
EPA 9315	Radium-226	1.27 ± 0.349 (0.256) C:83% T:NA	pCi/L		09/08/23 13:11	
EPA 9320	Radium-228	1.52 ± 0.529 (0.765) C:83% T:87%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	2.79 ± 0.878 (1.02)	pCi/L		09/08/23 17:29	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683132005	**YAT-YGWA-4I**					
EPA 9315	Radium-226	0.684 ± 0.241 (0.237) C:89% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.456U ± 0.389 (0.790) C:86% T:88%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	1.14 ± 0.630 (1.03)	pCi/L		09/08/23 17:29	
92683132006	**YAT-YGWA-5I**					
EPA 9315	Radium-226	0.0709U ± 0.127 (0.288) C:79% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.775 ± 0.405 (0.729) C:85% T:94%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	0.846U ± 0.532 (1.02)	pCi/L		09/08/23 17:29	
92683132007	**YAT-YGWA-5D**					
EPA 9315	Radium-226	2.44 ± 0.525 (0.265) C:85% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.995 ± 0.414 (0.664) C:83% T:93%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	3.44 ± 0.939 (0.929)	pCi/L		09/08/23 17:29	
92683132008	**YAT-YGWA-18S**					
EPA 9315	Radium-226	-0.00970U ± 0.121 (0.326) C:84% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.347U ± 0.345 (0.713) C:84% T:92%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	0.347U ± 0.466 (1.04)	pCi/L		09/08/23 17:29	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683132009	**YAT-YGWA-18I**					
EPA 9315	Radium-226	0.108U ± 0.121 (0.245) C:93% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.547U ± 0.432 (0.862) C:78% T:87%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	0.655U ± 0.553 (1.11)	pCi/L		09/08/23 17:29	
92683132010	**YAT-YGWA-14S**					
EPA 9315	Radium-226	0.0870U ± 0.121 (0.259) C:82% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.565U ± 0.353 (0.665) C:84% T:95%	pCi/L		09/06/23 15:50	
Total Radium Calculation	Total Radium	0.652U ± 0.474 (0.924)	pCi/L		09/08/23 17:29	
92683132011	**YAT-YGWA-47**					
EPA 9315	Radium-226	0.502 ± 0.236 (0.326) C:73% T:NA	pCi/L		09/08/23 13:08	
EPA 9320	Radium-228	0.445U ± 0.356 (0.711) C:85% T:89%	pCi/L		09/06/23 15:50	
Total Radium Calculation	Total Radium	0.947U ± 0.592 (1.04)	pCi/L		09/08/23 17:29	
92683132012	**YAT-GWA-2**					
EPA 9315	Radium-226	0.230U ± 0.166 (0.285) C:77% T:NA	pCi/L		09/08/23 13:09	
EPA 9320	Radium-228	0.603U ± 0.352 (0.631) C:85% T:82%	pCi/L		09/06/23 15:46	
Total Radium Calculation	Total Radium	0.833U ± 0.518 (0.916)	pCi/L		09/08/23 17:29	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683132013	**YAT-YGWA-17S**					
EPA 9315	Radium-226	-0.125U ± 0.202 (0.646) C:89% T:NA	pCi/L		09/12/23 18:20	
EPA 9320	Radium-228	0.0388U ± 0.250 (0.579) C:84% T:90%	pCi/L		09/06/23 15:47	
Total Radium Calculation	Total Radium	0.0388U ± 0.452 (1.23)	pCi/L		09/13/23 14:27	
92683132014	**YAT-YGWA-20S**					
EPA 9315	Radium-226	0.0694U ± 0.199 (0.482) C:94% T:NA	pCi/L		09/13/23 08:26	
EPA 9320	Radium-228	0.0952U ± 0.357 (0.807) C:80% T:89%	pCi/L		09/06/23 15:47	
Total Radium Calculation	Total Radium	0.165U ± 0.556 (1.29)	pCi/L		09/13/23 14:27	
92683132015	**YAT-YGWA-21I**					
EPA 9315	Radium-226	0.608 ± 0.351 (0.537) C:86% T:NA	pCi/L		09/13/23 08:28	
EPA 9320	Radium-228	1.07 ± 0.492 (0.853) C:84% T:88%	pCi/L		09/06/23 15:47	
Total Radium Calculation	Total Radium	1.68 ± 0.843 (1.39)	pCi/L		09/13/23 14:27	
92683132016	**YAT-YGWA-39**					
EPA 9315	Radium-226	0.441U ± 0.299 (0.494) C:90% T:NA	pCi/L		09/13/23 10:02	
EPA 9320	Radium-228	0.167U ± 0.308 (0.676) C:85% T:92%	pCi/L		09/06/23 15:48	
Total Radium Calculation	Total Radium	0.608U ± 0.607 (1.17)	pCi/L		09/13/23 14:27	

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683132017	**YAT-YGWA-40**					
EPA 9315	Radium-226	0.325U ± 0.300 (0.580) C:84% T:NA	pCi/L		09/13/23 10:02	
EPA 9320	Radium-228	-0.0884U ± 0.244 (0.597) C:86% T:91%	pCi/L		09/06/23 15:48	
Total Radium Calculation	Total Radium	0.325U ± 0.544 (1.18)	pCi/L		09/13/23 14:27	
92683132018	**YAT-YGWA-30I**					
EPA 9315	Radium-226	0.218U ± 0.283 (0.590) C:86% T:NA	pCi/L		09/13/23 13:31	
EPA 9320	Radium-228	0.677U ± 0.409 (0.777) C:82% T:91%	pCi/L		09/08/23 11:52	
Total Radium Calculation	Total Radium	0.895U ± 0.692 (1.37)	pCi/L		09/13/23 15:34	
92683132019	**YAT-YGWA-3I**					
EPA 9315	Radium-226	1.00 ± 0.537 (0.830) C:82% T:NA	pCi/L		09/13/23 13:31	
EPA 9320	Radium-228	0.868 ± 0.395 (0.664) C:85% T:87%	pCi/L		09/08/23 11:52	
Total Radium Calculation	Total Radium	1.87 ± 0.932 (1.49)	pCi/L		09/13/23 15:34	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-1I **Lab ID: 92683132001** Collected: 08/15/23 13:45 Received: 08/16/23 09:07 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	**0.150U ± 0.130 (0.239) C:91% T:NA**	pCi/L	09/08/23 13:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.576U ± 0.415 (0.817) C:80% T:89%**	pCi/L	09/06/23 12:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.726U ± 0.545 (1.06)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-1D **Lab ID: 92683132002** Collected: 08/15/23 11:20 Received: 08/16/23 09:07 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	**0.273U ± 0.177 (0.294) C:87% T:NA**	pCi/L	09/08/23 13:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.662U ± 0.411 (0.782) C:82% T:95%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.935U ± 0.588 (1.08)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-2I **Lab ID: 92683132003** Collected: 08/15/23 15:45 Received: 08/16/23 09:07 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	**0.355 ± 0.194 (0.299) C:86% T:NA**	pCi/L	09/08/23 13:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.256U ± 0.340 (0.726) C:85% T:87%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.611U ± 0.534 (1.03)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-3D **Lab ID: 92683132004** Collected: 08/15/23 17:10 Received: 08/16/23 09:07 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	**1.27 ± 0.349 (0.256) C:83% T:NA**	pCi/L	09/08/23 13:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.52 ± 0.529 (0.765) C:83% T:87%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.79 ± 0.878 (1.02)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-4I **Lab ID: 92683132005** Collected: 08/15/23 12:25 Received: 08/16/23 09:07 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	**0.684 ± 0.241 (0.237) C:89% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.456U ± 0.389 (0.790) C:86% T:88%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.14 ± 0.630 (1.03)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-5I **Lab ID: 92683132006** Collected: 08/15/23 10:20 Received: 08/16/23 09:07 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	**0.0709U ± 0.127 (0.288) C:79% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.775 ± 0.405 (0.729) C:85% T:94%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.846U ± 0.532 (1.02)**	pCi/L	09/08/23 17:29	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-5D **Lab ID: 92683132007** Collected: 08/15/23 11:13 Received: 08/16/23 09:07 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	**2.44 ± 0.525 (0.265) C:85% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.995 ± 0.414 (0.664) C:83% T:93%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.44 ± 0.939 (0.929)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-18S **Lab ID: 92683132008** Collected: 08/15/23 11:35 Received: 08/16/23 09:07 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	**-0.00970U ± 0.121 (0.326) C:84% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.347U ± 0.345 (0.713) C:84% T:92%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.347U ± 0.466 (1.04)**	pCi/L	09/08/23 17:29	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-18I **Lab ID: 92683132009** Collected: 08/15/23 15:40 Received: 08/16/23 09:07 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	**0.108U ± 0.121 (0.245) C:93% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.547U ± 0.432 (0.862) C:78% T:87%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.655U ± 0.553 (1.11)**	pCi/L	09/08/23 17:29	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-14S **Lab ID: 92683132010** Collected: 08/15/23 17:30 Received: 08/16/23 09:07 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	**0.0870U ± 0.121 (0.259) C:82% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.565U ± 0.353 (0.665) C:84% T:95%**	pCi/L	09/06/23 15:50	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.652U ± 0.474 (0.924)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-47 **Lab ID: 92683132011** Collected: 08/15/23 09:43 Received: 08/16/23 09:07 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	**0.502 ± 0.236 (0.326) C:73% T:NA**	pCi/L	09/08/23 13:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.445U ± 0.356 (0.711) C:85% T:89%**	pCi/L	09/06/23 15:50	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.947U ± 0.592 (1.04)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-GWA-2 **Lab ID: 92683132012** Collected: 08/15/23 10:20 Received: 08/16/23 09:07 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	**0.230U ± 0.166 (0.285) C:77% T:NA**	pCi/L	09/08/23 13:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.603U ± 0.352 (0.631) C:85% T:82%**	pCi/L	09/06/23 15:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.833U ± 0.518 (0.916)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-17S **Lab ID: 92683132013** Collected: 08/15/23 14:50 Received: 08/16/23 09:07 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	**-0.125U ± 0.202 (0.646) C:89% T:NA**	pCi/L	09/12/23 18:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0388U ± 0.250 (0.579) C:84% T:90%**	pCi/L	09/06/23 15:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0388U ± 0.452 (1.23)**	pCi/L	09/13/23 14:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-20S **Lab ID: 92683132014** Collected: 08/15/23 12:25 Received: 08/16/23 09:07 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	**0.0694U ± 0.199 (0.482) C:94% T:NA**	pCi/L	09/13/23 08:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0952U ± 0.357 (0.807) C:80% T:89%**	pCi/L	09/06/23 15:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.165U ± 0.556 (1.29)**	pCi/L	09/13/23 14:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-21I **Lab ID: 92683132015** Collected: 08/15/23 10:35 Received: 08/16/23 09:07 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	**0.608 ± 0.351 (0.537) C:86% T:NA**	pCi/L	09/13/23 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.07 ± 0.492 (0.853) C:84% T:88%**	pCi/L	09/06/23 15:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.68 ± 0.843 (1.39)**	pCi/L	09/13/23 14:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-39 **Lab ID: 92683132016** Collected: 08/15/23 16:11 Received: 08/16/23 09:07 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	**0.441U ± 0.299 (0.494) C:90% T:NA**	pCi/L	09/13/23 10:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.167U ± 0.308 (0.676) C:85% T:92%**	pCi/L	09/06/23 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.608U ± 0.607 (1.17)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-40 **Lab ID: 92683132017** Collected: 08/15/23 17:20 Received: 08/16/23 09:07 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	**0.325U ± 0.300 (0.580) C:84% T:NA**	pCi/L	09/13/23 10:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0884U ± 0.244 (0.597) C:86% T:91%**	pCi/L	09/06/23 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.325U ± 0.544 (1.18)**	pCi/L	09/13/23 14:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-30I **Lab ID: 92683132018** Collected: 08/16/23 12:20 Received: 08/17/23 09:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.218U ± 0.283 (0.590) C:86% T:NA**	pCi/L	09/13/23 13:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.677U ± 0.409 (0.777) C:82% T:91%**	pCi/L	09/08/23 11:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.895U ± 0.692 (1.37)**	pCi/L	09/13/23 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-3I **Lab ID: 92683132019** Collected: 08/16/23 10:50 Received: 08/17/23 09:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**1.00 ± 0.537 (0.830) C:82% T:NA**	pCi/L	09/13/23 13:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.868 ± 0.395 (0.664) C:85% T:87%**	pCi/L	09/08/23 11:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.87 ± 0.932 (1.49)**	pCi/L	09/13/23 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch: 611649
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683132001, 92683132002, 92683132003, 92683132004, 92683132005, 92683132006, 92683132007, 92683132008, 92683132009, 92683132010, 92683132011, 92683132012

METHOD BLANK: 2977146
Matrix: Water
Associated Lab Samples: 92683132001, 92683132002, 92683132003, 92683132004, 92683132005, 92683132006, 92683132007, 92683132008, 92683132009, 92683132010, 92683132011, 92683132012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.101 ± 0.125 (0.261) C:93% T:NA	pCi/L	09/08/23 11:33	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch: 611584
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683132001, 92683132002, 92683132003, 92683132004, 92683132005, 92683132006, 92683132007, 92683132008, 92683132009

METHOD BLANK: 2976835 Matrix: Water
Associated Lab Samples: 92683132001, 92683132002, 92683132003, 92683132004, 92683132005, 92683132006, 92683132007, 92683132008, 92683132009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.100 ± 0.312 (0.703) C:75% T:95%	pCi/L	09/06/23 12:40	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch: 611586
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683132010, 92683132011, 92683132012, 92683132013, 92683132014, 92683132015, 92683132016, 92683132017

METHOD BLANK: 2976847 Matrix: Water
Associated Lab Samples: 92683132010, 92683132011, 92683132012, 92683132013, 92683132014, 92683132015, 92683132016, 92683132017

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.830 ± 0.342 (0.491) C:81% T:89%	pCi/L	09/06/23 15:45	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch: 612656
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683132018, 92683132019

METHOD BLANK: 2982190 Matrix: Water
Associated Lab Samples: 92683132018, 92683132019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.438 ± 0.430 (0.847) C:79% T:NA	pCi/L	09/13/23 13:30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch:	612651	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92683132013, 92683132014, 92683132015, 92683132016, 92683132017

METHOD BLANK: 2982186 Matrix: Water

Associated Lab Samples: 92683132013, 92683132014, 92683132015, 92683132016, 92683132017

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.199 ± 0.286 (0.622) C:88% T:NA	pCi/L	09/12/23 18:19	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch: 611590
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683132018, 92683132019

METHOD BLANK: 2976857 Matrix: Water
Associated Lab Samples: 92683132018, 92683132019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0613 ± 0.274 (0.661) C:83% T:83%	pCi/L	09/08/23 11:54	

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683132001	**YAT-YGWA-1I**	EPA 9315	611649		
92683132002	**YAT-YGWA-1D**	EPA 9315	611649		
92683132003	**YAT-YGWA-2I**	EPA 9315	611649		
92683132004	**YAT-YGWA-3D**	EPA 9315	611649		
92683132005	**YAT-YGWA-4I**	EPA 9315	611649		
92683132006	**YAT-YGWA-5I**	EPA 9315	611649		
92683132007	**YAT-YGWA-5D**	EPA 9315	611649		
92683132008	**YAT-YGWA-18S**	EPA 9315	611649		
92683132009	**YAT-YGWA-18I**	EPA 9315	611649		
92683132010	**YAT-YGWA-14S**	EPA 9315	611649		
92683132011	**YAT-YGWA-47**	EPA 9315	611649		
92683132012	**YAT-GWA-2**	EPA 9315	611649		
92683132013	**YAT-YGWA-17S**	EPA 9315	612651		
92683132014	**YAT-YGWA-20S**	EPA 9315	612651		
92683132015	**YAT-YGWA-21I**	EPA 9315	612651		
92683132016	**YAT-YGWA-39**	EPA 9315	612651		
92683132017	**YAT-YGWA-40**	EPA 9315	612651		
92683132018	**YAT-YGWA-30I**	EPA 9315	612656		
92683132019	**YAT-YGWA-3I**	EPA 9315	612656		
92683132001	**YAT-YGWA-1I**	EPA 9320	611584		
92683132002	**YAT-YGWA-1D**	EPA 9320	611584		
92683132003	**YAT-YGWA-2I**	EPA 9320	611584		
92683132004	**YAT-YGWA-3D**	EPA 9320	611584		
92683132005	**YAT-YGWA-4I**	EPA 9320	611584		
92683132006	**YAT-YGWA-5I**	EPA 9320	611584		
92683132007	**YAT-YGWA-5D**	EPA 9320	611584		
92683132008	**YAT-YGWA-18S**	EPA 9320	611584		
92683132009	**YAT-YGWA-18I**	EPA 9320	611584		
92683132010	**YAT-YGWA-14S**	EPA 9320	611586		
92683132011	**YAT-YGWA-47**	EPA 9320	611586		
92683132012	**YAT-GWA-2**	EPA 9320	611586		
92683132013	**YAT-YGWA-17S**	EPA 9320	611586		
92683132014	**YAT-YGWA-20S**	EPA 9320	611586		
92683132015	**YAT-YGWA-21I**	EPA 9320	611586		
92683132016	**YAT-YGWA-39**	EPA 9320	611586		
92683132017	**YAT-YGWA-40**	EPA 9320	611586		
92683132018	**YAT-YGWA-30I**	EPA 9320	611590		
92683132019	**YAT-YGWA-3I**	EPA 9320	611590		
92683132001	**YAT-YGWA-1I**	Total Radium Calculation	614334		
92683132002	**YAT-YGWA-1D**	Total Radium Calculation	614334		
92683132003	**YAT-YGWA-2I**	Total Radium Calculation	614334		
92683132004	**YAT-YGWA-3D**	Total Radium Calculation	614334		
92683132005	**YAT-YGWA-4I**	Total Radium Calculation	614334		
92683132006	**YAT-YGWA-5I**	Total Radium Calculation	614334		
92683132007	**YAT-YGWA-5D**	Total Radium Calculation	614334		
92683132008	**YAT-YGWA-18S**	Total Radium Calculation	614334		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683132009	**YAT-YGWA-18I**	Total Radium Calculation	614334		
92683132010	**YAT-YGWA-14S**	Total Radium Calculation	614334		
92683132011	**YAT-YGWA-47**	Total Radium Calculation	614334		
92683132012	**YAT-GWA-2**	Total Radium Calculation	614334		
92683132013	**YAT-YGWA-17S**	Total Radium Calculation	615223		
92683132014	**YAT-YGWA-20S**	Total Radium Calculation	615223		
92683132015	**YAT-YGWA-21I**	Total Radium Calculation	615223		
92683132016	**YAT-YGWA-39**	Total Radium Calculation	615223		
92683132017	**YAT-YGWA-40**	Total Radium Calculation	615223		
92683132018	**YAT-YGWA-30I**	Total Radium Calculation	615249		
92683132019	**YAT-YGWA-3I**	Total Radium Calculation	615249		

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Gft Power

Project #: WO# : 92683132

92683132

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

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

Date/Initials Person Examining Contents: 8/14/23 CMH

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: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92683132**

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
2		1	1			2																			2				
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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 DENR 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:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax:
Requested Due Date:	Standard

Section B
Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-2023S2
Purchase Order #:	
Project Name:	Plant Yates Pooled Upgradient
Project Number:	

Section C
Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	~~Nicole D'Oleo~~ Bonnie Vang
Pace Profile #:	10840

Regulatory Agency
State / Location
Georgia

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	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gpysum only)	Residual Chlorine (Y/N)	92683132
1	YAT-YGWA-39	WG	G			--	--		6	2		4							X	X	X	X			
2	YAT-YGWA-40	WG	G			--	--		6	2		4							X	X	X	X			
3	YAT-YGWA-1I	WG	G	8/15/23	1345	--	--		6	2		4							X	X	X	X			001
4	YAT-YGWA-1D	WG	G	8/15/23	1120	--	--		6	2		4							X	X	X	X			002
5	YAT-YGWA-2I	WG	G	8/15/23	1545	--	--		6	2		4							X	X	X	X			003
6	YAT-YGWA-3I	WG	G			--	--		6	2		4							X	X	X	X			
7	YAT-YGWA-3D	WG	G	8/15/23	1710	--	--		6	2		4							X	X	X	X			004
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)	[signature] /Arcadis	8/15/23	1805	[signature] /Arcadis	8/15/23	1805	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	[signature] /Arcadis	8/14/23	0907	Ryan William / Pace	8/14/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan William / Pace	8/14/23	1115	[signature]	8/14/23	1115	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: (Arcadis) - David Prouty

SIGNATURE of SAMPLER: (Arcadis) [signature] DATE Signed: 8/15/23

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

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Off Power

Project #: WO#: 92683132

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

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

Date/Initials Person Examining Contents: 8/16/23 Cmf

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: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

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

***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92683132**

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2 1																			2 1				
2		1	1			1 2																			2 1				
3		1	1			2 1																			2 1				
4		1	1			2 1																			2 1				
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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 DENR 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:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Olio~~ Bonnie Jung
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Requested Analysis Filtered (Y/N) | State / Location: Georgia

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	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / III (gypsum only)	Residual Chlorine (Y/N)	92683/32
1	YAT-YGWA-47	WG	G			--	--		6	2		4							X	X	X	X				
2	YAT-GWA-2	WG	G			--	--		6	2		4							X	X	X	X	X			
3	YAT-YGWA-4I	WG	G	8/15/23	1725	--	--		6	2		4							X	X	X	X				WS
4	YAT-YGWA-5I	WG	G	8/15/23	1020	--	--		6	2		4							X	X	X	X				WG
5	YAT-YGWA-5D	WG	G	8/15/23	1113	--	--		6	2		4							X	X	X	X				WS
6	YAT-YGWA-17S	WG	G			--	--		6	2		4							X	X	X	X				
7	YAT-YGWA-18S	WG	G	8/15/23	1455	--	--		6	2		4							X	X	X	X				WG
8	YAT-YGWA-18I	WG	G	8/15/23	1540	--	--		6	2		4							X	X	X	X				WG
9	YAT-YGWA-20S	WG	G			--	--		6	2		4							X	X	X	X				
10	YAT-YGWA-21I	WG	G			--	--		6	2		4							X	X	X	X				
11	YAT-YGWA-30I	WG	G			--	--		6	2		4							X	X	X	X				
12	YAT-YGWA-14S	WG	G	8/15/23	1730	--	--		6	2		4							X	X	X	X				GW

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/16/23	0755		8/16/23	0755	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Arcadis	8/16/23	0901	Ryan Williams / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg);	Ryan Williams / Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Kim Lapsevynski					
SIGNATURE of SAMPLER:		DATE Signed: 8/16/23				

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92683132**

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

PM: BV **Due Date: 09/07/23**

CLIENT: 92-GP-Yates

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

Date/initials Person Examining Contents: 8/16/23 CM

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: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

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**

*****Check all unpreserved Nitrates for chlorine**

Project #

WO#: 92683132

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR 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:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B
Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-2023S2
Purchase Order #:	
Project Name:	Plant Yates Pooled Upgradient
Project Number:	

Section C
Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	~~Nicole D'Oleo~~ Bonnie Vang
Pace Profile #:	10840

Regulatory Agency
State / Location
Georgia

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	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gpysum only)	Residual Chlorine (Y/N)
1	YAT-YGWA-47	WG	G	8/15/23	0943	–	–		6	2		4							X	X	X	X		
2	YAT-GWA-2	WG	G			–	–		6	2		4							X	X	X	X	X	
3	YAT-YGWA-4I	WG	G			–	–		6	2		4							X	X	X	X		
4	YAT-YGWA-5I	WG	G			–	–		6	2		4							X	X	X	X		
5	YAT-YGWA-5D	WG	G			–	–		6	2		4							X	X	X	X		
6	YAT-YGWA-17S	WG	G			–	–		6	2		4							X	X	X	X		
7	YAT-YGWA-18S	WG	G			–	–		6	2		4							X	X	X	X		
8	YAT-YGWA-18I	WG	G			–	–		6	2		4							X	X	X	X		
9	YAT-YGWA-20S	WG	G			–	–		6	2		4							X	X	X	X		
10	YAT-YGWA-21I	WG	G			–	–		6	2		4							X	X	X	X		
11	YAT-YGWA-30I	WG	G			–	–		6	2		4							X	X	X	X		
12	YAT-YGWA-14S	WG	G			–	–		6	2		4							X	X	X	X		

92683132
011

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	Mark Chest / Arcadis	8/16/23	0907	Ryan William / Pace	8/16/23	0907	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Ryan William / Pace	8/16/23	1115	[signature]	8/16/23	1115	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Chest

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/16/23

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

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Off Power

Project #: **WO#: 92683132**

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

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

Date/Initials Person Examining Contents: 8/16/23 CMH

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: 2.3 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 2.3

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:

WO# : 92683132

PM: BV **Due Date: 09/07/23**

CLIENT: 92-GP-Yates

***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**

*****Check all unpreserved Nitrates for chlorine**

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Steijle Plastic (N/A – lab)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR 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:	GA Power
Address:	Atlanta, GA
Email To:	lsucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-202352
Purchase Order #:	
Project Name:	Plant Yates Pooled Upgradient
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Nicole D'Oleo
Pace Profile #:	10840

Regulatory Agency: —

State / Location: Georgia

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	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	92683132
1	YAT-YGWA-47	WG	G			–	–		6	2		4							X	X	X	X			
2	YAT-GWA-2	WG	G	8/15/23	1020	–	–		6	2		4							X	X	X	X	X		0.12
3	YAT-YGWA-4I	WG	G			–	–		6	2		4							X	X	X	X			
4	YAT-YGWA-5I	WG	G			–	–		6	2		4							X	X	X	X			
5	YAT-YGWA-5D	WG	G			–	–		6	2		4							X	X	X	X			
6	YAT-YGWA-17S	WG	G			–	–		6	2		4							X	X	X	X			
7	YAT-YGWA-18S	WG	G			–	–		6	2		4							X	X	X	X			
8	YAT-YGWA-18I	WG	G			–	–		6	2		4							X	X	X	X			
9	YAT-YGWA-20S	WG	G			–	–		6	2		4							X	X	X	X			
10	YAT-YGWA-21I	WG	G			–	–		6	2		4							X	X	X	X			
11	YAT-YGWA-30I	WG	G			–	–		6	2		4							X	X	X	X			
12	YAT-YGWA-14S	WG	G			–	–		6	2		4							X	X	X	X			

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	8/16/23	0900	/Pace	8/16/23	0800	
App III Metals: Boron 6020B, Ca 6010D; App I/III 6020B: Zn, Ag, Ni, V	/Arcadis	8/16/23	0907	/Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)	/Pace	8/16/23	1115	/Pace	8/16/23	1115	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Luke Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/15/23

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

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO#: 92683132

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

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

Date/Initials Person Examining Contents: 8/16/23 CMH

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

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

Thermometer: ☑ IR Gun ID: 230

Cooler Temp: 2.3 Correction Factor: Add/Subtract (°C) 0.0 Type of Ice: ☐ Wet ☐ Blue ☐ None

Cooler Temp Corrected (°C): 2.3

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

***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92683132**

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG3S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																		2	2				
2		1	1			2																		2	2				
3		1	1			2																		2	2				
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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 DENR 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 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-202392	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Otto~~ Brooke Jany
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: Georgia

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	Analysis Test Y/N	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	9266313
1	YAT-YGWA-47	WG	G			--	--		6	2		4							X	X	X	X			
2	YAT-GWA-2	WG	G			--	--		6	2		4							X	X	X	X	X		
3	YAT-YGWA-4I	WG	G			--	--		6	2		4							X	X	X	X			
4	YAT-YGWA-5I	WG	G			--	--		6	2		4							X	X	X	X			
5	YAT-YGWA-5D	WG	G			--	--		6	2		4							X	X	X	X			
6	YAT-YGWA-17S	WG	G	8/15	1450	--	--		6	2		4							X	X	X	X			013
7	YAT-YGWA-18S	WG	G			--	--		6	2		4							X	X	X	X			
8	YAT-YGWA-18I	WG	G			--	--		6	2		4							X	X	X	X			
9	YAT-YGWA-20S	WG	G	8/15	1225	--	--		6	2		4							X	X	X	X			014
10	YAT-YGWA-21I	WG	G	8/15	1035	--	--		6	2		4							X	X	X	X			015
11	YAT-YGWA-30I	WG	G			--	--		6	2		4							X	X	X	X			
12	YAT-YGWA-14S	WG	G			--	--		6	2		4							X	X	X	X			

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	8/15/23	1805	/ Arcadis	8/15/23	1805	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Arcadis	8/16/23	0907	Ryan Williams / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan Williams / Pace	8/16/23	1115	/	8/16/23	1115	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jessica Ware

SIGNATURE of SAMPLER: DATE Signed: 8/15/23

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 : 2 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-202352	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Olen~~ Bonnie Young
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: Georgia

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	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	
1	YAT-YGWA-39	WG	G	8/15	1611	--	--		6	2		4							X	X	X	X			1116
2	YAT-YGWA-40	WG	G	8/15	1720	--	--		6	2		4							X	X	X	X			1117
3	YAT-YGWA-1I	WG	G			--	--		6	2		4							X	X	X	X			
4	YAT-YGWA-1D	WG	G			--	--		6	2		4							X	X	X	X			
5	YAT-YGWA-2I	WG	G			--	--		6	2		4							X	X	X	X			
6	YAT-YGWA-3I	WG	G			--	--		6	2		4							X	X	X	X			
7	YAT-YGWA-3D	WG	G			--	--		6	2		4							X	X	X	X			
8						--	--																		
9						--	--																		
10						--	--																		
11						--	--																		
12						--	--																		

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	8/15/23	1805	/Arcadis	8/15/23	1805	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	/Arcadis	8/16/23	0907	Ryan Williams / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se); 7040A: Mercury (Hg)	Ryan Williams / Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE				TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	(Arcadis): Jessica Ware						
SIGNATURE of SAMPLER:	(Arcadis):	DATE Signed:	8/15/23				

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO#: 92683132

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

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

Date/Initials Person Examining Contents: 9-17-23 AY

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: 5.7 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 5.7

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: WG				
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:

Qualtrax ID: 82814

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

***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**

*****Check all unpreserved Nitrates for chlorine**

Project #

WO#: 92683132

PM: BV **Due Date: 09/07/23**

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR 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 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	laucoken@southernco.com	Purchase Order #:		Pace Quote:	
Phone: 470.620.6176	Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Oleo~~ Brooke Varg
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency / State / Location: Georgia

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	SAMPLE TYPE (G=GRAB C=COMP)	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	92683132
	YAT-YGWA-47	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-GWA-2	WG	G			–	–		6	2		4						X	X	X	X	X		
	YAT-YGWA-4I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-5I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-5D	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-17S	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-18S	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-18I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-20S	WG	G			–	–		6	2		4						X	X	X	X			
10	YAT-YGWA-21I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-30I	WG	G	8/18/23	1230	–	–		6	2		4						X	X	X	X			6218
	YAT-YGWA-14S	WG	G			–	–		6	2		4						X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] /Arcadis	8/17/23	0833	[signature]	8/17/23	0833	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	[signature] /Arcadis	8/17/23		Ryan William /Pace	8/17/23	0955	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)	Ryan William /Pace	8/17/23	1254	[signature]	8-17	1254	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: David Trout

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/16/23

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

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ ~~Kernersville~~ ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92683132**

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

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

Date/Initials Person Examining Contents: 9-17-23 AY

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: 5.7 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): 5.7

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: WG				
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:

Qualtrax ID: 69614

WO#: 92683132

***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**

*****Check all unpreserved Nitrates for chlorine**

Project #

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-202382	Address:	
Email To:	jaucoke@southernco.com	Purchase Order #:		Pace Quote:	Bonnie Young
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	Alicole DiCioo
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

State / Location: Georgia

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	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	
	YAT-YGWA-3S	WG	G			-	-		6	2		4						X	X	X	X			G2063132
	YAT-YGWA-4D	WG	G			-	-		6	2		4						X	X	X	X			
	YAT-YGWA-1I	WG	G			-	-		6	2		4						X	X	X	X			
	YAT-YGWA-1D	WG	G			-	-		6	2		4						X	X	X	X			
	YAT-YGWA-2I	WG	G			-	-		6	2		4						X	X	X	X			
	YAT-YGWA-3I	WG	G	8/16/23	1050	-	-		6	2		4						X	X	X	X			G19
	YAT-YGWA-3D	WG	G			-	-		6	2		4						X	X	X	X			
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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

Anions Suite 300.0 (Cl, F, Sulfate)

App III Metals- Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V

App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)

[signature]	(Arcadis)	8/17/23	0853	[signature]	8/17/23	0832
[signature]		8/17/23		Ryan Williams	8/17/23	0955
Ryan Williams		8/17/23	1259	[signature]	8/17	1259

PRINT Name of SAMPLER: (Arcadis) - David Prouty

SIGNATURE of SAMPLER: (Arcadis) [signature] DATE Signed: 8/16/23

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-228
Analyst: JJS1
Date: 8/31/2023
Worklist: 75028
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2976835
MB concentration:	0.100
M/B 2 Sigma CSU:	0.312
MB MDC:	0.703
MB Numerical Performance Indicator:	0.63
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75028	LCSD75028
Count Date:	9/6/2023	9/6/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.931	39.931
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.820	0.817
Target Conc. (pCi/L, g, F):	4.871	4.885
Uncertainty (Calculated):	0.239	0.239
Result (pCi/L, g, F):	4.767	3.683
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.036	0.867
Numerical Performance Indicator:	-0.19	-2.62
Percent Recovery:	97.85%	75.39%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS75028	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75028	
Sample Result (pCi/L, g, F):	4.767	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.036	
Sample Duplicate Result (pCi/L, g, F):	3.683	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.867	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.573	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	25.93%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(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:

VAL
9/8/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	ZPC
Date:	8/31/2023
Worklist:	75029
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2976847
MB concentration:	0.830
M/B 2 Sigma CSU:	0.342
MB MDC:	0.491
MB Numerical Performance Indicator:	4.76
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

OK

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75029	LCSD75029
Count Date:	9/6/2023	9/6/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.931	39.931
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.817
Target Conc. (pCi/L, g, F):	4.889	4.888
Uncertainty (Calculated):	0.240	0.240
Result (pCi/L, g, F):	3.930	3.696
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.909	0.843
Numerical Performance Indicator:	-2.00	-2.67
Percent Recovery:	80.39%	75.60%
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		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	LCS75029	
Duplicate Sample I.D.	LCSD75029	
Sample Result (pCi/L, g, F):	3.930	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.909	
Sample Duplicate Result (pCi/L, g, F):	3.696	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.843	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.370	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	6.14%	
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:
*The method blank result is below the reporting limit for this analysis and is acceptable.

VAL
9/8/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/5/2023
Worklist:	75032
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2976857
MB concentration:	-0.061
M/B 2 Sigma CSU:	0.274
MB MDC:	0.661
MB Numerical Performance Indicator:	-0.44
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75032	LCSD75032
Count Date:	9/8/2023	9/8/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.906	39.906
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.816	0.820
Target Conc. (pCi/L, g, F):	4.890	4.868
Uncertainty (Calculated):	0.240	0.239
Result (pCi/L, g, F):	5.009	4.854
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.056	1.035
Numerical Performance Indicator:	0.22	-0.03
Percent Recovery:	102.44%	99.70%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS75032	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75032	
Sample Result (pCi/L, g, F):	5.009	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.056	
Sample Duplicate Result (pCi/L, g, F):	4.854	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.035	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.206	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.71%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(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:

9/11/23

LAM 9/12/23

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/2/2023
Worklist:	75042
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2977146
MB concentration:	0.101
M/B 2 Sigma CSU:	0.125
MB MDC:	0.261
MB Numerical Performance Indicator:	1.59
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75042	LCSD75042
Count Date:	9/8/2023	9/8/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.013	24.013
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.503
Target Conc. (pCi/L, g, F):	4.790	4.775
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	6.088	6.235
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.071	1.103
Numerical Performance Indicator:	2.37	2.59
Percent Recovery:	127.10%	130.59%
Status vs Numerical Indicator:	Warning	Warning
Status vs Recovery:	N/A	N/A
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 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.:	LCS75042	92683140002
Duplicate Sample I.D.	LCSD75042	92683140002DUP
Sample Result (pCi/L, g, F):	6.088	0.160
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.071	0.135
Sample Duplicate Result (pCi/L, g, F):	6.235	0.280
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.103	0.167
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.187	-1.090
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.70%	54.18%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% 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 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:

9/8/23

LAM 9/8/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/12/2023
Worklist:	75103
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2982186
MB concentration:	0.199
M/B 2 Sigma CSU:	0.286
MB MDC:	0.622
MB Numerical Performance Indicator:	1.36
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75103	LCSD75103
Count Date:	9/13/2023	9/13/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.031	25.031
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.509
Target Conc. (pCi/L, g, F):	4.965	4.920
Uncertainty (Calculated):	0.233	0.231
Result (pCi/L, g, F):	5.960	4.641
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.214	1.014
Numerical Performance Indicator:	1.58	-0.53
Percent Recovery:	120.03%	94.32%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS75103	92682115021
Duplicate Sample I.D.	LCSD75103	92682115021DUP
Sample Result (pCi/L, g, F):	5.960	0.432
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.214	0.300
Sample Duplicate Result (pCi/L, g, F):	4.641	0.258
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.014	0.271
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.634	0.844
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	23.99%	50.51%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% 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 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:

LAM 9/13/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/13/2023
Worklist:	75106
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2982190
MB concentration:	0.438
M/B 2 Sigma CSU:	0.430
MB MDC:	0.847
MB Numerical Performance Indicator:	2.00
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75106	LCSD75106
Count Date:	9/13/2023	9/13/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.031	25.031
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.501
Target Conc. (pCi/L, g, F):	4.948	4.999
Uncertainty (Calculated):	0.233	0.235
Result (pCi/L, g, F):	4.951	4.002
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.188	1.046
Numerical Performance Indicator:	0.00	-1.82
Percent Recovery:	100.06%	80.06%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS75106	92683386026
Duplicate Sample I.D.	LCSD75106	92683386026DUP
Sample Result (pCi/L, g, F):	4.951	0.428
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.188	0.368
Sample Duplicate Result (pCi/L, g, F):	4.002	0.305
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.046	0.323
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.175	0.489
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	22.21%	33.36%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% 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 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:

LAM 9/13/23

Appendix B

Field Sampling Reports

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/15/2023

Calibrated By: Kim Lapszynski

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	867242
Turbidity Meter	Geotech	22043965

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 7:50			**Time Finish 8:40**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	25.09	± 0.1	GWMP
pH (SU)	7.00	7.00	24.87	± 0.1	GWMP
pH (SU)	10.00	10.00	25.00	± 0.1	GWMP
D.O. (%)	N/A	100.00	26.86	± 10%	NA
ORP (mV)	229.0	229	26.86	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.8	± 10% of standard	EPA 2023
	100	111		
	800	783		
	<0.10	0.02		

Calibration Check					
Time Start 12:45			**Time Finish 13:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4	25.09	± 0.1	GWMP
pH (SU)	7.00	7	24.87	± 0.1	GWMP
pH (SU)	10.00	10	25.00	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.1	± 10% of standard	EPA 2023
	100	111		
	800	804		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/15/2023

Calibrated By: David Prouty

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	661797
Turbidity Meter	Geotech	22043966

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:00			**Time Finish 8:45**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	21.80	± 0.1	GWMP
pH (SU)	7.00	7.02	21.61	± 0.1	GWMP
pH (SU)	10.00	10.05	21.77	± 0.1	GWMP
D.O. (%)	N/A	100.00	23.38	± 10%	NA
ORP (mV)	229.0	229	22.35	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	101		
	800	--		
	<0.10	0.11		

Calibration Check					
Time Start 12:30			**Time Finish 13:12**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4	26.96	± 0.1	GWMP
pH (SU)	7.00	7	26.94	± 0.1	GWMP
pH (SU)	10.00	9.95	27.04	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	--	± 10% of standard	EPA 2023
	100	--		
	800	--		
	<0.10	--		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/15/2023

Calibrated By: Jake Swanson

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	613192
Turbidity Meter	Geotech	--

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 7:45			**Time Finish 8:30**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	21.34	± 0.1	GWMP
pH (SU)	7.00	7.02	21.36	± 0.1	GWMP
pH (SU)	10.00	10.05	21.82	± 0.1	GWMP
D.O. (%)	N/A	100.00	23.76	± 10%	NA
ORP (mV)	229.0	229	22.02	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Calibration Check					
Time Start 12:20			**Time Finish 12:50**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	30.55	± 0.1	GWMP
pH (SU)	7.00	6.99	31.19	± 0.1	GWMP
pH (SU)	10.00	9.95	30.94	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/15/2023

Calibrated By: Jessica Ware

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	887121
Turbidity Meter	Geotech	21063282

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:00			**Time Finish 8:45**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	21.68	± 0.1	GWMP
pH (SU)	7.00	7.02	21.76	± 0.1	GWMP
pH (SU)	10.00	10.05	22.21	± 0.1	GWMP
D.O. (%)	N/A	100.00	22.45	± 10%	NA
ORP (mV)	229.0	229	23.34	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.2	± 10% of standard	EPA 2023
	100	100		
	800	801		
	<0.10	0.02		

Calibration Check					
Time Start 12:30			**Time Finish 13:00**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4	28.19	± 0.1	GWMP
pH (SU)	7.00	7	28.25	± 0.1	GWMP
pH (SU)	10.00	9.95	28.83	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.8	± 10% of standard	EPA 2023
	100	101		
	800	806		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/16/2023

Calibrated By: Mark Chest

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	663604
Turbidity Meter	Geotech	U112809X

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 9:30			**Time Finish 10:20**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	23.26	± 0.1	GWMP
pH (SU)	7.00	7.00	23.26	± 0.1	GWMP
pH (SU)	10.00	10.00	23.45	± 0.1	GWMP
D.O. (%)	N/A	100.00	23.92	± 10%	NA
ORP (mV)	229.0	231.1	24.47	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.8	± 10% of standard	EPA 2023
	100	96.4		
	800	789		
	<0.10	0.02		

Calibration Check					
Time Start 12:20			**Time Finish 12:40**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4	26.46	± 0.1	GWMP
pH (SU)	7.00	7	27.27	± 0.1	GWMP
pH (SU)	10.00	10	26.31	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.4	± 10% of standard	EPA 2023
	100	99.1		
	800	783		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/16/2023

Calibrated By: Jessica Ware

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	613224
Turbidity Meter	Geotech	21063282

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:45		**Time Finish 9:15**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	24.25	± 0.1	GWMP
pH (SU)	7.00	7.00	25.34	± 0.1	GWMP
pH (SU)	10.00	10.00	24.54	± 0.1	GWMP
D.O. (%)	N/A	100.00	23.15	± 10%	NA
ORP (mV)	229.0	229	25.38	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.8	± 10% of standard	EPA 2023
	100	100		
	800	806		
	<0.10	0.02		

Calibration Check					
Time Start 17:00		**Time Finish 17:20**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	28.79	± 0.1	GWMP
pH (SU)	7.00	6.99	28.31	± 0.1	GWMP
pH (SU)	10.00	9.95	28.55	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.3	± 10% of standard	EPA 2023
	100	102		
	800	800		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/16/2023

Calibrated By: Kim Lapszynski

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	867242
Turbidity Meter	Geotech	22043965

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:45		**Time Finish 9:15**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	22.08	± 0.1	GWMP
pH (SU)	7.00	7.02	22.15	± 0.1	GWMP
pH (SU)	10.00	10.05	22.03	± 0.1	GWMP
D.O. (%)	N/A	100.00	22.55	± 10%	NA
ORP (mV)	229.0	229	21.94	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	97.6		
	800	796		
	<0.10	0.02		

Calibration Check					
Time Start 13:31		**Time Finish 14:00**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	30.44	± 0.1	GWMP
pH (SU)	7.00	6.99	31.78	± 0.1	GWMP
pH (SU)	10.00	9.95	29.63	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	18	± 10% of standard	EPA 2023
	100	97.6		
	800	797		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/16/2023

Calibrated By: David Prouty

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	661797
Turbidity Meter	Geotech	22043966

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:45		**Time Finish 9:10**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	23.32	± 0.1	GWMP
pH (SU)	7.00	7.00	23.11	± 0.1	GWMP
pH (SU)	10.00	10.00	23.25	± 0.1	GWMP
D.O. (%)	N/A	100.00	22.98	± 10%	NA
ORP (mV)	229.0	230	24.32	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	100		
	800	--		
	<0.10	0.1		

Calibration Check					
Time Start 13:30		**Time Finish 13:45**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4	25.87	± 0.1	GWMP
pH (SU)	7.00	7	26.03	± 0.1	GWMP
pH (SU)	10.00	10	26.21	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	--	± 10% of standard	EPA 2023
	100	--		
	800	--		
	<0.10	--		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/16/2023

Calibrated By: Jake Swanson

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	613192
Turbidity Meter	Geotech	--

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 0:00			**Time Finish 9:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	21.66	± 0.1	GWMP
pH (SU)	7.00	7.02	20.82	± 0.1	GWMP
pH (SU)	10.00	10.05	21.45	± 0.1	GWMP
D.O. (%)	N/A	100.00	24.35	± 10%	NA
ORP (mV)	229.0	229	21.19	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Calibration Check					
Time Start 13:31			**Time Finish 14:00**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	34.01	± 0.1	GWMP
pH (SU)	7.00	6.99	32	± 0.1	GWMP
pH (SU)	10.00	9.91	35.23	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/17/2023

Calibrated By: David Prouty

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	661797
Turbidity Meter	Geotech	22043966

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:40			**Time Finish 9:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	26.19	± 0.1	GWMP
pH (SU)	7.00	7.00	23.33	± 0.1	GWMP
pH (SU)	10.00	10.00	25.73	± 0.1	GWMP
D.O. (%)	N/A	100.00	24.73	± 10%	NA
ORP (mV)	229.0	226.9	26.66	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	101		
	800	--		
	<0.10	101		

Calibration Check					
Time Start NA			**Time Finish NA**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	--	--	± 10% of standard	EPA 2023
pH (SU)	4.00	--	--	± 0.1	GWMP
pH (SU)	7.00	--	--	± 0.1	GWMP
pH (SU)	10.00	--	--	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	--	--	± 10% of standard	EPA 2023
	--	--		
	--	--		
	--	--		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/17/2023

Calibrated By: Kim Lapszynski

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	867242
Turbidity Meter	Geotech	22043965

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:43			**Time Finish 9:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	23.53	± 0.1	GWMP
pH (SU)	7.00	7.00	23.55	± 0.1	GWMP
pH (SU)	10.00	10.00	23.50	± 0.1	GWMP
D.O. (%)	N/A	100.00	23.35	± 10%	NA
ORP (mV)	229.0	229	22.96	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	21	± 10% of standard	EPA 2023
	100	100		
	800	785		
	<0.10	0.02		

Calibration Check					
Time Start NA			**Time Finish NA**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	--	--	± 10% of standard	EPA 2023
pH (SU)	4.00	--	--	± 0.1	GWMP
pH (SU)	7.00	--	--	± 0.1	GWMP
pH (SU)	10.00	--	--	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	--	--	± 10% of standard	EPA 2023
	--	--		
	--	--		
	--	--		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/17/2023

Calibrated By: Jake Swanson

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	613192
Turbidity Meter	Geotech	--

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:43			**Time Finish 9:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	24.16	± 0.1	GWMP
pH (SU)	7.00	7.00	23.24	± 0.1	GWMP
pH (SU)	10.00	10.00	23.75	± 0.1	GWMP
D.O. (%)	N/A	100.00	24.65	± 10%	NA
ORP (mV)	229.0	229	23.50	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Calibration Check					
Time Start 13:00			**Time Finish 13:30**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	29.87	± 0.1	GWMP
pH (SU)	7.00	6.99	30.47	± 0.1	GWMP
pH (SU)	10.00	9.95	31.14	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/17/2023

Calibrated By: Jessica Ware

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	613224
Turbidity Meter	Geotech	21063282

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:40		**Time Finish 9:10**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	22.83	± 0.1	GWMP
pH (SU)	7.00	7.00	22.64	± 0.1	GWMP
pH (SU)	10.00	10.00	23.10	± 0.1	GWMP
D.O. (%)	N/A	100.00	27.08	± 10%	NA
ORP (mV)	229.0	229	23.90	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	100		
	800	807		
	<0.10	0.04		

Calibration Check					
Time Start NA		**Time Finish NA**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	--	--	± 10% of standard	EPA 2023
pH (SU)	4.00	--	--	± 0.1	GWMP
pH (SU)	7.00	--	--	± 0.1	GWMP
pH (SU)	10.00	--	--	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	--	--	± 10% of standard	EPA 2023
	--	--		
	--	--		
	--	--		

Notes:

Groundwater Gauging Log

Client:		Georgia Power			
Project Location:		AP-1			
Date:		8/14/2023			
Sampler:		Mark Chest			
Equipment:		water probe			
Well	**Date**	**Time**	**Depth to Water (ft)**	**Well Depth (ft)**	**Comments**
YGWC-52	8/14/2023	12:23:00	37.14	70.79	--
PZ-09S	8/14/2023	12:31:00	19.29	57.00	--
PZ-09I	8/14/2023	12:34:00	19.59	77.00	--
YGWC-45	8/14/2023	12:39:00	22.78	73.80	--
PZ-10I	8/14/2023	12:51:00	13.38	46.50	--
PZ-10S	8/14/2023	12:56:00	8.42	16.30	--
YGWC-44	8/14/2023	13:03:00	49.52	89.85	--
YGWC-46A	8/14/2023	13:13:00	39.88	79.22	--
PZ-53	8/14/2023	13:16:00	39.78	72.00	--

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/15/2023 10:05:48 AM -04:00

Project Number	30052922	**Well ID**	YGWA-47			**Date**	08/15/2023
Project Location	AP-1			**Weather(°F)**	77.0 degrees F and Clear. The wind is blowing W at 4.7 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)	33.82	**Total Depth (ft-bmp)**	59.19	**Water Column(ft)**	25.37	**Gallons in Well**	4.12
MP Elevation	758.22	**Pump Intake (ft-bmp)**	54	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:43	**Well Volumes Purged**	0.29	**Sample ID**	YGWA-47	**Sampled by**	Mark Chest
Purge Start	09:20	**Gallons Purged**	1.19	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:40						

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)
09:20:00	00:00	225	33.82	5.53	217.42	0.25	4.61	18.4	226.72
09:25:00	05:00	225	34.75	5.60	218.91	0.02	3.15	19.0	246.92
09:30:00	10:00	225	34.75	5.65	219.03	0.03	3.12	19.0	255.57
09:35:00	15:00	225	34.74	5.65	219.51	0.03	3.06	19.1	262.66
09:40:00	20:00	225	34.74	5.69	220.80	0.02	3.05	19.0	265.45

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	2	HNO3
Anions	250 mL Plastic	1	None

Comments: No comment

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

Groundwater Sampling Form

Updated : 8/15/2023 11:44:06 AM -04:00

Project Number	30052922	**Well ID**	YGWC-52			**Date**	08/15/2023
Project Location	AP-1		**Weather(°F)**	78.8 degrees F and Clear. The wind is blowing W/SW at 4.7 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)	37.13	**Total Depth (ft-bmp)**	70.79	**Water Column(ft)**	33.66	**Gallons in Well**	5.47
MP Elevation	755.86	**Pump Intake (ft-bmp)**	65	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:23	**Well Volumes Purged**	0.39	**Sample ID**	YAT-YGWC-52	**Sampled by**	Mark Chest
Purge Start	10:40	**Gallons Purged**	2.11	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:20						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
10:40:00	00:00	200	37.13	5.97	347.78	0.02	1.21	21.3	202.62
10:45:00	05:00	200	38.05	6.04	347.23	0.03	0.62	21.1	197.74
10:50:00	10:00	200	38.04	6.07	346.88	0.02	0.51	20.9	194.94
10:55:00	15:00	200	38.08	6.08	346.85	0.02	0.56	20.7	202.93
11:00:00	20:00	200	38.1	6.06	358.91	0.02	1.75	20.9	210.93
11:05:00	25:00	200	38.12	6.04	360.09	0.02	2.03	20.8	218.01
11:10:00	30:00	200	38.1	6.04	358.42	0.02	2.20	21.1	223.24
11:15:00	35:00	200	38.05	6.04	356.30	0.02	2.26	20.9	226.23
11:20:00	40:00	200	38.05	6.05	356.74	0.02	2.31	20.9	229.28

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	2	HNO3
Anions	250 mL Plastic	1	None

Comments: No comment

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

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/15/2023 3:23:32 PM -04:00

Project Number	30052922	**Well ID**	YGWC-45			**Date**	08/15/2023
Project Location	AP-1		**Weather(°F)**	89.8 degrees F and Partly Cloudy. The wind is blowing W/SW at 5.8 mph.			
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)	23.25	**Total Depth (ft-bmp)**	73.8	**Water Column(ft)**	50.55	**Gallons in Well**	8.21
MP Elevation	719.36	**Pump Intake (ft-bmp)**	69	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:05	**Well Volumes Purged**	0.23	**Sample ID**	YAT-YGWC-45	**Sampled by**	Mark Chest
Purge Start	14:27	**Gallons Purged**	1.85	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:02						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
14:27:00	00:00	200	23.25	7.15	566.93	31.00	7.80	26.6	159.42
14:32:00	05:00	200	24.91	6.53	551.94	16.20	0.37	19.9	-0.07
14:37:00	10:00	200	25.25	6.66	558.12	12.30	0.12	19.5	6.75
14:42:00	15:00	200	25.3	6.64	566.01	4.63	0.22	22.1	8.89
14:47:00	20:00	200	25.26	6.69	564.68	2.69	0.19	22.1	8.94
14:52:00	25:00	200	25.32	6.96	584.09	1.29	0.14	20.7	-18.99
14:57:00	30:00	200	25.39	7.05	586.97	0.46	0.14	20.6	-36.56
15:02:00	35:00	200	25.39	6.97	580.38	1.13	0.17	20.4	-28.43

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	500 mL Plastic	2	HNO3
Metals	250 mL Plastic	2	HNO3
Anions	250 mL Plastic	1	None

Comments: No comment

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

Groundwater Sampling Form

Updated : 8/16/2023 8:35:50 AM -04:00

Project Number	30052922	**Well ID**	YGWC-44			**Date**	08/15/2023
Project Location	AP-1		**Weather(°F)**	84.9 degrees F and Mostly Cloudy. The wind is blowing W at 4.7 mph.			
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)	49.54	**Total Depth (ft-bmp)**	89.85	**Water Column(ft)**	40.31	**Gallons in Well**	6.55
MP Elevation	758.35	**Pump Intake (ft-bmp)**	83	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:27	**Well Volumes Purged**	0.16	**Sample ID**	YAT-YGWC-44	**Sampled by**	Mark Chest
Purge Start	13:05	**Gallons Purged**	1.06	**Replicate/ Code No.**	YAT-AP1-FB-1	**Color**	Clear
Purge End	13:25						

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)
13:05:00	00:00	200	49.54	5.81	449.97	0.02	1.03	21.3	-32.97
13:10:00	05:00	200	51.72	5.78	451.29	0.02	0.43	22.1	25.87
13:15:00	10:00	200	51.9	5.79	450.82	0.02	0.27	22.5	66.92
13:20:00	15:00	200	51.98	5.78	453.59	0.02	0.22	23.4	90.85
13:25:00	20:00	200	51.95	5.79	450.94	0.02	0.23	24.6	112.51

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	500 mL Plastic	2	HNO3
Metals	250 mL Plastic	2	HNO3
Anions	250 mL Plastic	1	None

Comments: 1350 Field Blank AP1-FB-1

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 9/1/2023 9:01:47 AM -04:00

Project Number	30052922	**Well ID**	YGWC-46A			**Date**	08/15/2023
Project Location	AP-1		**Weather(°F)**	It is Mostly Cloudy. The wind is blowing undefined at 0.0 mph.			
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)	39.87	**Total Depth (ft-bmp)**	79.22	**Water Column(ft)**	39.35	**Gallons in Well**	6.39
MP Elevation	733.04	**Pump Intake (ft-bmp)**	74	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:07	**Well Volumes Purged**	0.21	**Sample ID**	YAT-YGWC-46A	**Sampled by**	Mark Chest
Purge Start	15:40	**Gallons Purged**	1.32	**Replicate/ Code No.**	YAT-AP1-FD-1	**Color**	Clear
Purge End	16:05						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
15:40:00	00:00	200	39.87	7.51	1139.77	0.50	8.20	24.5	101.60
15:40:00	00:00	200	39.87	7.51	1139.77	0.50	8.20	24.5	101.60
15:45:00	05:00	200	41.55	7.42	1335.61	0.04	0.84	20.9	-107.45
15:45:00	05:00	200	41.55	7.42	1335.61	0.04	0.84	20.9	-107.45
15:50:00	10:00	200	41.6	7.45	1341.17	0.02	0.61	21.9	-110.97
15:50:00	10:00	200	41.6	7.45	1341.17	0.02	0.61	21.9	-110.97
15:55:00	15:00	200	41.62	7.51	1365.01	0.02	0.36	22.1	-122.92
15:55:00	15:00	200	41.62	7.51	1365.01	0.02	0.36	22.1	-122.92
16:00:00	20:00	200	41.68	7.55	1358.20	0.02	0.21	22.2	-132.91
16:00:00	20:00	200	41.68	7.55	1358.20	0.02	0.21	22.2	-132.91
16:05:00	25:00	200	41.7	7.51	1348.84	0.02	0.18	22.3	-131.60
16:05:00	25:00	200	41.7	7.51	1348.84	0.02	0.18	22.3	-131.60

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	500 mL Plastic	2	HNO3
Metals	250 mL Plastic	2	HNO3
Anions	250 mL Plastic	1	None

Comments: No comment AP1-EB-1 @1710

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

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:	Mark Chest
Date:	8/14/2023
Time:	12:23:00

			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:	PZ-09S
Person Gauging:	Mark Chest
Date:	8/14/2023
Time:	12:31:00

			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:	PZ-09I
Person Gauging:	Mark Chest
Date:	8/14/2023
Time:	12:34:00

			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-45
Person Gauging:	Mark Chest
Date:	8/14/2023
Time:	12:39:00

			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:				
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:	Mark Chest
Date:	8/14/2023
Time:	12:51:00

			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:	PZ-10S
Person Gauging:	Mark Chest
Date:	8/14/2023
Time:	12:56:00

			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-44
Person Gauging:	Mark Chest
Date:	8/14/2023
Time:	13:03:00

			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:	Mark Chest
Date:	8/14/2023
Time:	13:13:00

			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:	PZ-53
Person Gauging:	Mark Chest
Date:	8/14/2023
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:				
8	Date by when corrective actions are needed:				

Upgradient Wells

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AP-3, AMA R6, AP-1, AP-2, Gypsum
Date:	8/14/2023
Sampler:	Mark Chest, Jake Swanson, Kim Lapszunski, Jessica Ware
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
GWA-2	8/14/2023	10:33	36.83	52.13	--
YGWA-14S	8/14/2023	10:23	18.53	34.96	--
YGWA-17S	8/14/2023	12:15	14.38	39.85	--
YGWA-18I	8/14/2023	12:01	24.90	79.97	--
YGWA-18S	8/14/2023	12:05	21.97	39.97	--
YGWA-1D	8/14/2023	09:36	49.55	128.85	--
YGWA-1I	8/14/2023	09:56	37.23	53.60	--
YGWA-20S	8/14/2023	10:23	11.54	29.52	--
YGWA-21I	8/14/2023	10:33	31.80	79.90	--
YGWA-2I	8/14/2023	10:01	44.76	63.75	--
YGWA-30I	8/14/2023	10:37	42.42	59.48	--
YGWA-39	8/14/2023	15:32	17.61	68.59	--
YGWA-3D	8/14/2023	10:10	31.49	134.18	--
YGWA-3I	8/14/2023	10:08	53.07	59.05	--
YGWA-40	8/14/2023	15:38	23.70	48.23	--
YGWA-47	8/14/2023	12:15	33.81	59.19	--
YGWA-4I	8/14/2023	11:01	24.27	48.81	--
YGWA-5D	8/14/2023	10:47	20.89	129.13	--
YGWA-5I	8/14/2023	10:48	20.58	58.94	--

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/15/2023 2:05:48 PM +00:00

Project Number	30052922	**Well ID**	YGWA-47			**Date**	8/15/2023
Project Location	AP-1		**Weather(°F)**	77.0 degrees F and Clear. The wind is blowing W at 4.7 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)	33.82	**Total Depth (ft-bmp)**	59.19	**Water Column(ft)**	25.37	**Gallons in Well**	4.12
MP Elevation	758.22	**Pump Intake (ft-bmp)**	54	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:43	**Well Volumes Purged**	0.29	**Sample ID**	YGWA-47	**Sampled by**	Mark Chest
Purge Start	09:20	**Gallons Purged**	1.19	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:40						

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)
9:20:00	00:00	225	33.82	5.53	217.42	0.25	4.61	18.40	226.72
9:25:00	05:00	225	34.75	5.60	218.91	0.02	3.15	19.00	246.92
9:30:00	10:00	225	34.75	5.65	219.03	0.03	3.12	19.00	255.57
9:35:00	15:00	225	34.74	5.65	219.51	0.03	3.06	19.10	262.66
9:40:00	20:00	225	34.74	5.69	220.80	0.02	3.05	19.00	265.45

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	2	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: No comment

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: _____ Key Number To Well: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/15/2023 4:50:18 PM +00:00

Project Number	30143622	**Well ID**	GWA-2			**Date**	8/15/2023
Project Location	Gypsum Landfill		**Weather(°F)**	Sunny and clear 78 F °F, Sunny, winds at mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	42.1	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	36.81	**Total Depth (ft-bmp)**	52.13	**Water Column(ft)**	15.32	**Gallons in Well**	2.49
MP Elevation	805.62	**Pump Intake (ft-bmp)**	47	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:20	**Well Volumes Purged**	0.65	**Sample ID**	GWA-2	**Sampled by**	Jake Swanson
Purge Start	09:43	**Gallons Purged**	1.62	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:14						

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)
9:43:00	00:00	200	36.81	6.21	332.29	3.06	5.85	22.90	140.26
9:48:00	05:00	200	37.3	5.93	396.02	2.84	1.50	20.60	91.42
9:53:00	10:00	200	37.49	5.71	383.77	0.58	0.80	20.50	126.79
9:58:00	15:00	200	37.58	5.50	347.62	0.32	0.71	20.30	153.04
10:04:00	20:38	200	37.68	5.37	331.72	1.23	0.60	20.60	170.66
10:09:00	25:38	200	37.75	5.32	323.72	0.86	0.53	20.50	177.62
10:14:00	30:38	200	37.84	5.30	321.06	0.59	0.48	20.60	179.52

Constituent Sampled	Container	Number	Preservative
ChlorideSulfate	250 mL Plastic	1	None
MercuryMetals	250 mL Plastic	1	HNO3
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 6:40:01 PM +00:00

Project Number	30143608	**Well ID**	YGWA-1I			**Date**	8/15/2023
Project Location	AP-2		**Weather(°F)**	86.2 degrees F and Partly Cloudy. The wind is blowing NW at 3.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	43.3	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	37.24	**Total Depth (ft-bmp)**	53.6	**Water Column(ft)**	16.36	**Gallons in Well**	2.66
MP Elevation	836.6	**Pump Intake (ft-bmp)**	49	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	13:45	**Well Volumes Purged**	0.30	**Sample ID**	YAT-YGWA-1I	**Sampled by**	David Prouty
Purge Start	13:15	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:40						

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)
13:15:00	00:00	100	38.8	6.39	103.30		3.64	22.30	26.75
13:20:00	05:00	100	39.87	6.13	77.01		1.05	17.60	75.79
13:25:00	10:00	100	41.8	5.92	57.87		3.47	17.50	126.79
13:30:00	15:00	100	41.88	5.79	54.67	0.02	4.11	18.30	151.90
13:35:00	20:00	100	41.95	5.85	53.54	0.02	4.28	18.40	156.18
13:40:00	25:00	100	42.1	5.88	54.81	0.02	4.30	19.00	159.63

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 6:43:15 PM +00:00

Project Number	30143608	**Well ID**	YGWA-1D			**Date**	8/15/2023
Project Location	AP-2		**Weather(°F)**	78.8 degrees F and Clear. The wind is blowing W/SW at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	78.05	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	49.57	**Total Depth (ft-bmp)**	128.85	**Water Column(ft)**	79.28	**Gallons in Well**	12.88
MP Elevation	837.25	**Pump Intake (ft-bmp)**	108	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	11:20	**Well Volumes Purged**	0.07	**Sample ID**	YAT-YGWA-1D	**Sampled by**	David Prouty
Purge Start	10:49	**Gallons Purged**	0.92	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:19						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
10:49:00	00:00	100	49.69	7.15	168.64	0.55	0.85	19.70	-133.88
10:54:00	05:00	100	49.7	7.11	164.60	0.02	0.65	18.30	-140.91
10:59:00	10:00	100	49.71	7.07	159.08	0.02	0.43	17.40	-148.39
11:04:00	15:00	100	49.72	7.04	157.29	0.02	0.75	19.20	-123.76
11:09:00	20:00	100	49.72	7.02	155.02	0.02	0.76	19.10	-113.30
11:14:00	25:00	100	49.72	7.01	153.39	0.03	0.78	18.90	-99.34
11:19:00	30:00	100	49.72	6.98	153.07	0.02	0.85	18.90	-86.58

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 8:12:44 PM +00:00

Project Number	30143608	**Well ID**	YGWA-2I			**Date**	8/15/2023
Project Location	AP-2		**Weather(°F)**	86.7 degrees F and Thunderstorms and Rain. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	53.45	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	44.78	**Total Depth (ft-bmp)**	63.75	**Water Column(ft)**	18.97	**Gallons in Well**	3.08
MP Elevation	866.25	**Pump Intake (ft-bmp)**	60	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	15:45	**Well Volumes Purged**	0.19	**Sample ID**	YAT-YGWA-2I	**Sampled by**	David Prouty
Purge Start	15:14	**Gallons Purged**	0.59	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:41						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
15:14:00	00:00	100	44.78	6.94	225.19		6.10	19.50	96.70
15:15:00	00:22	100	44.78	6.93	228.51		5.35	19.50	45.58
15:15:00	00:45	100	44.78	6.90	235.78		4.59	18.70	3.86
15:16:00	01:23	100	45.73	6.94	240.21	0.89	3.57	18.60	-32.08
15:21:00	06:23	80	46.65	7.08	250.07	0.02	2.06	20.00	-62.29
15:26:00	11:23	80	47.15	7.08	250.80	0.02	1.60	20.50	-62.10
15:31:00	16:23	80	47.36	7.02	249.40	0.02	1.09	20.40	-50.95
15:36:00	21:23	80	47.36	6.98	243.49	0.02	0.98	20.30	-36.80
15:41:00	26:23	80	47.36	6.96	240.30	0.02	1.06	21.40	-32.57

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 9:45:37 PM +00:00

Project Number	30143608	**Well ID**	YGWA-3D			**Date**	8/15/2023
Project Location	AP-2		**Weather(°F)**	75.2 degrees F and Thunderstorms. The wind is blowing W at 3.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	83.88	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	31.5	**Total Depth (ft-bmp)**	134.18	**Water Column(ft)**	102.68	**Gallons in Well**	16.68
MP Elevation	796.78	**Pump Intake (ft-bmp)**	113	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	17:10	**Well Volumes Purged**		**Sample ID**	YAT-YGWA-3D	**Sampled by**	David Prouty
Purge Start	16:45	**Gallons Purged**		**Replicate/ Code No.**		**Color**	Clear
Purge End	17:06						

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)
16:45:00	00:00	100	31.5	7.36	246.20		8.18	25.90	101.77
16:45:00	00:33	100	31.55	7.28	247.50		8.12	25.30	102.28
16:50:00	05:33	100	31.55	7.38	243.30	0.02	0.40	17.80	-76.64
16:51:00	06:42	100	31.63	7.51	243.76	0.02	0.37	17.70	-93.21
16:55:00	10:09	100	31.66	7.63	243.32	0.02	0.27	17.80	-114.05
17:00:00	15:09	100	31.7	7.67	243.72	0.02	0.26	17.70	-119.95
17:05:00	20:09	100	31.71	7.69	243.95	0.02	0.28	17.60	-121.97

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 9:47:29 PM +00:00

Project Number	30143623	**Well ID**	YGWA-14S			**Date**	8/15/2023
Project Location	AP-2		**Weather(°F)**	74.5 degrees F and Partly Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	24.66	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	18.53	**Total Depth (ft-bmp)**	34.96	**Water Column(ft)**	16.43	**Gallons in Well**	2.67
MP Elevation	748.76	**Pump Intake (ft-bmp)**	30	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	17:30	**Well Volumes Purged**	0.74	**Sample ID**	YAT-YGWA-14S	**Sampled by**	Kim Lapszynski
Purge Start	16:37	**Gallons Purged**	1.98	**Replicate/ Code No.**		**Color**	Clear
Purge End	17:28						

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)
16:37:00	00:00	150	18.53	6.03	15.42	1.64	7.97	26.00	180.27
16:42:00	05:00	150	18.85	5.23	29.99	0.02	8.58	20.50	209.12
16:47:00	10:00	150	18.92	5.25	40.73	0.10	8.43	20.10	223.47
16:52:00	15:00	150	18.95	5.22	57.88	0.17	8.35	19.90	236.69
16:57:00	20:00	150	18.96	5.29	64.57	0.02	8.16	19.80	237.99
17:02:00	25:00	150	18.96	5.31	67.12	0.02	8.14	19.80	249.87
17:07:00	30:00	150	18.97	5.32	68.99	0.02	8.03	19.70	262.12
17:12:00	35:00	150	18.98	5.26	71.36	0.02	7.63	19.70	272.94
17:17:00	40:00	150	18.98	5.03	74.69	0.02	6.28	19.70	278.76
17:22:00	45:00	150	18.98	5.04	74.65	0.02	6.25	19.70	277.58
17:27:00	50:00	150	18.99	5.03	74.70	0.02	6.23	19.60	278.23

Constituent Sampled	Container	Number	Preservative
App III Metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
F, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Groundwater Sampling Form

Updated : 8/16/2023 3:17:06 PM +00:00

Project Number	30143608	**Well ID**	YGWA-3I			**Date**	8/16/2023
Project Location	AP-2		**Weather(°F)**	It is Clear. The wind is blowing N at 5.8 mph. 72			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	48.85	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	53.13	**Total Depth (ft-bmp)**	59.05	**Water Column(ft)**	5.92	**Gallons in Well**	0.96
MP Elevation	796.55	**Pump Intake (ft-bmp)**	54	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	10:50	**Well Volumes Purged**	0.91	**Sample ID**	YAT-YGWA-3I	**Sampled by**	David Prouty
Purge Start	10:05	**Gallons Purged**	0.87	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:45						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
10:05:00	00:00	100	53.7	7.34	232.33	0.02	7.33	18.60	216.33
10:10:00	05:00	80	54.2	7.30	290.92	0.02	2.31	18.10	214.83
10:15:00	10:00	80	53.8	7.33	279.46	0.05	1.50	18.50	158.07
10:20:00	15:00	80	53.65	7.35	264.04	0.02	1.33	19.50	144.12
10:25:00	20:00	80	53.65	7.37	240.62	0.02	0.81	19.40	-2.47
10:30:00	25:00	80	53.65	7.39	227.18	0.02	0.62	19.40	-31.47
10:35:00	30:00	80	53.64	7.39	216.94	0.02	0.57	19.30	-55.49
10:40:00	35:00	80	53.64	7.38	214.29	0.02	0.60	19.30	-61.05
10:45:00	40:00	80	53.64	7.39	211.10	0.02	0.61	19.20	-67.19

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/16/2023 4:56:03 PM +00:00

Project Number	30143608	**Well ID**	YGWA-30I			**Date**	8/16/2023
Project Location	AP-2		**Weather(°F)**	78.8 degrees F and Clear. The wind is blowing NW at 5.8 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	49.18	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	42.45	**Total Depth (ft-bmp)**	59.48	**Water Column(ft)**	17.03	**Gallons in Well**	2.77
MP Elevation	762.58	**Pump Intake (ft-bmp)**	54.5	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	12:20	**Well Volumes Purged**	0.20	**Sample ID**	YAT-YGWA-30I	**Sampled by**	David Prouty
Purge Start	11:56	**Gallons Purged**	0.55	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:17						

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)
11:56:00	00:00	100	42.45	5.53	41.77	0.02	7.00	18.90	243.62
12:01:00	05:00	100	42.45	5.54	41.80	0.02	7.05	19.00	249.49
12:07:00	10:53	100	42.45	5.53	41.73	0.74	7.05	19.20	254.67
12:12:00	15:53	100	42.45	5.53	41.65	0.27	7.06	19.00	258.78
12:17:00	20:53	100	42.45	5.55	41.65	0.23	7.07	19.10	260.93

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/17/2023 9:41:13 AM -04:00

Project Number	30143623	**Well ID**	YGWA-21I			**Date**	08/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	77.0 degrees F and Clear. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	69.6	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	31.78	**Total Depth (ft-bmp)**	79.9	**Water Column(ft)**	48.12	**Gallons in Well**	7.82
MP Elevation	783.7	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:35	**Well Volumes Purged**	0.09	**Sample ID**	YGWA-21I	**Sampled by**	Jessica Ware
Purge Start	10:06	**Gallons Purged**	0.69	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:32						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
10:06:00	00:00	200	31.78	7.22	173.14	1.16	7.85	26.3	184.83
10:11:00	05:00	100	33.15	6.77	182.86	2.15	1.51	22.2	-24.05
10:16:00	10:00	100	33.63	6.81	188.75	1.30	1.02	24.1	-73.15
10:21:00	15:00	100	34	6.85	187.55	1.15	0.77	23.9	-105.42
10:26:00	20:00	100	34.11	6.84	186.75	0.86	0.76	25.4	-98.83
10:31:00	25:00	100	34.19	6.84	184.65	0.02	0.79	25.8	-97.47

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	None
App III metals	250 mL Plastic	1	HNO3
App IV metals,Mercury	250 mL Plastic	1	HNO3

Comments: None

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

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/15/2023 4:43:26 PM +00:00

Project Number	30143623	**Well ID**	YGWA-4I			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	83.1 degrees F and Mostly Cloudy. The wind is blowing NW at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	38.51	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	24.27	**Total Depth (ft-bmp)**	48.81	**Water Column(ft)**	24.54	**Gallons in Well**	3.99
MP Elevation	784.21	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:25	**Well Volumes Purged**	0.30	**Sample ID**	YAT-YGWA-4I	**Sampled by**	Kim Lapszynski
Purge Start	11:51	**Gallons Purged**	1.19	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:21						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
11:51:00	00:00	150	24.27	6.60	159.44	0.02	5.72	20.60	126.80
11:56:00	05:00	150	25.54	6.01	168.76	0.02	1.94	18.70	159.52
12:01:00	10:00	150	25.82	6.00	169.94	0.02	1.41	18.30	166.27
12:06:00	15:00	150	26.07	6.02	167.15	0.02	1.67	18.00	170.11
12:11:00	20:00	150	26.12	6.05	163.14	0.02	2.33	18.10	172.95
12:16:00	25:00	150	26.23	6.03	161.34	0.02	2.30	18.00	174.57
12:21:00	30:00	150	26.27	5.99	157.86	0.02	2.37	18.00	175.97

Constituent Sampled	Container	Number	Preservative
App III metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
Fl, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: Throughout purging, consistently bumped tested turbidity standards and all within range.

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 6:55:07 PM +00:00

Project Number	30143623	**Well ID**	YGWA-18S			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	88.2 degrees F and Mostly Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	29.97	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	21.95	**Total Depth (ft-bmp)**	39.97	**Water Column(ft)**	18.02	**Gallons in Well**	2.93
MP Elevation	790.57	**Pump Intake (ft-bmp)**	35	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:35	**Well Volumes Purged**	0.36	**Sample ID**	YGWA-18S	**Sampled by**	Kim Lapszynski
Purge Start	14:07	**Gallons Purged**	1.06	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:28						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
14:07:00	00:00	200	21.95	6.60	65.27	1.78	7.27	24.70	188.86
14:12:00	05:00	200	23.08	5.18	62.97	0.02	3.88	19.00	183.25
14:17:00	10:00	200	23.41	5.19	64.09	0.02	3.36	18.70	183.33
14:22:00	15:00	200	23.48	5.20	64.04	0.12	3.25	18.50	184.52
14:27:00	20:00	200	23.53	5.20	64.20	0.02	3.28	18.60	184.94

Constituent Sampled	Container	Number	Preservative
App III metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
F, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/15/2023 7:59:42 PM +00:00

Project Number	30143623	**Well ID**	YGWA-18I			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	86.7 degrees F and Thunderstorms and Rain. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	69.67	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	24.87	**Total Depth (ft-bmp)**	79.97	**Water Column(ft)**	55.10	**Gallons in Well**	8.95
MP Elevation	790.57	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:40	**Well Volumes Purged**	0.09	**Sample ID**	YGWA-18I	**Sampled by**	Kim Lapszynski
Purge Start	15:17	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:37						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
15:17:00	00:00	150	24.87	6.08	125.32	1.91	8.10	22.10	185.83
15:22:00	05:00	150	25.09	5.84	126.70	3.32	3.86	18.30	187.04
15:27:00	10:00	150	25.13	5.82	127.26	4.73	3.89	18.40	187.19
15:32:00	15:00	150	25.13	5.82	126.60	3.97	3.90	18.10	187.78
15:37:00	20:00	150	25.13	5.82	126.65	3.92	3.92	18.20	188.15

Constituent Sampled	Container	Number	Preservative
App III metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
F, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None.

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/16/2023 9:28:25 PM +00:00

Project Number	30143623	**Well ID**	YGWA-5I			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	77.0 degrees F and Clear. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	48.64	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	20.59	**Total Depth (ft-bmp)**	58.94	**Water Column(ft)**	38.35	**Gallons in Well**	6.23
MP Elevation	784.54	**Pump Intake (ft-bmp)**	53	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:20	**Well Volumes Purged**	0.10	**Sample ID**	YAT-YGWA-5I	**Sampled by**	Kim Lapszynski
Purge Start	09:58	**Gallons Purged**	0.59	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:16						

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)
9:58:00	00:00	150	20.59	6.24	99.40	1.92	6.69	21.80	200.12
10:03:00	05:00	150	20.9	5.60	98.10	0.27	5.31	18.40	197.83
10:08:00	10:00	150	20.97	5.57	96.97	0.14	5.11	18.00	194.09
10:13:00	15:00	150	20.97	5.58	96.86	0.02	5.13	18.00	193.98

Constituent Sampled	Container	Number	Preservative
App III metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
F, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	250 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/17/2023 1:39:20 PM +00:00

Project Number	30143623	**Well ID**	YGWA-40			**Date**	8/15/2023
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	75.2 degrees F and Thunderstorms. The wind is blowing W at 3.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	37.73	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	23.72	**Total Depth (ft-bmp)**	48.23	**Water Column(ft)**	24.51	**Gallons in Well**	3.98
MP Elevation	815.73	**Pump Intake (ft-bmp)**	42	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	17:20	**Well Volumes Purged**	0.39	**Sample ID**	YAT-YGWA-40	**Sampled by**	Jessica Ware
Purge Start	16:49	**Gallons Purged**	1.53	**Replicate/ Code No.**		**Color**	Clear
Purge End	17:59						

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)
16:49:00	00:00	200	23.72	4.75	129.29	0.02	0.71	19.00	131.14
16:54:00	05:00	150	24.47	4.71	126.66	0.65	0.19	19.00	163.54
16:59:00	10:00	150	24.46	4.77	125.97	0.02	0.13	19.00	179.51
17:04:00	15:00	150	24.47	4.85	126.09	0.02	0.10	18.80	187.78
17:09:00	20:00	150	24.47	4.91	126.01	0.02	0.10	18.80	193.46
17:14:00	25:00	150	24.48	4.96	126.01	0.02	0.08	18.80	197.16
17:19:00	30:00	150	24.48	5.00	125.51	0.02	0.08	18.70	199.02

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III metals	250 mL Plastic	1	HNO3
App IV metalsMercury	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/17/2023 1:39:41 PM +00:00

Project Number	30143623	**Well ID**	YGWA-39			**Date**	8/15/2023
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Thunderstorms and Rain. The wind is blowing W at 5.8 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	58.09	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	17.68	**Total Depth (ft-bmp)**	68.59	**Water Column(ft)**	50.91	**Gallons in Well**	8.27
MP Elevation	818.19	**Pump Intake (ft-bmp)**	63	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:11	**Well Volumes Purged**	0.17	**Sample ID**	YAT-YGWA-39	**Sampled by**	Jessica Ware
Purge Start	15:46	**Gallons Purged**	1.37	**Replicate/ Code No.**		**Color**	Clear
Purge End	16:07						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
15:46:00	00:00	200	17.68	6.34	309.57	1.50	5.32	25.20	130.29
15:51:00	05:00	200	17.77	5.83	414.64	1.19	0.84	20.80	96.27
15:56:00	10:00	200	17.98	5.78	420.91	0.27	0.25	19.90	91.80
16:01:00	15:00	200	18.03	5.78	423.68	0.13	0.13	19.60	88.26
16:06:00	20:00	200	18	5.78	421.12	0.02	0.11	19.60	87.17

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III metals	250 mL Plastic	1	HNO3
App IV metalsMercury	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____
Well Locked at Arrival: _____
Well Locked at Departure: _____
Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/17/2023 1:40:24 PM +00:00

Project Number	30143623	**Well ID**	YGWA-17S			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	86.7 degrees F and Thunderstorms and Rain. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	29.65	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	14.46	**Total Depth (ft-bmp)**	39.85	**Water Column(ft)**	25.39	**Gallons in Well**	4.13
MP Elevation	783.05	**Pump Intake (ft-bmp)**	35	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:50	**Well Volumes Purged**	0.35	**Sample ID**	YGWA-17S	**Sampled by**	Jessica Ware
Purge Start	13:56	**Gallons Purged**	1.43	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:48						

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)
13:56:00	00:00	100	14.46	4.80	113.86	3.98	5.22	25.90	211.14
14:01:00	05:00	100	14.57	4.63	108.12	0.70	2.38	22.30	208.11
14:06:00	10:00	100	14.58	4.74	106.92	0.15	1.90	21.40	200.46
14:11:00	15:00	100	14.58	4.97	106.96	0.02	1.77	21.30	183.80
14:16:00	20:00	100	14.58	5.11	107.57	0.11	1.75	21.10	176.01
14:17:00	21:03	100	14.59	5.14	107.37	0.14	1.74	21.00	173.33
14:22:00	26:03	100	14.57	5.25	107.36	0.38	1.67	20.70	168.24
14:27:00	31:03	100	14.57	5.32	107.22	0.44	1.63	20.70	163.52
14:32:00	36:03	100	14.58	5.39	107.23	0.50	1.61	20.50	161.90
14:37:00	41:03	100	14.6	5.45	107.11	0.52	1.58	20.30	159.31
14:42:00	46:03	100	14.58	5.50	107.55	0.50	1.57	20.20	158.97
14:47:00	51:03	100	14.58	5.54	106.77	0.55	1.56	20.10	156.21

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III metals	250 mL Plastic	1	HNO3
App IV metalsMercury	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____

Well Locked at Arrival: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/17/2023 1:40:42 PM +00:00

Project Number	30143623	**Well ID**	YGWA-20S			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	83.1 degrees F and Mostly Cloudy. The wind is blowing NW at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	19.22	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.5	**Total Depth (ft-bmp)**	29.52	**Water Column(ft)**	18.02	**Gallons in Well**	2.93
MP Elevation	767.12	**Pump Intake (ft-bmp)**	24.5	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:25	**Well Volumes Purged**	0.61	**Sample ID**	YGWA-20S	**Sampled by**	Jessica Ware
Purge Start	11:36	**Gallons Purged**	1.78	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:22						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
11:36:00	00:00	200	11.5	6.95	106.05	4.92	5.04	24.60	-1.00
11:41:00	05:00	150	12.02	6.21	55.12	8.80	7.06	19.80	61.55
11:46:00	10:00	125	12.1	6.31	54.89	5.86	7.13	19.20	79.47
11:51:00	15:00	125	12.12	6.51	54.54	2.37	7.13	19.20	86.02
11:56:00	20:00	125	12.13	6.68	54.41	1.78	7.12	18.90	91.18
12:01:00	25:00	125	12.12	6.78	54.33	1.52	7.12	18.90	94.38
12:06:00	30:00	125	12.14	6.86	54.32	1.42	7.06	19.50	97.38
12:11:00	35:00	125	12.15	6.92	54.24	1.35	7.10	19.10	97.76
12:16:00	40:00	125	12.13	6.97	54.09	1.33	7.10	19.10	100.78
12:21:00	45:00	125	12.12	7.00	53.89	1.21	7.01	19.40	104.40

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III metals	250mL HDPE Plastic	1	HNO3
App IV metalsMercury	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/23/2023 5:04:37 PM +00:00

Project Number	30143623	**Well ID**	YGWA-5D			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	81.5 degrees F and Partly Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	78.83	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	20.8	**Total Depth (ft-bmp)**	129.13	**Water Column(ft)**	108.33	**Gallons in Well**	17.60
MP Elevation	784.53	**Pump Intake (ft-bmp)**	124	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:13	**Well Volumes Purged**	0.06	**Sample ID**	YAT-YGWA-5D	**Sampled by**	Kim Lapszynski
Purge Start	10:49	**Gallons Purged**	1.06	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:10						

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)
10:49:00	00:00	200	20.8	6.65	227.72	4.02	6.10	20.50	197.18
10:54:00	05:00	200	21.57	7.32	249.74	0.02	0.14	18.40	-138.90
10:59:00	10:00	200	21.59	7.38	246.03	0.02	0.07	18.30	-141.65
11:04:00	15:00	200	21.58	7.35	240.13	0.02	0.04	18.30	-148.25
11:09:00	20:00	200	21.58	7.34	238.56	0.02	0.03	18.20	-157.18

Constituent Sampled	Container	Number	Preservative
App III metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
F, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	Other

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-2
Permit Number:	
Well ID:	YGWA-1D
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	09:36:00

			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:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWA-40
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	15:38:00

			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:				
	Area around well needs to be cleared.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-2
Permit Number:	
Well ID:	YGWA-1I
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	09:56:00

			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-2
Permit Number:	
Well ID:	YGWA-2I
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	10:01:00

			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:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-2
Permit Number:	
Well ID:	YGWA-3I
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	10:08:00

			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-2
Permit Number:	
Well ID:	YGWA-3D
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	10:10:00

			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:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-20S
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	10:23:00

			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:				
	Well area and path to well needs to be cleared of vegetation.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-2
Permit Number:	
Well ID:	YGWA-14S
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	10:23:00

			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:				
	Grass needs to be cut				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	Gypsum Landfill
Permit Number:	
Well ID:	GWA-2
Person Gauging:	Mark Chest
Date:	8/14/2023
Time:	10:33:00

			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 new label				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-21I
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	10:33:00

			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:				
	Well area needs to be cleared of vegetation.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-2
Permit Number:	
Well ID:	YGWA-30I
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	10:37:00

			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:				
	Grass needs to be cut				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-5D
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	10:47:00

			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:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-5I
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	10:48:00

			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:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-4I
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	11:01:00

			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:				
	Well area needs to be cleared.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-18I
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	12:01:00

			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:				
	Need to clear area by well				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-18S
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	12:05:00

			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:				
	Need to clear area by well.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-17S
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	12:15:00

			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:				
	Need to clear area by well.				
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:	Mark Chest
Date:	8/14/2023
Time:	12:15:00

			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:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWA-39
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	15:32:00

			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:				
	Area around well needs to be cleared.				
8	Date by when corrective actions are needed:				

Appendix C

Statistical Analysis

GROUNDWATER STATS CONSULTING

February 28, 2024

Southern Company Services
Attn: Ms. Lauren Hartley
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308-3374

Re: Plant Yates Ash Pond 1 (AP-1)
August 2023 Sample Event Analysis

Dear Ms. Hartley,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August 2023 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

Note that well YGWC-52 was installed in June 2020, and baseline sampling began in August 2020. Well YGWC-46 was abandoned in June 2020, and baseline sampling began at well YGWC-46A in July 2020 to supplement existing data in well YGWC-46. In the current analysis, reported observations from the August 2023 sample event for Appendix III constituents at all downgradient wells are compared to interwell prediction limits for Appendix III constituents. Data from downgradient wells YGWC-46 and YGWC-46A were combined and are plotted under well YGWC-46A.

Confidence intervals have been used to evaluate the combined data from both wells YGWC-46 and YGWC-46A for the Appendix IV constituents. All concentrations from both wells are below established Maximum Concentrations Limits (MCLs). When a minimum of 8 samples were collected from new well YGWC-46A, the Mann-Whitney test of medians was used to evaluate whether the medians of both wells were statistically different for Appendix IV constituents. In cases where statistically significant differences were identified at the 99% confidence level, the historical record was truncated so that only data from new well YGWC-46A, which may be more representative of present-day groundwater quality, are evaluated with confidence interval comparisons to respective Groundwater Protection Standards. This process is described below.

All data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Senior Statistician and Founder 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. 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. 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. During this event, elevated reporting limits occurred for beryllium, boron, and lithium due to higher dilution factors at some wells; therefore, current reporting limits of 0.0005 mg/L, 0.04 mg/L, and 0.03 mg/L were substituted across all wells for each respective constituent.

Combined upgradient well data from all units at Plant Yates are utilized to construct statistical limits for Appendix III and IV parameters.

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 for antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

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, 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 for parametric limits. 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 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

For the original well network which consisted of upgradient well YGWA-47 and downgradient wells YGWC-44, YGWC-45, and YGWC-46, time series plots were used to identify suspected outliers 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. Tukey's test results followed the screening.

Using the Tukey box plot method, a couple outliers were identified. 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.

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 the time of the screening, 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 2023

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were reassessed 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 August 2023 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The August 2023 sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When a resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result. Therefore, no exceedance is noted, and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. A summary table of the interwell prediction limits follows this letter. Prediction limit exceedances were noted for the following Appendix III well/constituent pairs:

- Boron: YGWC-44, YGWC-45, and YGWC-46A
- Calcium: YGWC-45 and YGWC-46A
- 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 at the 99% confidence level 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 variability in groundwater unrelated to practices at the site. Both a summary and complete graphical results of the trend tests follow this report. The following statistically significant trends were identified:

Increasing

- Boron: YGWA-39 (upgradient)
- Calcium: GWA-2, YGWA-1D, YGWA-5I, YGWA-17S, YGWA-21I, YGWA-39 (all upgradient) and YGWC-46A
- Chloride: GWA-2, YGWA-17S, YGWA-18I, YGWA-20S, and YGWA-40 (all upgradient)
- Sulfate: GWA-2, YGWA-1D, YGWA-2I, YGWA-3D, YGWA-3I, and YGWA-5I (all upgradient)
- TDS: YGWA-21I and YGWA-39 (both upgradient)

Decreasing

- Boron: YGWA-40 (upgradient)
- Calcium: YGWA-1I, YGWA-5D, YGWA-18S, and YGWA-47 (all upgradient)
- Chloride: YGWA-3D, YGWA-5D, and YGWA-47 (all upgradient)
- Sulfate: YGWA-5D, YGWA-18I, YGWA-39, YGWA-40, and YGWA-47 (all upgradient)
- TDS: YGWA-47 (upgradient)

Statistical Analysis of Appendix IV Parameters – August 2023

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 do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis.

The reported measurements of cobalt from August 2020 through August 2022 in upgradient well GWA-2 were previously flagged as outliers as these measurements were substantially higher than remaining measurements at this well. This step results in statistical limits that are conservative (i.e., lower) from a regulatory perspective. If further studies indicate these measurements represent spatial variation in groundwater quality, the values will be re-evaluated for construction of interwell prediction limits. No additional values were flagged as outliers and a summary of flagged outliers follows this report (Figure C).

Mann-Whitney Test of Medians

During previous analyses, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of observations sampled before July 2020 at abandoned well YGWC-46 to the medians of the 8 most recent observations sampled at well YGWC-46A, when available, for each Appendix IV parameter. When no variation was present between historical data and compliance samples, the Mann-Whitney test was not performed, which was the case for beryllium, chromium, and selenium. Significant differences were identified for barium, cobalt, and lithium at the 99% confidence level; therefore, the records were not combined and only use the more recent measurements at well YGWC-46A. The earlier data are shown on the time series as disconnected point and in a lighter font on the data pages.

During this analysis, cadmium, mercury, and thallium were analyzed with the Mann-Whitney test to compare the medians of observations sampled before July 2020 at

abandoned well YGWC-46 to the medians the 8 most recent observations sampled at well YGWC-46A through August 2023 (Figure F). When the medians of the two groups are statistically significantly different at the 99% confidence level (such as barium, cobalt, and lithium), the historical data sampled from abandoned well YGWC-46 are truncated to only use data from well YGWC-46A. No significant results were identified for; therefore, no truncation was required. As of the current analysis, all Appendix IV constituents have been evaluated with the Mann-Whitney test of medians at well YGWC-46A. A list of the constituents using truncated records follows this report.

Interwell Upper Tolerance Limits

Interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through August 2023 for Appendix IV constituents (Figure G). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. When the alpha level (or false positive rate) for a nonparametric limit is shown as NaN in the results table, it indicates that the background sample size is large enough such that the resulting alpha level is too small to display in the results table.

Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a). On July 30, 2018, US EPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Effective on February 22, 2022, Georgia EPD incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). In accordance with the updated Rules, the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, Federal and State CCR Rules specify levels for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

Following Georgia EPD Rule requirements and the Federal CCR requirements, GWPS were established for statistical comparison of Appendix IV constituents for this sample event (Figure H).

Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals using data through August 2023 were constructed for each of the Appendix IV constituents in each downgradient well with 4 or more samples (Figure I). Beryllium and selenium were 100% non-detects at all downgradient wells.

The Sanitas software was used to calculate the tolerance limits and the confidence intervals. These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the appropriate order statistics, depending on the sample size, as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The achievable confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. Summaries of the confidence interval results, along with graphical comparison against GWPS follow this letter. No exceedances were identified.

Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test at the 95% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable. Although the trend tests for Assessment monitoring pairs were previously evaluated using 99% confidence, the 95% confidence level more rapidly identifies statistically significant trends. Additionally, the 95% confidence is recommended in cases with limited sample sizes and, particularly, for new assessment wells. Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient wells, it is an indication of variability in groundwater

quality unrelated to practices at the site. Since no exceedances were identified, no trend tests were required.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Yates AP-1. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew T. Collins
Project Manager

Kristina L. Rayner
Senior Statistician

100% Non-Detects: Appendix IV Downgradient

Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Antimony (mg/L)
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

Lead (mg/L)
YGWC-44

Mercury (mg/L)
YGWC-52

Selenium (mg/L)
YGWC-44, YGWC-45, YGWC-46A, YGWC-52

Thallium (mg/L)
YGWC-45, YGWC-52

Date Ranges

Date: 10/9/2023 5:48 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Barium (mg/L)
YGWC-46A overall:7/6/2020-8/15/2023
Cobalt (mg/L)
YGWC-46A overall:7/6/2020-8/15/2023
Lithium (mg/L)
YGWC-46A overall:7/6/2020-8/15/2023

Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:12 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	**YGWC-44**	**0.16**	**n/a**	**8/15/2023**	**0.6**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Boron, total (mg/L)	**YGWC-45**	**0.16**	**n/a**	**8/15/2023**	**0.36**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Boron, total (mg/L)	**YGWC-46A**	**0.16**	**n/a**	**8/15/2023**	**2.1**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Calcium, total (mg/L)	**YGWC-45**	**37**	**n/a**	**8/15/2023**	**46.3**	**Yes**	**388**	**0.7732**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**YGWC-46A**	**37**	**n/a**	**8/15/2023**	**111**	**Yes**	**388**	**0.7732**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**YGWC-44**	**12**	**n/a**	**8/15/2023**	**13.4**	**Yes**	**388**	**0**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**YGWC-46A**	**12**	**n/a**	**8/15/2023**	**32.2**	**Yes**	**388**	**0**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**YGWC-46A**	**160**	**n/a**	**8/15/2023**	**419**	**Yes**	**388**	**5.928**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-44**	**220.5**	**n/a**	**8/15/2023**	**319**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-45**	**220.5**	**n/a**	**8/15/2023**	**404**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-46A**	**220.5**	**n/a**	**8/15/2023**	**945**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-52**	**220.5**	**n/a**	**8/15/2023**	**267**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:12 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	**YGWC-44**	**0.16**	**n/a**	**8/15/2023**	**0.6**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Boron, total (mg/L)	**YGWC-45**	**0.16**	**n/a**	**8/15/2023**	**0.36**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Boron, total (mg/L)	**YGWC-46A**	**0.16**	**n/a**	**8/15/2023**	**2.1**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Boron, total (mg/L)	YGWC-52	0.16	n/a	8/15/2023	0.014J	No	388	51.03	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Calcium, total (mg/L)	YGWC-44	37	n/a	8/15/2023	30	No	388	0.7732	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	**YGWC-45**	**37**	**n/a**	**8/15/2023**	**46.3**	**Yes**	**388**	**0.7732**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**YGWC-46A**	**37**	**n/a**	**8/15/2023**	**111**	**Yes**	**388**	**0.7732**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	YGWC-52	37	n/a	8/15/2023	34.6	No	388	0.7732	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	**YGWC-44**	**12**	**n/a**	**8/15/2023**	**13.4**	**Yes**	**388**	**0**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	YGWC-45	12	n/a	8/15/2023	5.6	No	388	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	**YGWC-46A**	**12**	**n/a**	**8/15/2023**	**32.2**	**Yes**	**388**	**0**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	YGWC-52	12	n/a	8/15/2023	3	No	388	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	YGWC-44	0.68	n/a	8/15/2023	0.1ND	No	457	64.33	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-45	0.68	n/a	8/15/2023	0.07J	No	457	64.33	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-46A	0.68	n/a	8/15/2023	0.12	No	457	64.33	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-52	0.68	n/a	8/15/2023	0.1ND	No	457	64.33	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	YGWC-44	8.39	4.4	8/15/2023	5.79	No	467	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-45	8.39	4.4	8/15/2023	6.97	No	467	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-46A	8.39	4.4	8/15/2023	7.51	No	467	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-52	8.39	4.4	8/15/2023	6.05	No	467	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-44	160	n/a	8/15/2023	113	No	388	5.928	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-45	160	n/a	8/15/2023	154	No	388	5.928	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	**YGWC-46A**	**160**	**n/a**	**8/15/2023**	**419**	**Yes**	**388**	**5.928**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	YGWC-52	160	n/a	8/15/2023	96.5	No	388	5.928	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**YGWC-44**	**220.5**	**n/a**	**8/15/2023**	**319**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-45**	**220.5**	**n/a**	**8/15/2023**	**404**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-46A**	**220.5**	**n/a**	**8/15/2023**	**945**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-52**	**220.5**	**n/a**	**8/15/2023**	**267**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron, total (mg/L)	YGWA-39 (bg)	0.02058	92	68	Yes	18	5.556	n/a	0.01	NP
Boron, total (mg/L)	YGWA-40 (bg)	-0.01353	-106	-68	Yes	18	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-47 (bg)	-1.099	-122	-68	Yes	18	5.556	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-17S (bg)	0.134	143	87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-18S (bg)	-0.0757	-147	-87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-21I (bg)	0.6806	92	87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-39 (bg)	2.124	86	68	Yes	18	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-5D (bg)	-1.349	-113	-87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-5I (bg)	0.06491	106	87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	GWA-2 (bg)	2.437	87	74	Yes	19	5.263	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-1D (bg)	0.4931	94	87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-1I (bg)	-0.08927	-112	-87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWC-46A	2.352	105	92	Yes	22	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-47 (bg)	-0.3827	-108	-68	Yes	18	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-17S (bg)	0.6794	162	87	Yes	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-18I (bg)	0.08671	96	87	Yes	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-20S (bg)	0.1049	130	87	Yes	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-40 (bg)	0.3111	91	68	Yes	18	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-5D (bg)	-0.6409	-159	-87	Yes	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	GWA-2 (bg)	0.2897	101	74	Yes	19	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-3D (bg)	-0.03797	-98	-87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-47 (bg)	-13.93	-138	-68	Yes	18	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-18I (bg)	-0.1191	-112	-87	Yes	21	19.05	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-39 (bg)	-2.62	-107	-68	Yes	18	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-40 (bg)	-7.156	-120	-68	Yes	18	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5D (bg)	-2.402	-162	-87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5I (bg)	0.08787	138	87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	GWA-2 (bg)	12.89	88	74	Yes	19	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-1D (bg)	0.8971	154	87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-2I (bg)	1.209	91	87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-3D (bg)	0.2566	105	87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-3I (bg)	1.155	119	87	Yes	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-47 (bg)	-12.84	-95	-68	Yes	18	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-21I (bg)	9.895	91	87	Yes	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-39 (bg)	27.52	85	68	Yes	18	0	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron, total (mg/L)	YGWA-47 (bg)	-0.0005874	-51	-68	No	18	5.556	n/a	0.01	NP
Boron, total (mg/L)	YGWC-44	-0.01408	-55	-68	No	18	0	n/a	0.01	NP
Boron, total (mg/L)	YGWC-45	0.001634	20	68	No	18	0	n/a	0.01	NP
Boron, total (mg/L)	YGWA-17S (bg)	0.0004386	55	87	No	21	14.29	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18I (bg)	0	-14	-87	No	21	80.95	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18S (bg)	0.0006414	54	87	No	21	28.57	n/a	0.01	NP
Boron, total (mg/L)	YGWA-20S (bg)	0	-5	-87	No	21	90.48	n/a	0.01	NP
Boron, total (mg/L)	YGWA-21I (bg)	0	-28	-87	No	21	57.14	n/a	0.01	NP
Boron, total (mg/L)	**YGWA-39 (bg)**	**0.02058**	**92**	**68**	**Yes**	**18**	**5.556**	**n/a**	**0.01**	**NP**
Boron, total (mg/L)	**YGWA-40 (bg)**	**-0.01353**	**-106**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Boron, total (mg/L)	YGWA-4I (bg)	0	13	87	No	21	71.43	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5D (bg)	0.0006284	65	87	No	21	19.05	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5I (bg)	0	-11	-87	No	21	66.67	n/a	0.01	NP
Boron, total (mg/L)	GWA-2 (bg)	0	35	74	No	19	68.42	n/a	0.01	NP
Boron, total (mg/L)	YGWA-14S (bg)	-0.0004045	-54	-87	No	21	9.524	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1D (bg)	0.001652	58	87	No	21	42.86	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1I (bg)	0	-13	-87	No	21	71.43	n/a	0.01	NP
Boron, total (mg/L)	YGWA-2I (bg)	0	2	87	No	21	80.95	n/a	0.01	NP
Boron, total (mg/L)	YGWA-30I (bg)	0	-13	-87	No	21	85.71	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3D (bg)	0	16	87	No	21	61.9	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3I (bg)	0	-13	-87	No	21	90.48	n/a	0.01	NP
Boron, total (mg/L)	YGWC-46A	0.07878	74	92	No	22	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-47 (bg)**	**-1.099**	**-122**	**-68**	**Yes**	**18**	**5.556**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWC-45	-0.4199	-37	-68	No	18	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-17S (bg)**	**0.134**	**143**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWA-18I (bg)	0.05034	39	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-18S (bg)**	**-0.0757**	**-147**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWA-20S (bg)	0.02165	43	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-21I (bg)**	**0.6806**	**92**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	**YGWA-39 (bg)**	**2.124**	**86**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWA-40 (bg)	-0.3452	-49	-68	No	18	5.556	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-4I (bg)	0.02012	12	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-5D (bg)**	**-1.349**	**-113**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	**YGWA-5I (bg)**	**0.06491**	**106**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	**GWA-2 (bg)**	**2.437**	**87**	**74**	**Yes**	**19**	**5.263**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWA-14S (bg)	0	18	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-1D (bg)**	**0.4931**	**94**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	**YGWA-1I (bg)**	**-0.08927**	**-112**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWA-2I (bg)	0	1	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-30I (bg)	0.02343	63	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3D (bg)	0.2668	48	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3I (bg)	0.5543	85	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWC-46A**	**2.352**	**105**	**92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**YGWA-47 (bg)**	**-0.3827**	**-108**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWC-44	0.1457	52	68	No	18	0	n/a	0.01	NP
Chloride, Total (mg/L)	**YGWA-17S (bg)**	**0.6794**	**162**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**YGWA-18I (bg)**	**0.08671**	**96**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-18S (bg)	0.1048	63	87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	**YGWA-20S (bg)**	**0.1049**	**130**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-21I (bg)	-0.07755	-57	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-39 (bg)	0.699	68	68	No	18	0	n/a	0.01	NP
Chloride, Total (mg/L)	**YGWA-40 (bg)**	**0.3111**	**91**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-4I (bg)	0.05782	58	87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	**YGWA-5D (bg)**	**-0.6409**	**-159**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-5I (bg)	0	6	87	No	21	0	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Chloride, Total (mg/L)	**GWA-2 (bg)**	**0.2897**	**101**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-14S (bg)	0.102	55	87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-1D (bg)	0	-24	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-1I (bg)	0	-25	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-2I (bg)	-0.01766	-41	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-30I (bg)	-0.01564	-40	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	**YGWA-3D (bg)**	**-0.03797**	**-98**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-3I (bg)	-0.02296	-79	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWC-46A	-0.2173	-10	-92	No	22	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-47 (bg)**	**-13.93**	**-138**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-17S (bg)	0	5	87	No	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-18I (bg)**	**-0.1191**	**-112**	**-87**	**Yes**	**21**	**19.05**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-18S (bg)	-0.112	-71	-87	No	21	9.524	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-20S (bg)	0	54	87	No	21	71.43	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-21I (bg)	-0.1972	-61	-87	No	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-39 (bg)**	**-2.62**	**-107**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**YGWA-40 (bg)**	**-7.156**	**-120**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-4I (bg)	0.0251	16	87	No	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-5D (bg)**	**-2.402**	**-162**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**YGWA-5I (bg)**	**0.08787**	**138**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**GWA-2 (bg)**	**12.89**	**88**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-14S (bg)	-0.04669	-29	-87	No	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-1D (bg)**	**0.8971**	**154**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-1I (bg)	-0.06392	-13	-87	No	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-2I (bg)**	**1.209**	**91**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-30I (bg)	-0.03548	-33	-87	No	21	9.524	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-3D (bg)**	**0.2566**	**105**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**YGWA-3I (bg)**	**1.155**	**119**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWC-46A	-34.63	-90	-92	No	22	4.545	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**YGWA-47 (bg)**	**-12.84**	**-95**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	YGWC-44	-2.924	-24	-68	No	18	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-45	0	-2	-68	No	18	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-17S (bg)	2.283	46	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18I (bg)	-1.363	-33	-87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18S (bg)	1.344	26	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-20S (bg)	2.575	48	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**YGWA-21I (bg)**	**9.895**	**91**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**YGWA-39 (bg)**	**27.52**	**85**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	YGWA-40 (bg)	-6.016	-59	-68	No	18	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-4I (bg)	0.6864	14	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-5D (bg)	-9.186	-72	-87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-5I (bg)	-0.77	-20	-87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	GWA-2 (bg)	14.49	72	74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-14S (bg)	0.8282	30	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-1D (bg)	2.147	46	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-1I (bg)	-0.3083	-7	-87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-2I (bg)	-0.5892	-11	-87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-30I (bg)	1.322	26	87	No	21	9.524	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3D (bg)	1.819	27	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3I (bg)	1.056	15	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-46A	-24.27	-33	-92	No	22	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-52	-28.5	-29	-30	No	10	0	n/a	0.01	NP

Welch's t-test/Mann-Whitney - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:00 PM

Constituent	Well	Calc.	0.01	Alpha	Sig.	Method
Cadmium (mg/L)	YGWC-46A	1.497	No	0.01	No	Mann-W
Mercury (mg/L)	YGWC-46A	0.825	No	0.01	No	Mann-W
Thallium (mg/L)	YGWC-46A	-1.279	No	0.01	No	Mann-W

Upper Tolerance Limits - Summary Table

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 7:07 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0047	n/a	n/a	n/a	410	88.54	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	458	75.76	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.21	n/a	n/a	n/a	458	2.402	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0011	n/a	n/a	n/a	442	79.86	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.00063	n/a	n/a	n/a	442	94.8	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0093	n/a	n/a	n/a	410	80.73	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.035	n/a	n/a	n/a	452	69.03	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.92	n/a	n/a	n/a	437	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride, total (mg/L)	n/a	0.68	n/a	n/a	n/a	457	64.33	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	412	86.65	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	437	26.77	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	n/a	0.00064	n/a	n/a	n/a	366	89.07	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.014	n/a	n/a	n/a	401	61.1	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	440	92.73	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	376	97.34	n/a	n/a	NaN	NP Inter(NDs)

YATES ASH POND 1 GWPS				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006		0.0047	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.21	2
Beryllium, Total (mg/L)	0.004		0.0011	0.004
Cadmium, Total (mg/L)	0.005		0.00063	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.92	6.92
Fluoride, Total (mg/L)	4		0.68	4
Lead, Total (mg/L)		0.015	0.0013	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.00064	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Appendix IV Confidence Intervals - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 7:14 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-44	0.003	0.0023	0.006	No	17	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-45	0.003	0.0017	0.006	No	17	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-46A	0.003	0.00029	0.006	No	20	95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-44	0.005	0.00086	0.01	No	19	73.68	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00078	0.01	No	19	78.95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-46A	0.005	0.001	0.01	No	22	40.91	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-44	0.1101	0.09103	2	No	19	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.06806	0.05568	2	No	19	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46A	0.04616	0.03984	2	No	11	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-52	0.02018	0.01742	2	No	10	0	None	No	0.01	Param.
Cadmium (mg/L)	YGWC-46A	0.0005	0.00012	0.005	No	19	84.21	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-45	0.0061	0.0006	0.1	No	17	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-52	0.005	0.00086	0.1	No	10	50	None	No	0.011	NP (normality)
Cobalt (mg/L)	YGWC-44	0.003381	0.001627	0.035	No	19	5.263	None	ln(x)	0.01	Param.
Cobalt (mg/L)	YGWC-45	0.000818	0.0006275	0.035	No	18	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46A	0.002491	0.0007833	0.035	No	11	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	YGWC-52	0.001914	0.001048	0.035	No	10	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	0.9134	0.2928	6.92	No	19	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.465	0.9578	6.92	No	19	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46A	1.728	1.124	6.92	No	22	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-52	0.8689	0.3907	6.92	No	9	0	None	x^5	0.01	Param.
Fluoride, total (mg/L)	YGWC-44	0.12	0.07	4	No	20	75	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	YGWC-45	0.1826	0.07598	4	No	20	20	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride, total (mg/L)	YGWC-46A	0.1014	0.03761	4	No	23	21.74	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride, total (mg/L)	YGWC-52	0.1	0.063	4	No	10	80	Kaplan-Meier	No	0.011	NP (NDs)
Lead (mg/L)	YGWC-45	0.001	0.0001	0.015	No	17	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-46A	0.001	0.000044	0.015	No	20	95	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-52	0.001	0.000064	0.015	No	10	60	None	No	0.011	NP (NDs)
Lithium (mg/L)	YGWC-44	0.01348	0.01258	0.04	No	19	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.014	0.012	0.04	No	19	0	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-46A	0.01391	0.01154	0.04	No	11	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-52	0.004556	0.003784	0.04	No	10	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0002	0.00006	0.002	No	15	93.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0002	0.000071	0.002	No	15	93.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-46A	0.0002	0.00007	0.002	No	17	94.12	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.0005	0.1	No	19	94.74	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.0024	0.0011	0.1	No	19	15.79	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-46A	0.003199	0.001891	0.1	No	22	13.64	None	No	0.01	Param.
Molybdenum (mg/L)	YGWC-52	0.01	0.01	0.1	No	10	90	None	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-44	0.001	0.00008	0.002	No	17	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-46A	0.001	0.000073	0.002	No	19	94.74	None	No	0.01	NP (NDs)

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FIGURE A.

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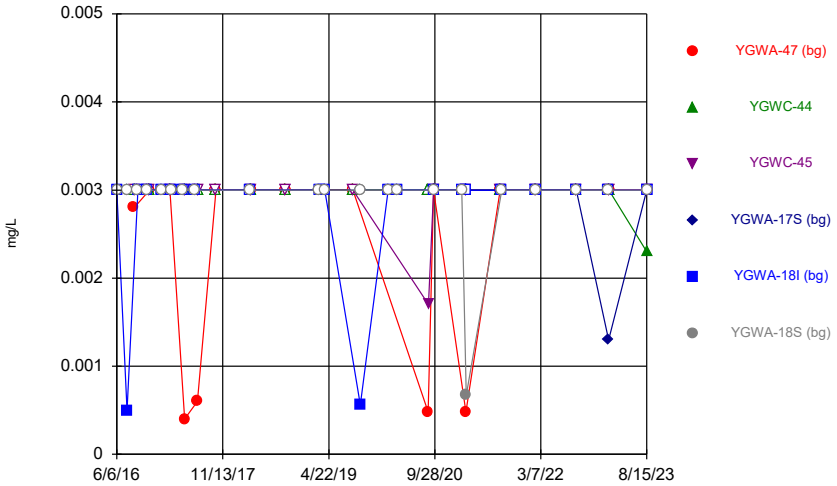

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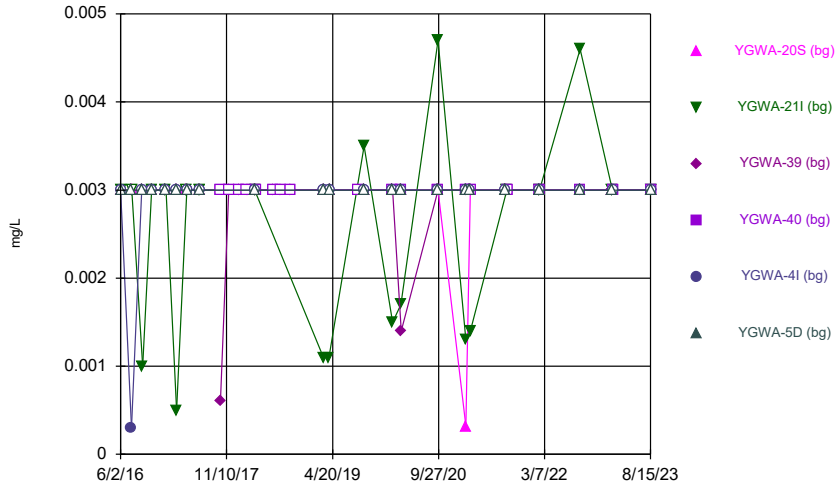

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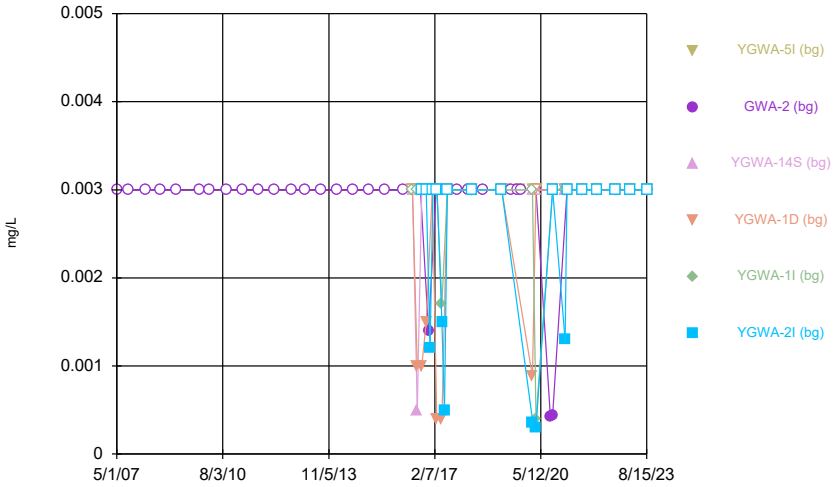

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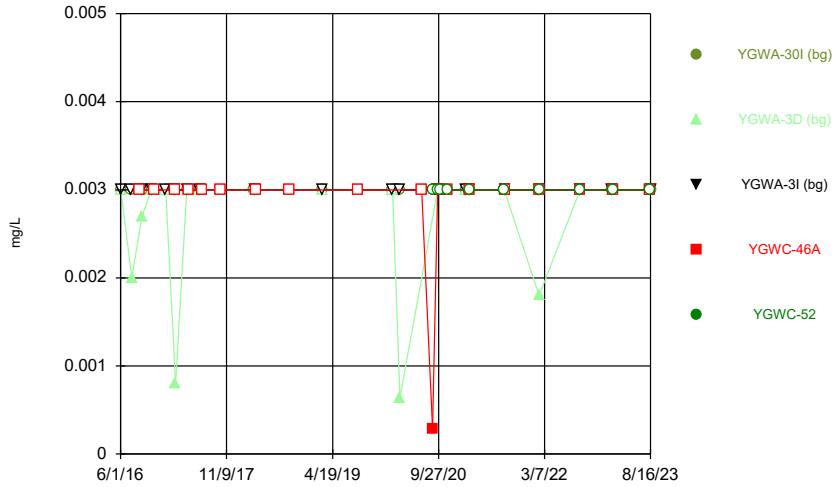

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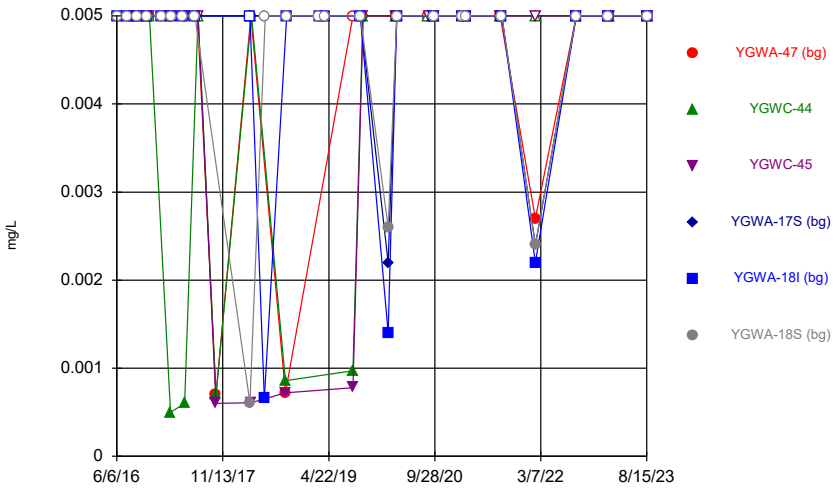

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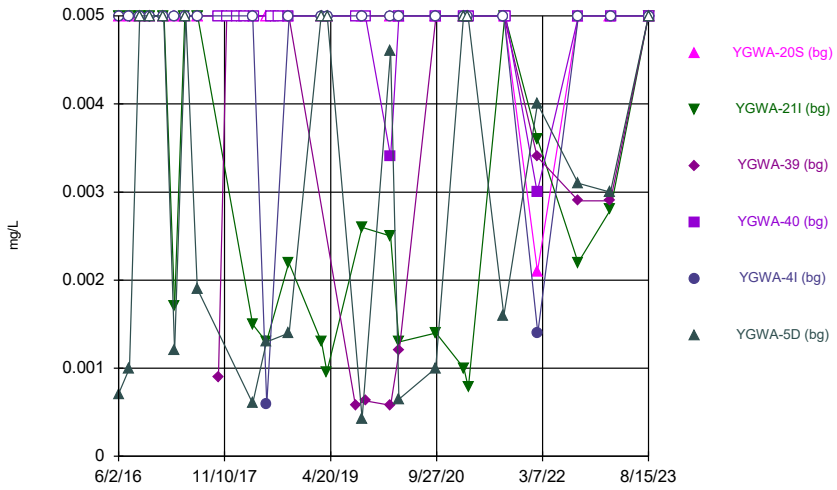

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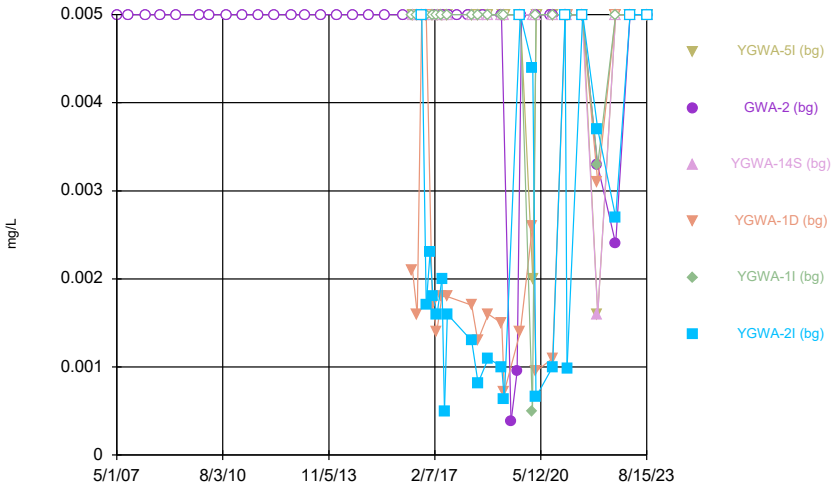

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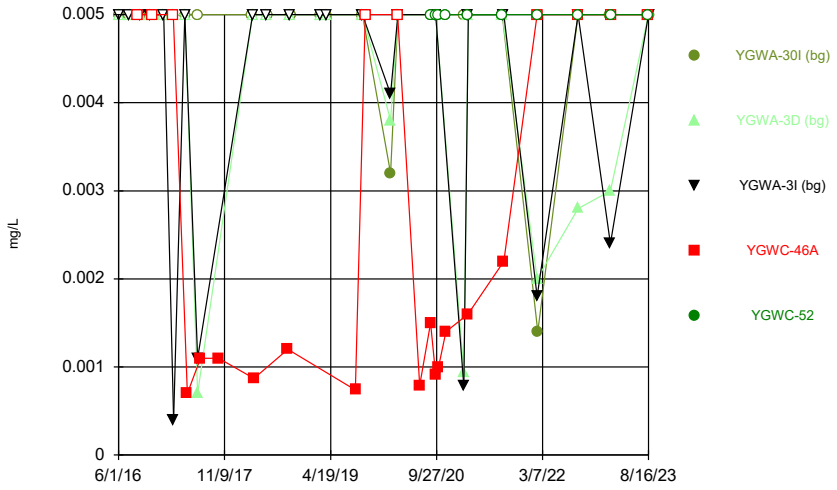

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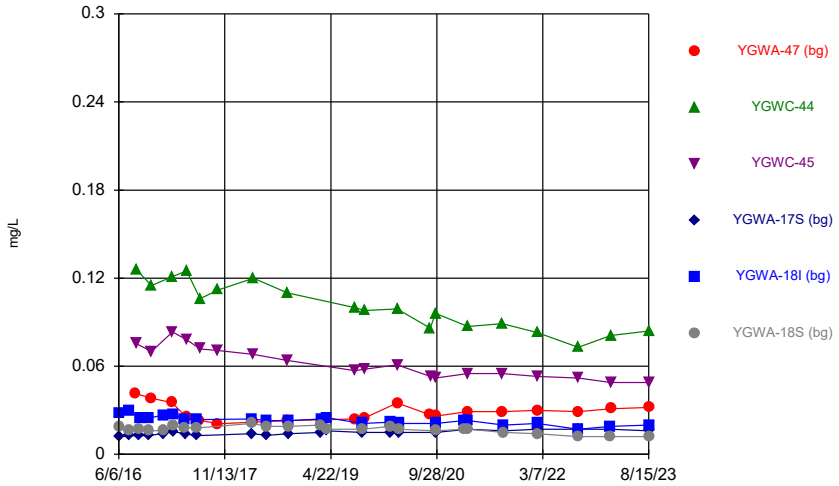

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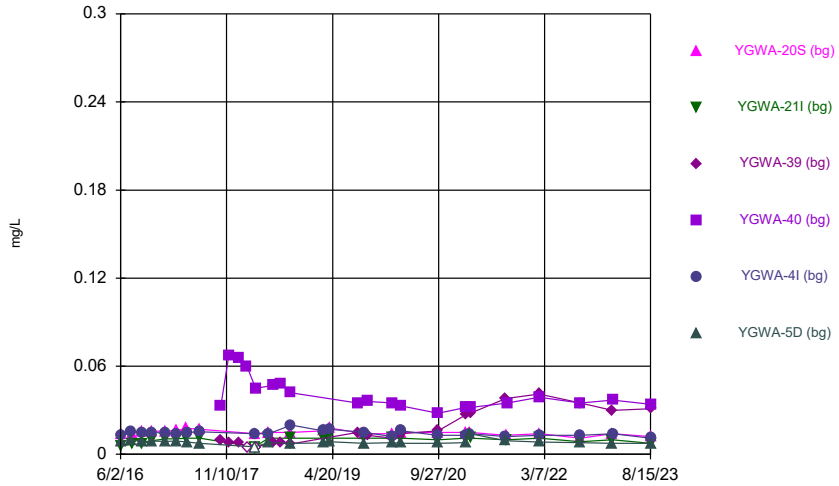

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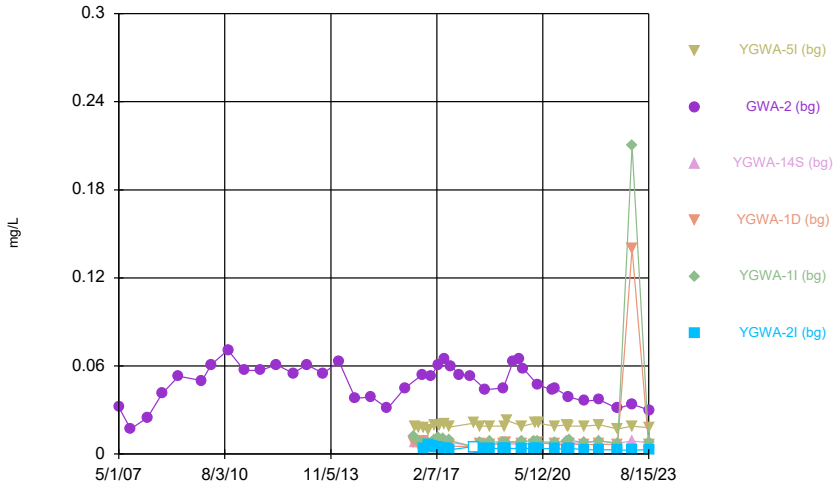

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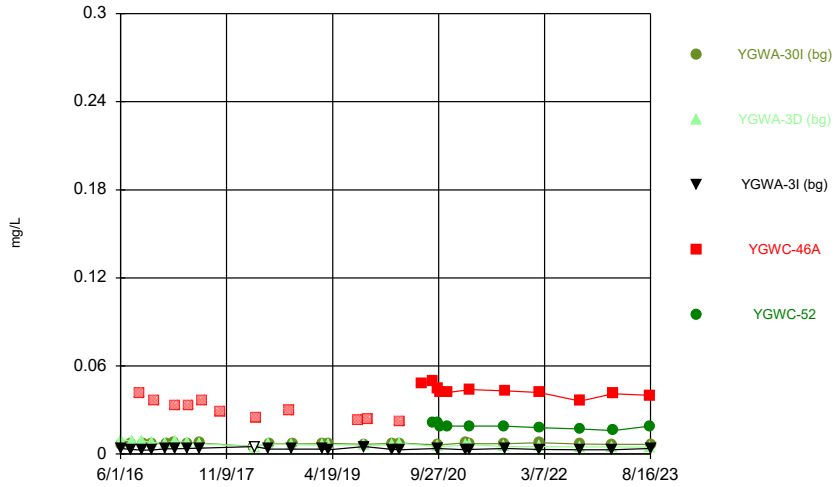

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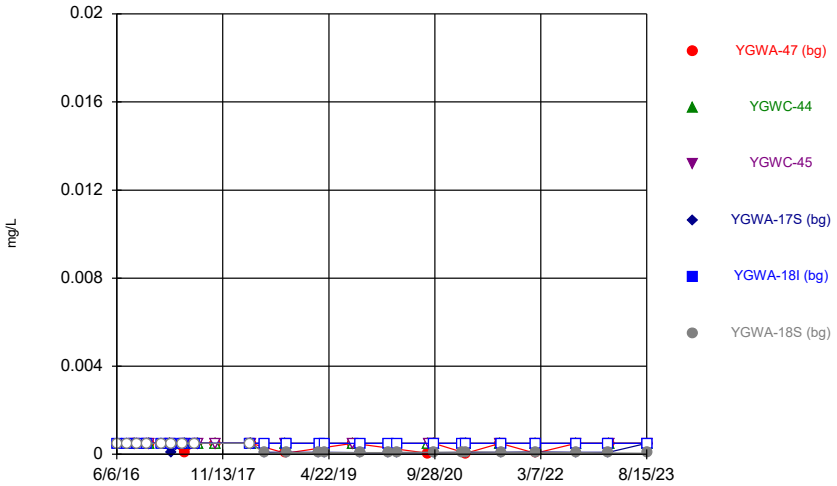

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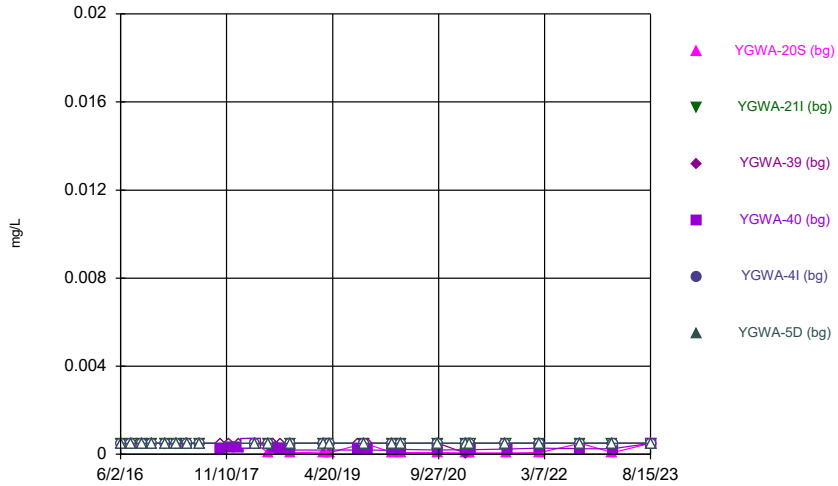

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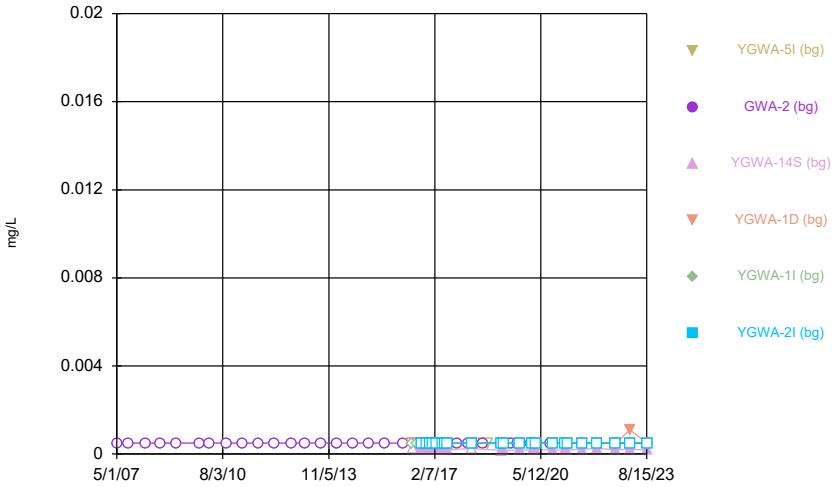

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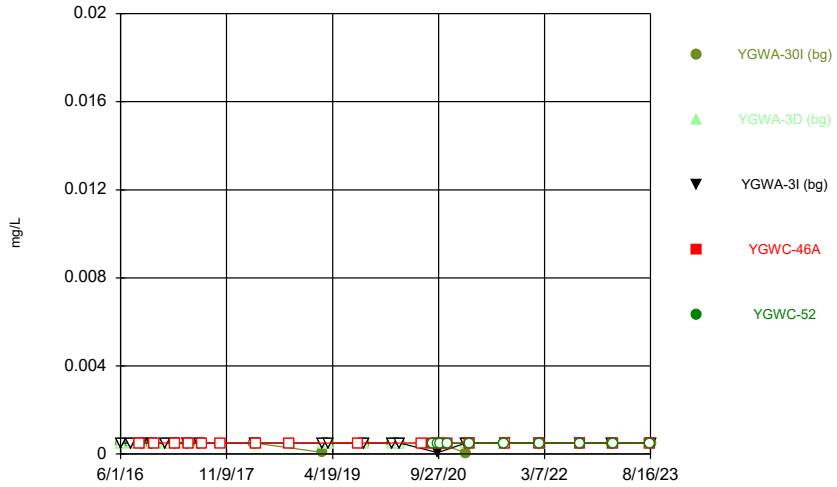

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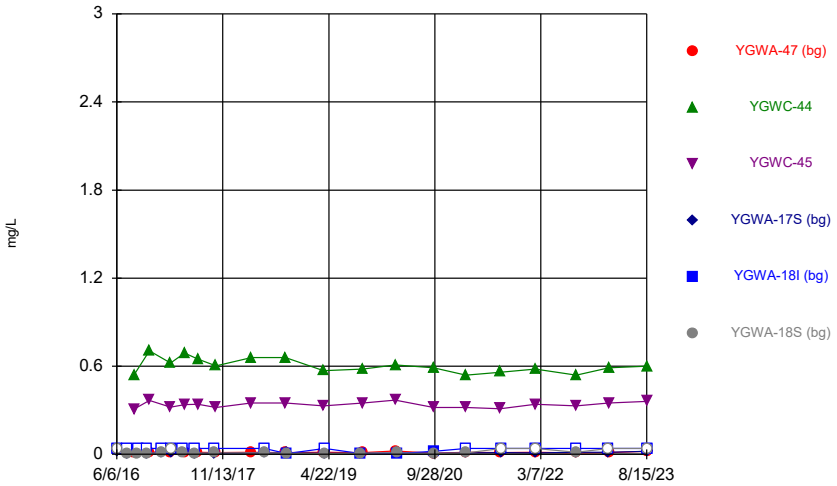

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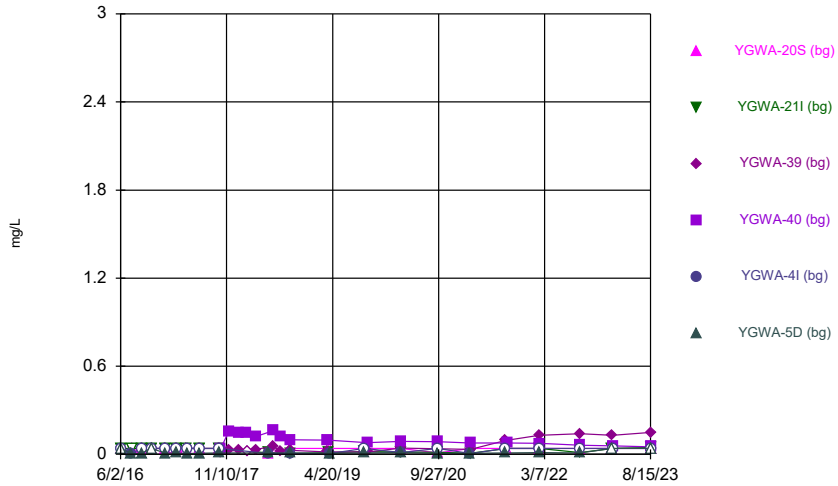

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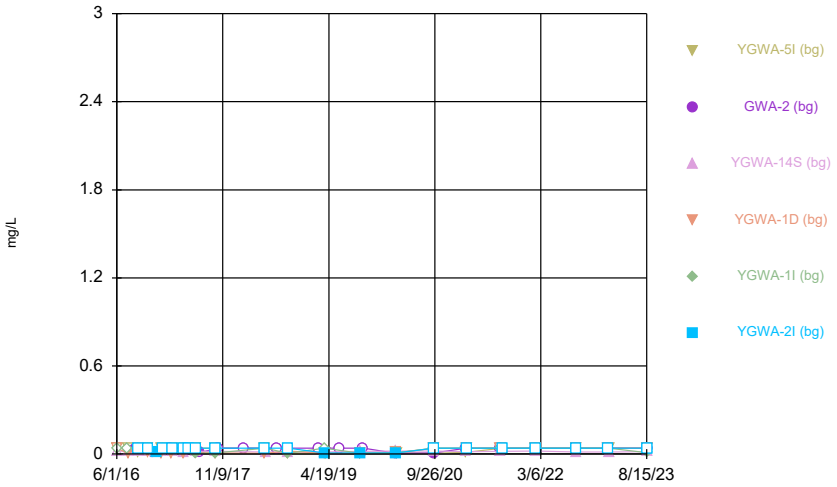

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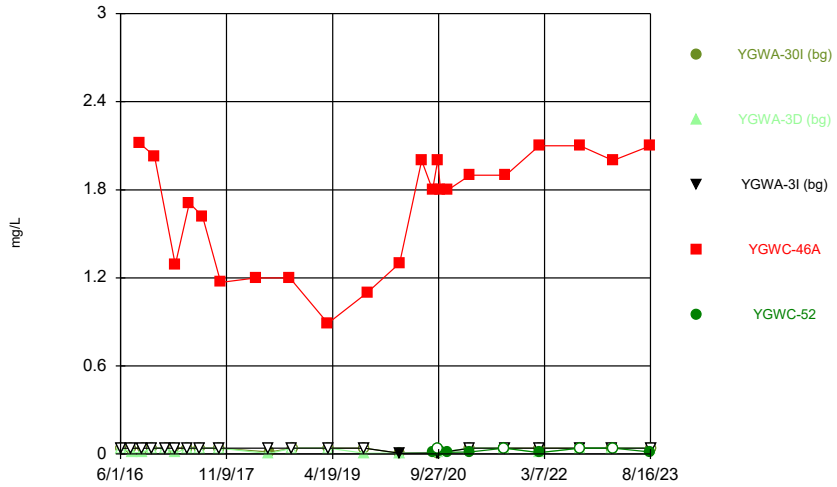

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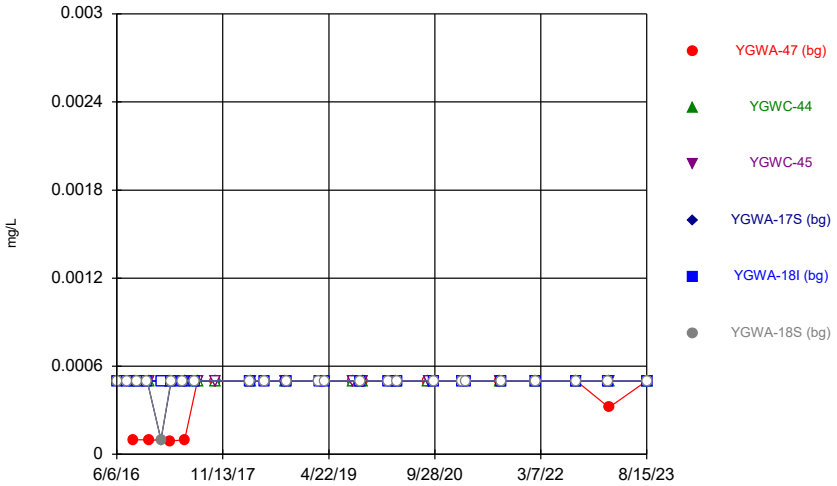
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 10/9/2023 6:01 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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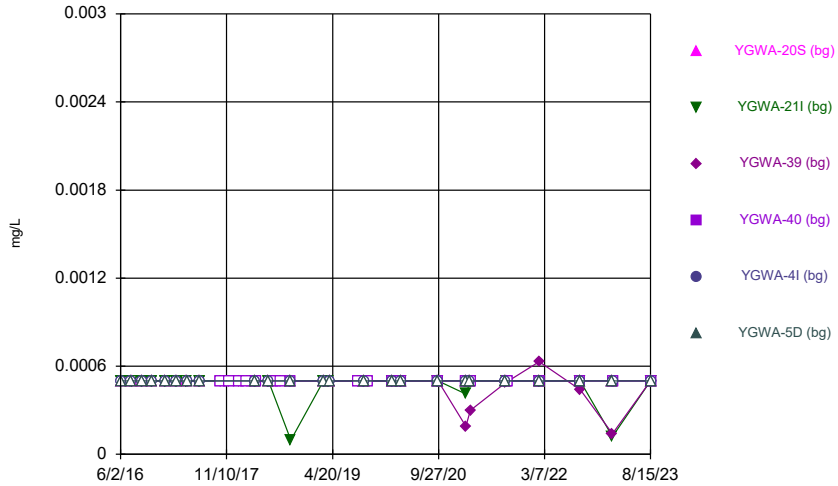
Hollow symbols indicate censored values.

Time Series



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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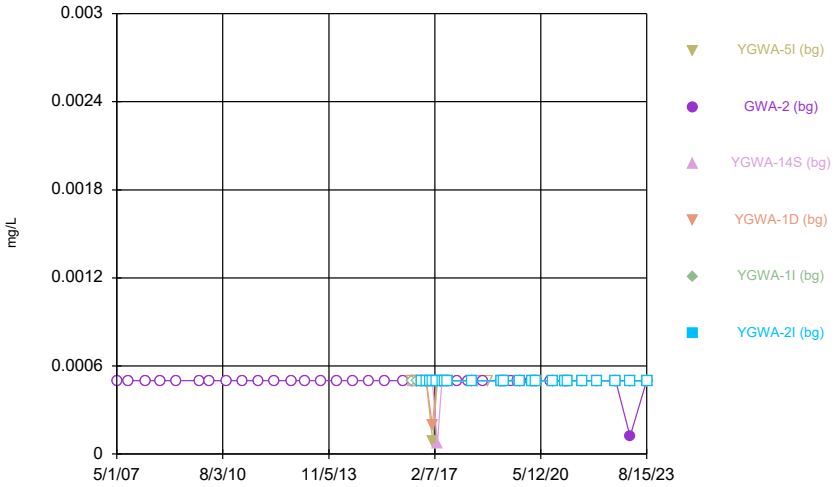
Hollow symbols indicate censored values.

Time Series



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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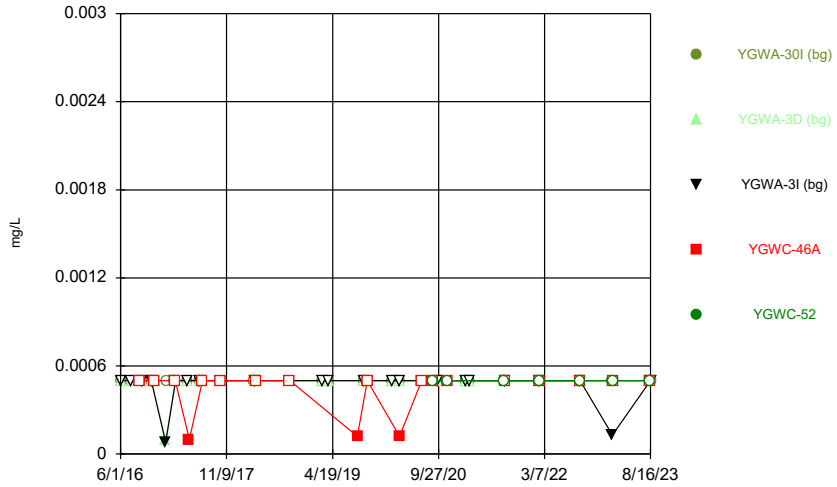
Hollow symbols indicate censored values.

Time Series



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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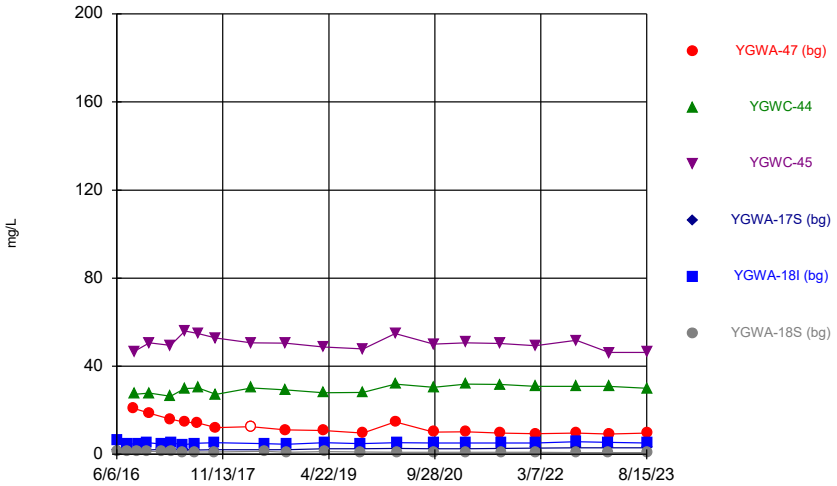
Hollow symbols indicate censored values.

Time Series



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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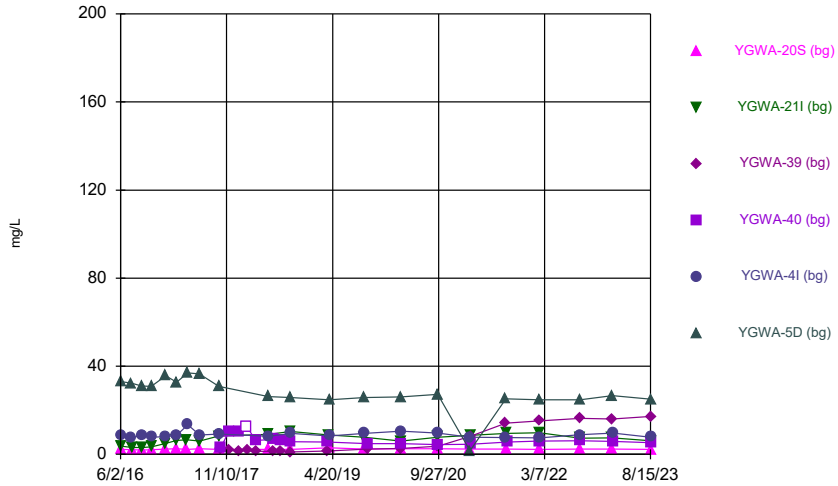
Time Series



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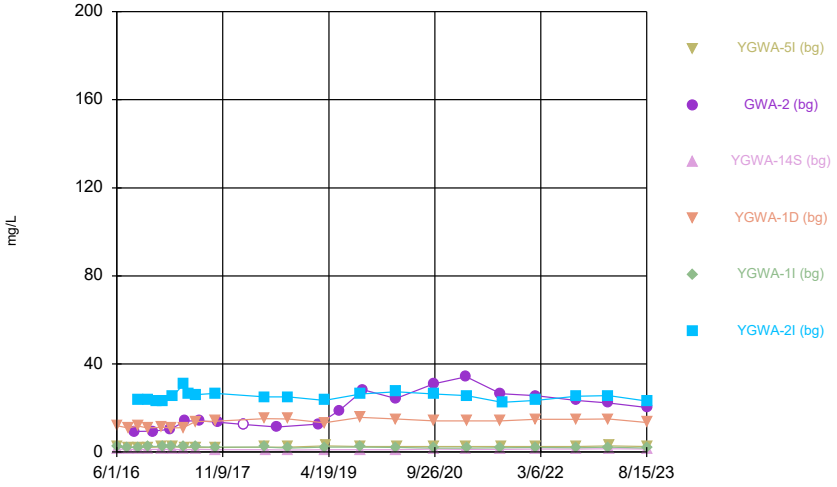
Time Series



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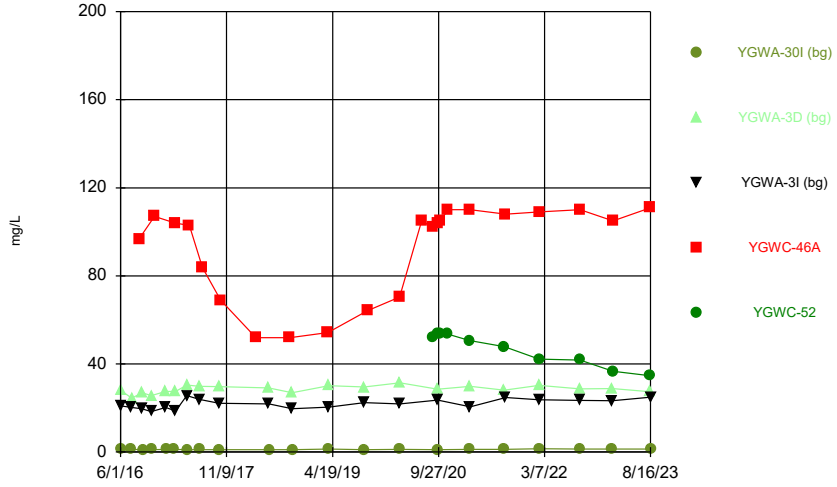
Time Series



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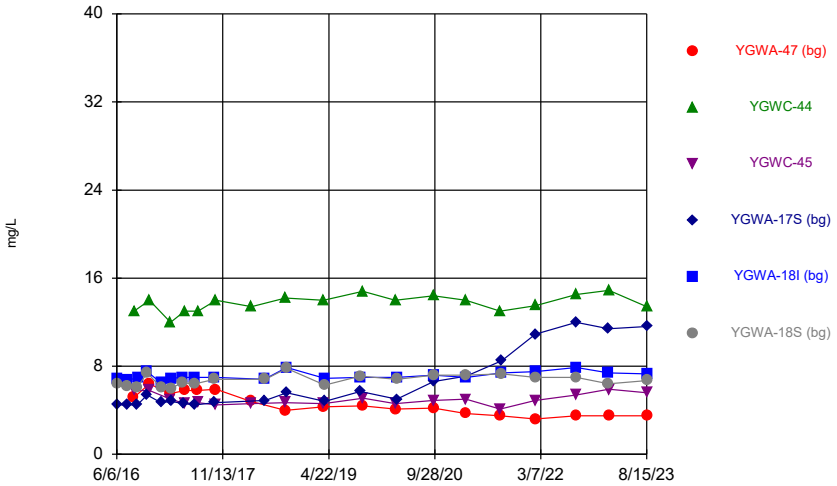
Time Series



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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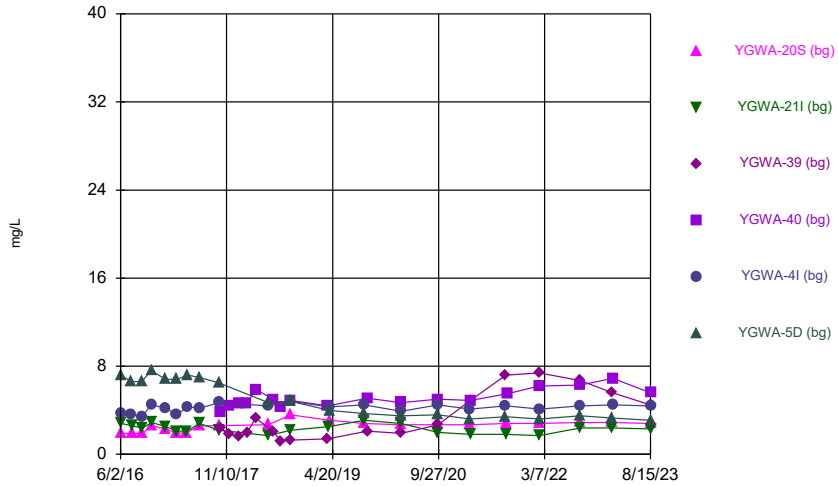
Time Series



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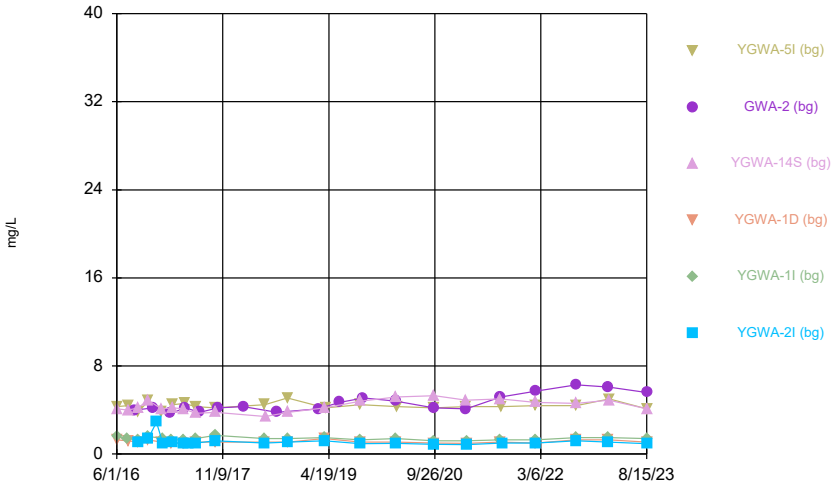
Time Series



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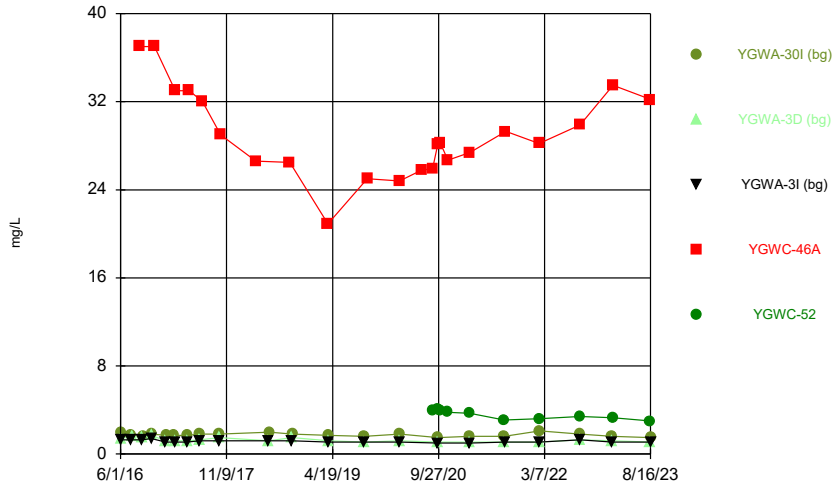
Time Series



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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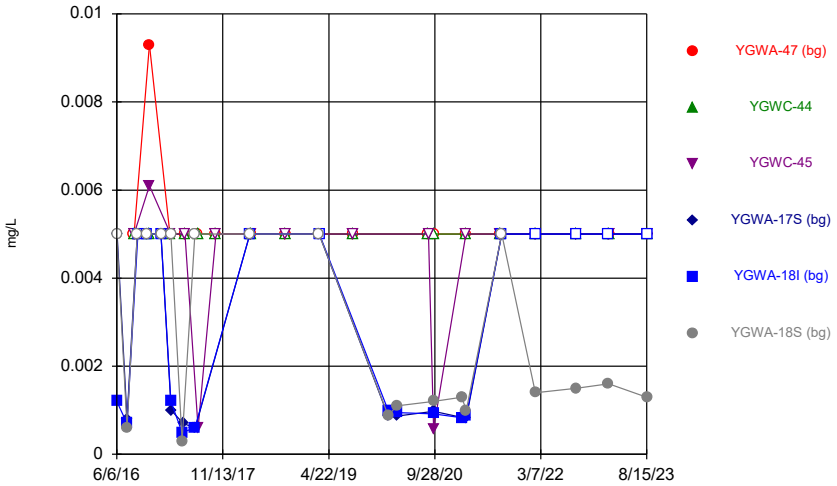
Hollow symbols indicate censored values.

Time Series



Constituent: Chromium Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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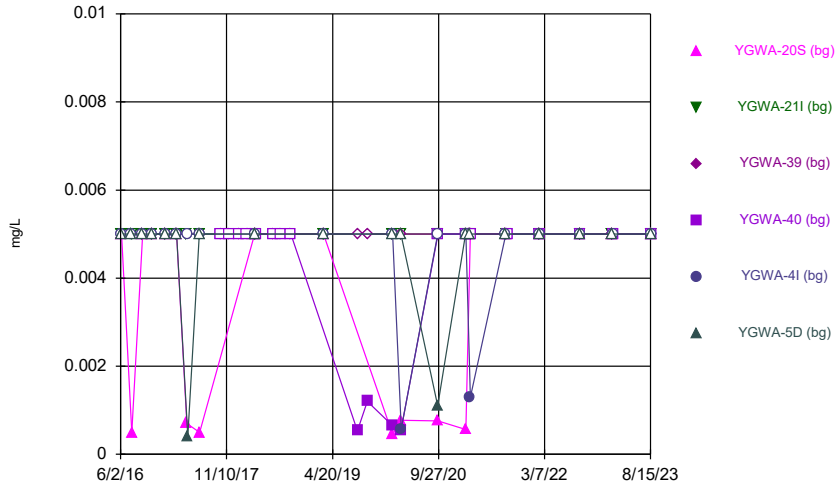
Hollow symbols indicate censored values.

Time Series



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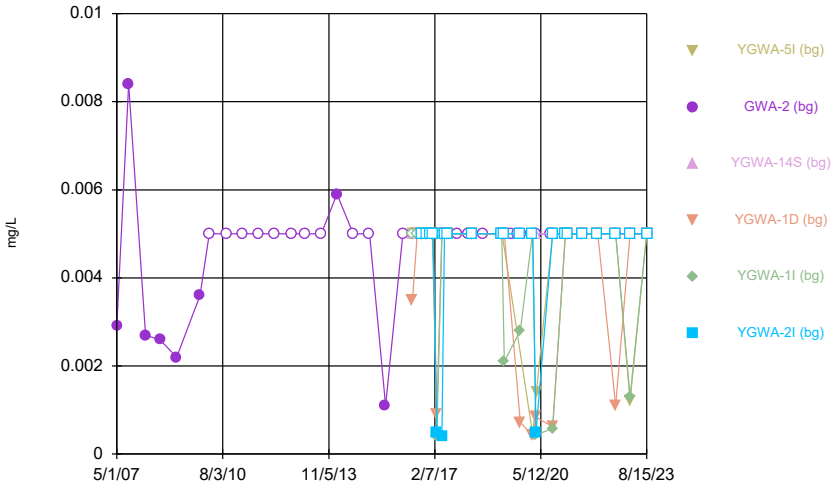

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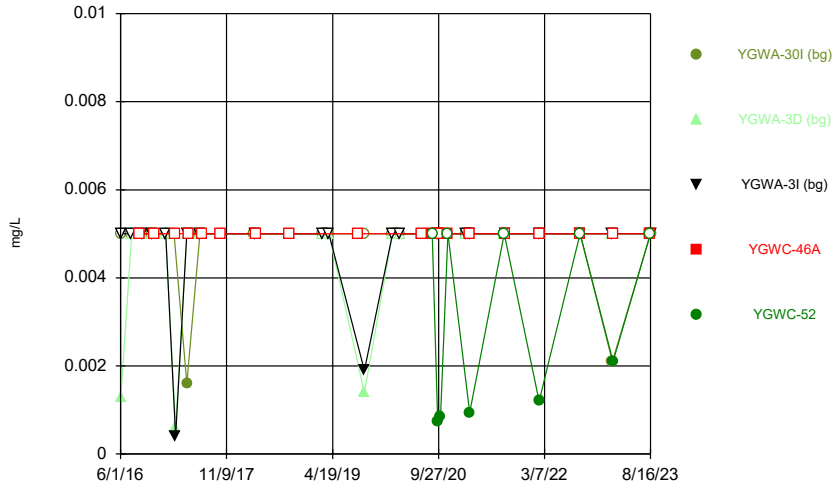

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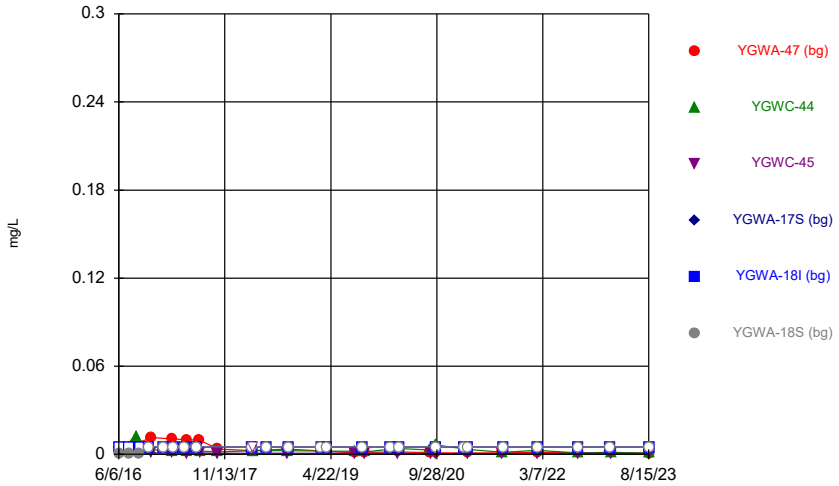

Constituent: Cobalt Analysis Run 10/9/2023 6:02 PM
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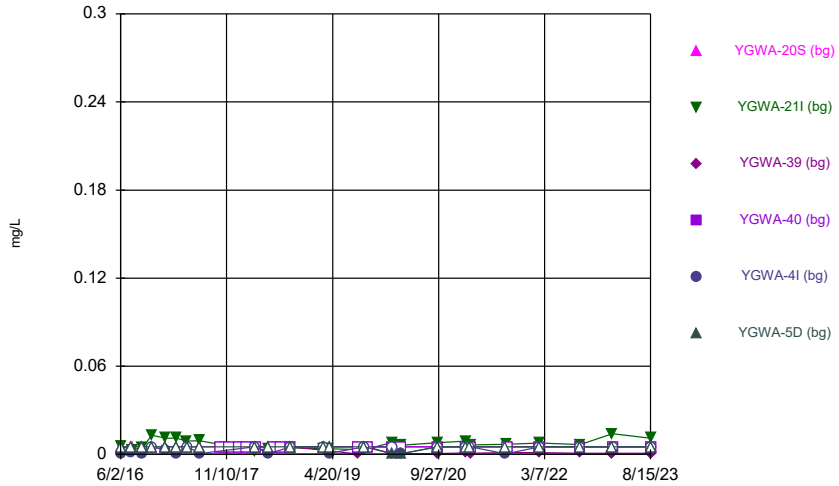
Hollow symbols indicate censored values.

Time Series



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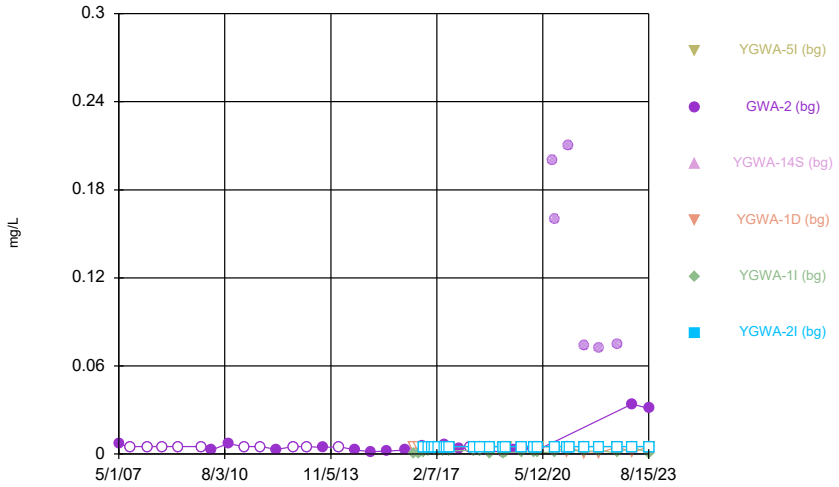

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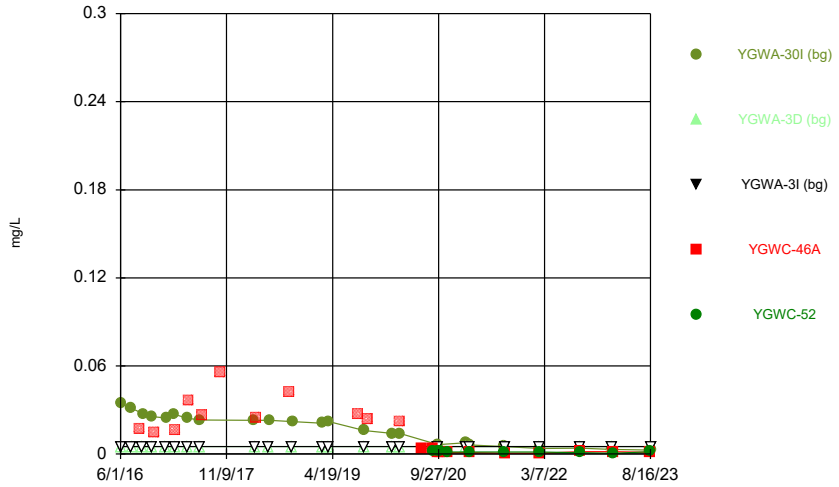

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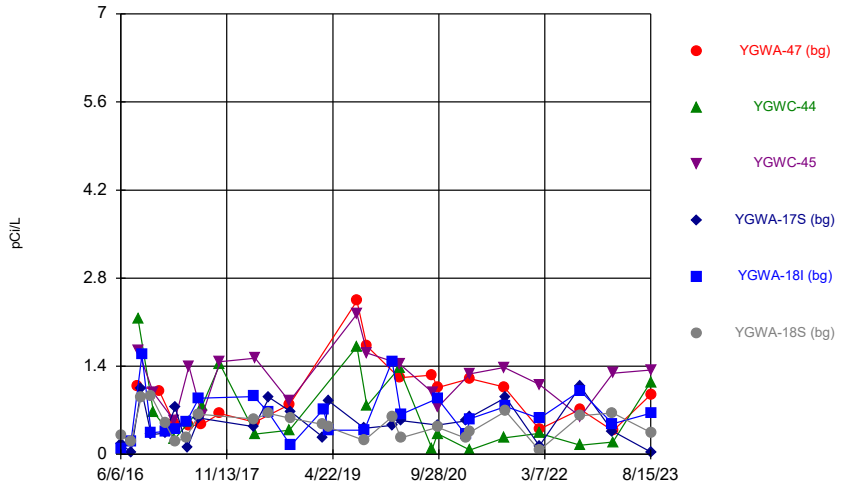
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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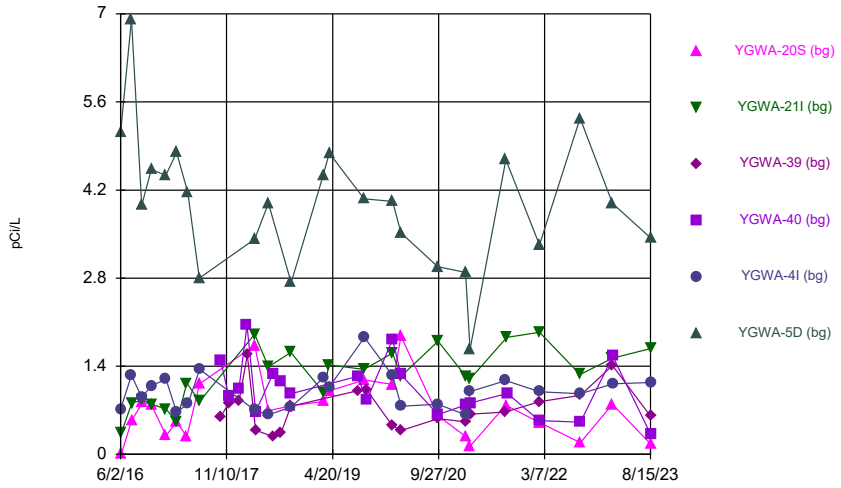
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 10/9/2023 6:02 PM
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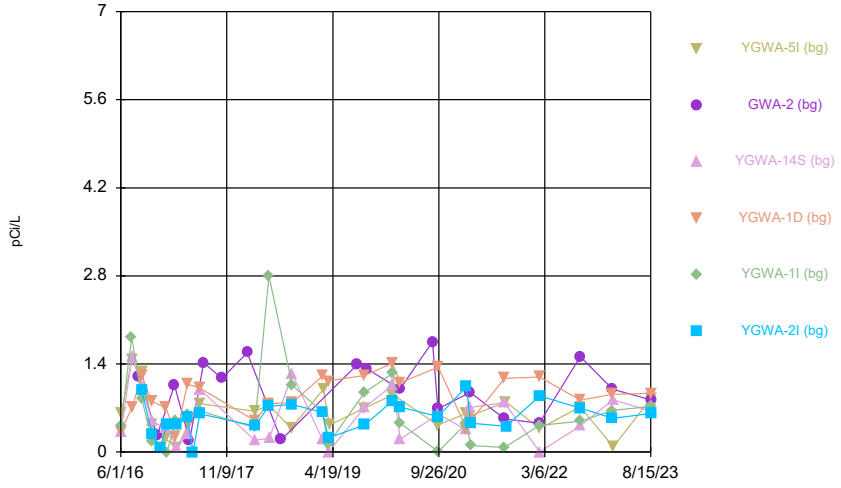
Time Series



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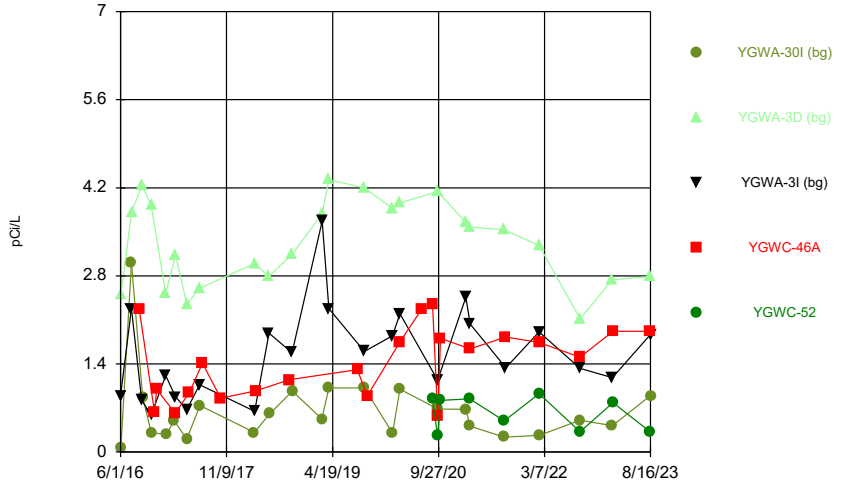
Sanitas™ v.10.0.12 Software licensed to . UG

Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 10/9/2023 6:02 PM
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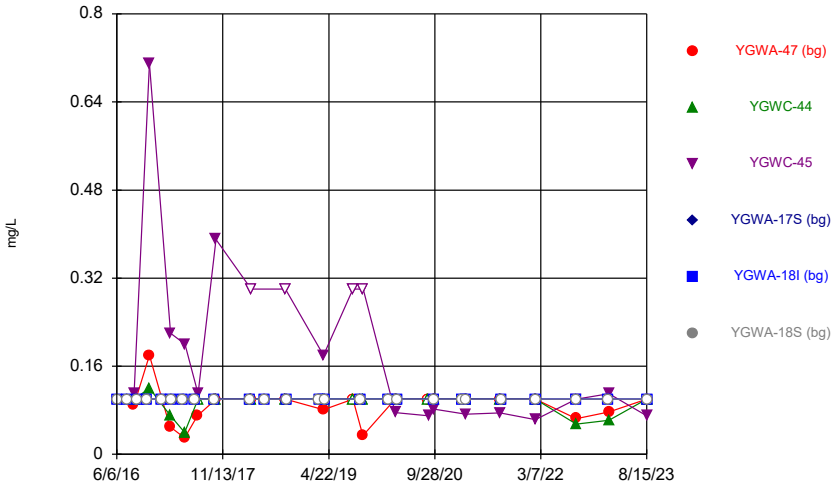
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride, total Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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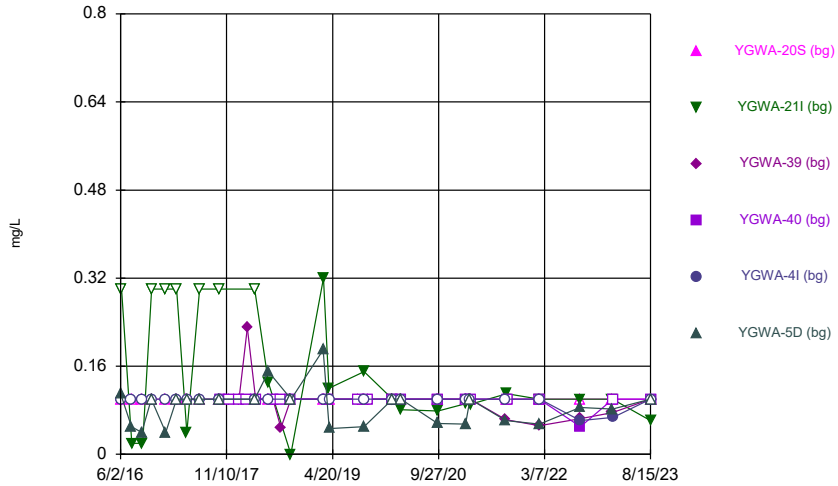
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride, total Analysis Run 10/9/2023 6:02 PM
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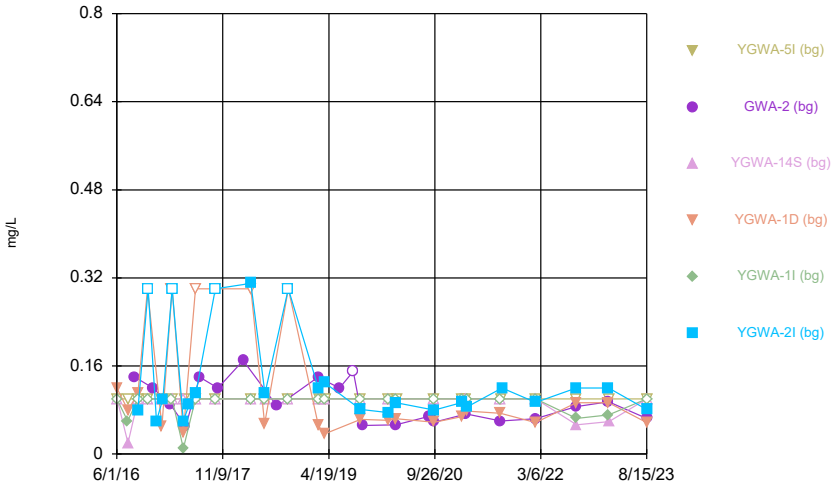

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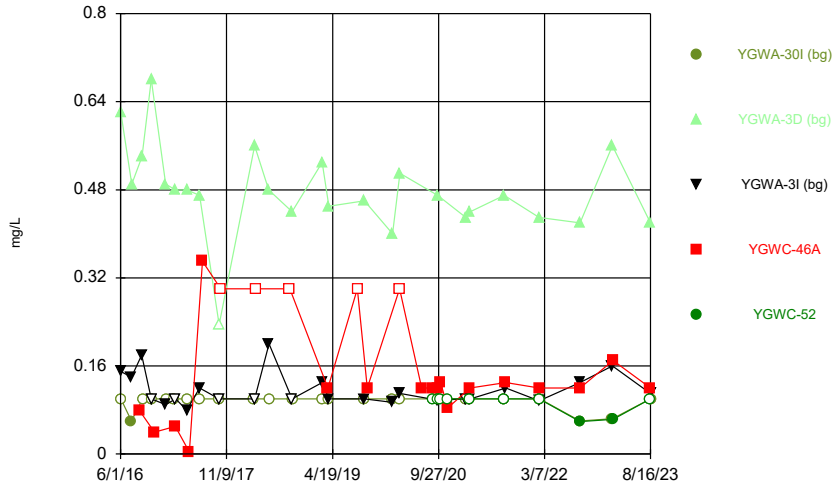

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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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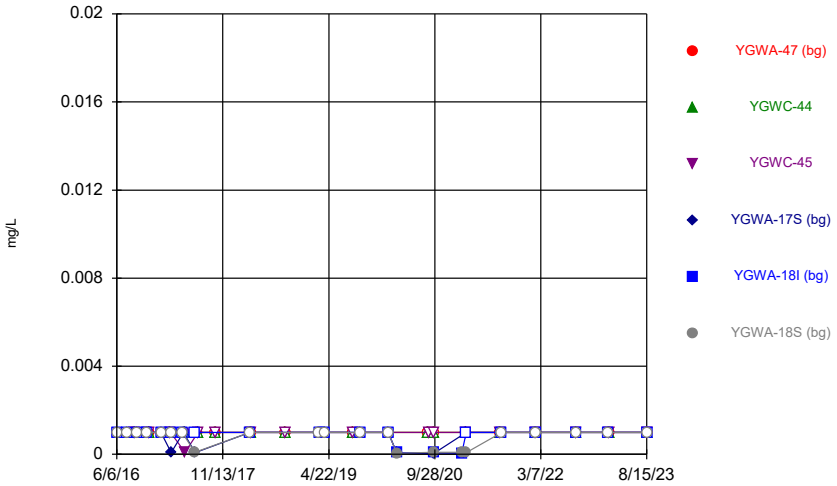
Time Series



Constituent: Lead Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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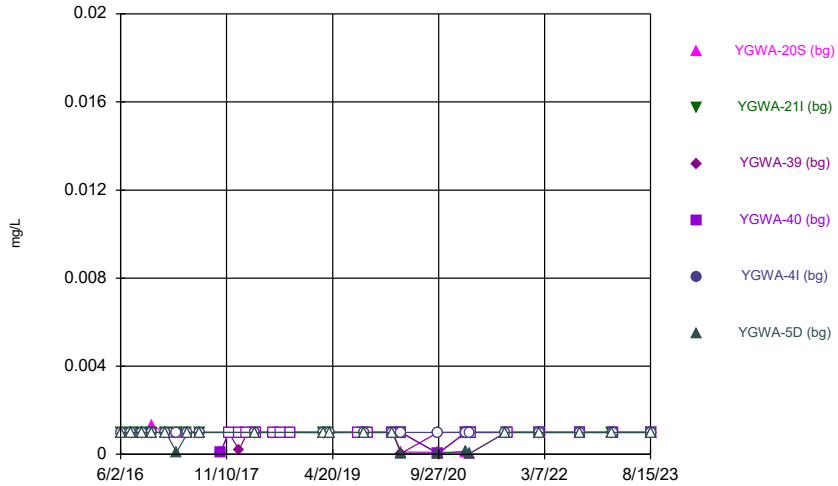
Hollow symbols indicate censored values.

Time Series



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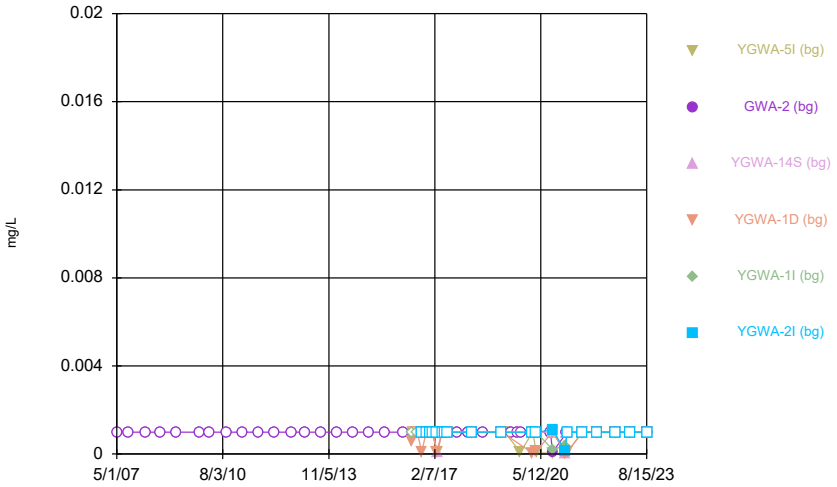

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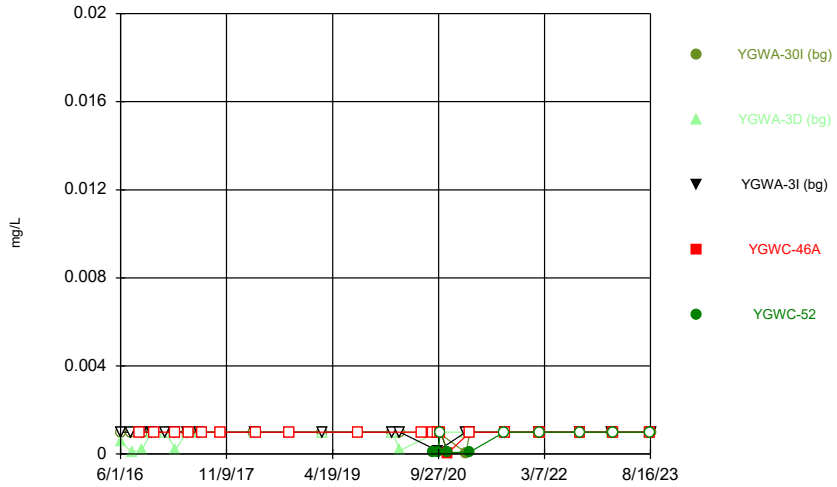

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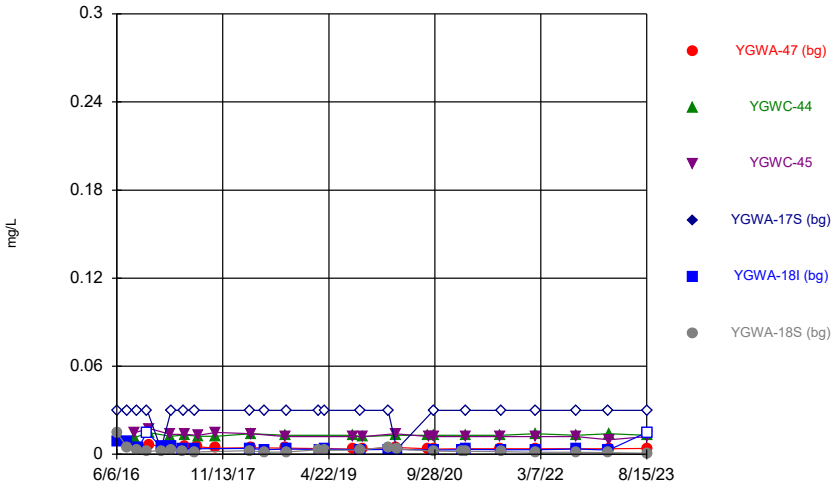

Constituent: Lithium Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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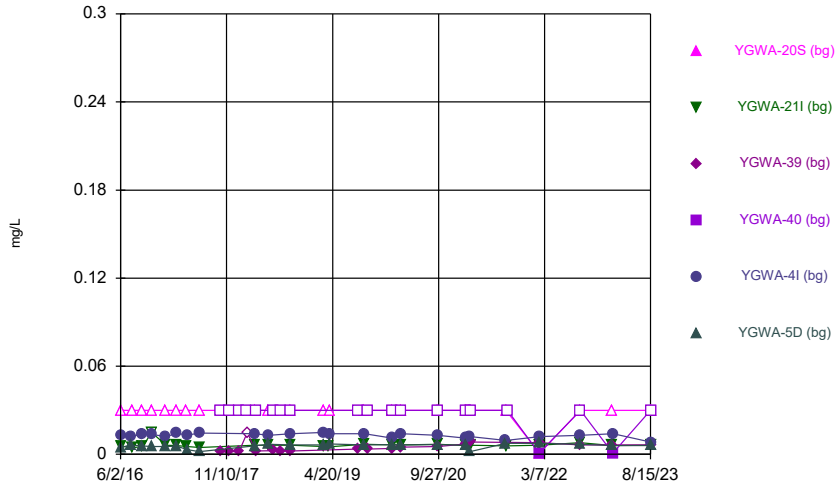
Time Series



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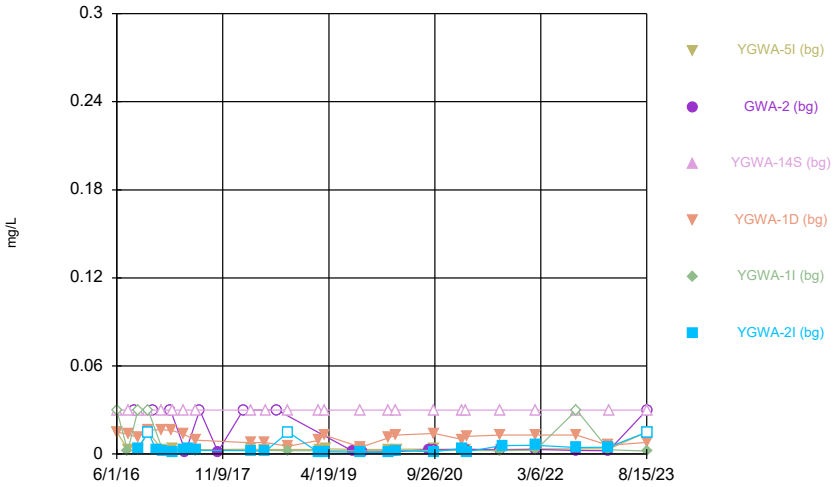

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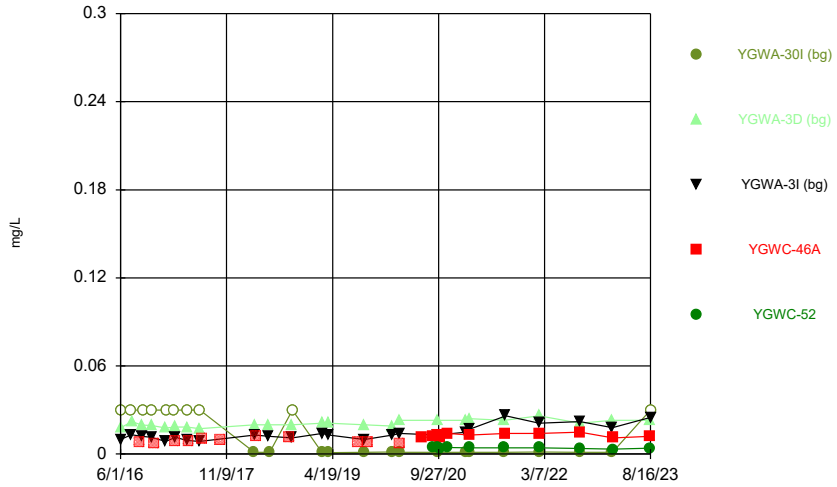

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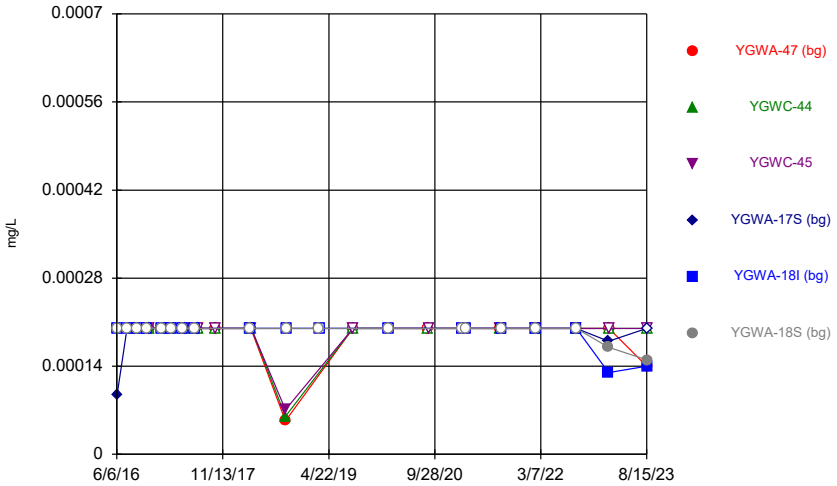

Constituent: Mercury Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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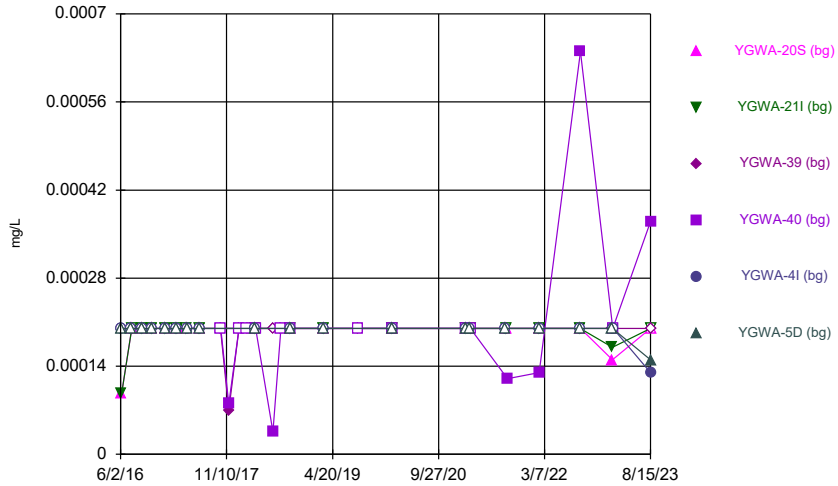
Hollow symbols indicate censored values.

Time Series



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Sanitas™ v.10.0.12 Software licensed to . UG
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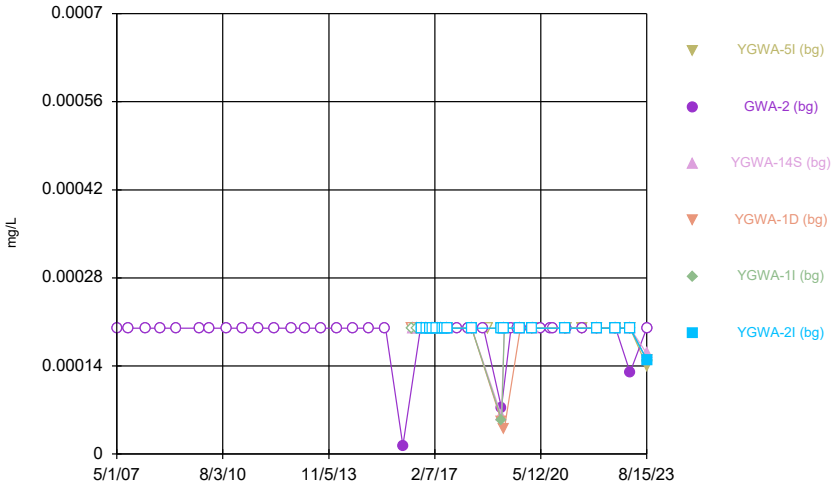

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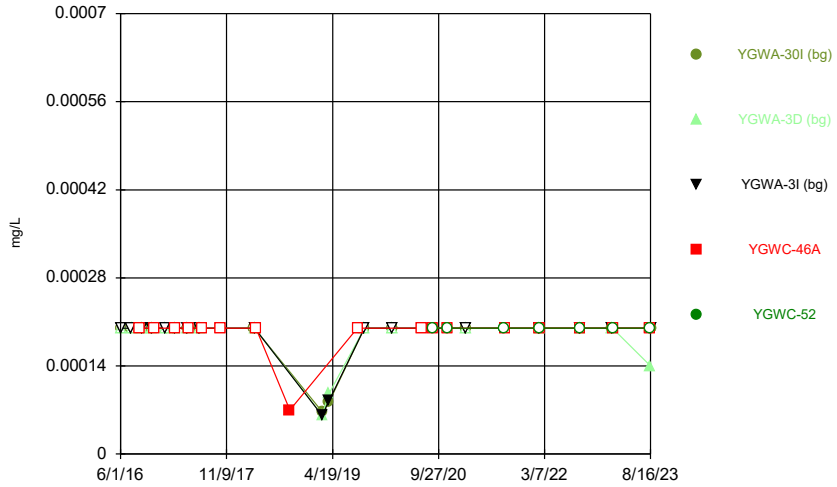

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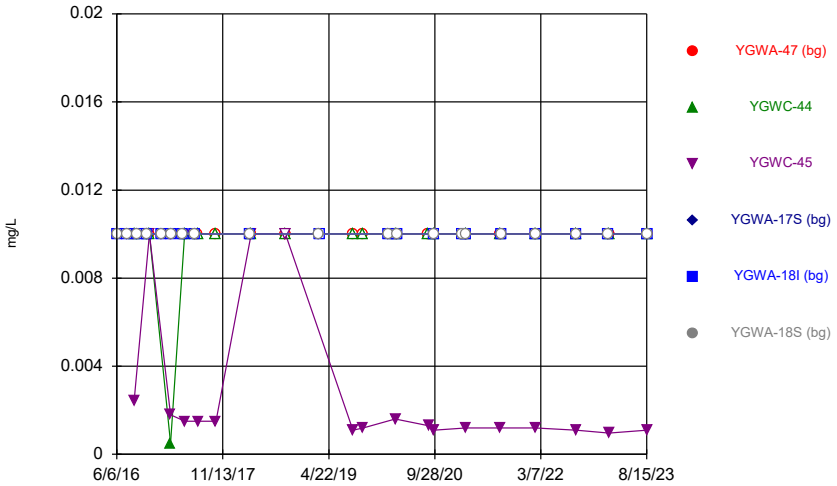

Constituent: Molybdenum Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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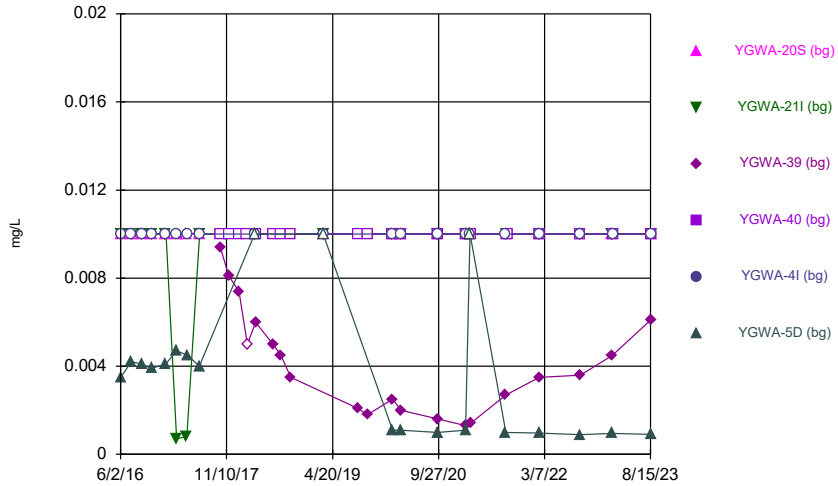
Hollow symbols indicate censored values.

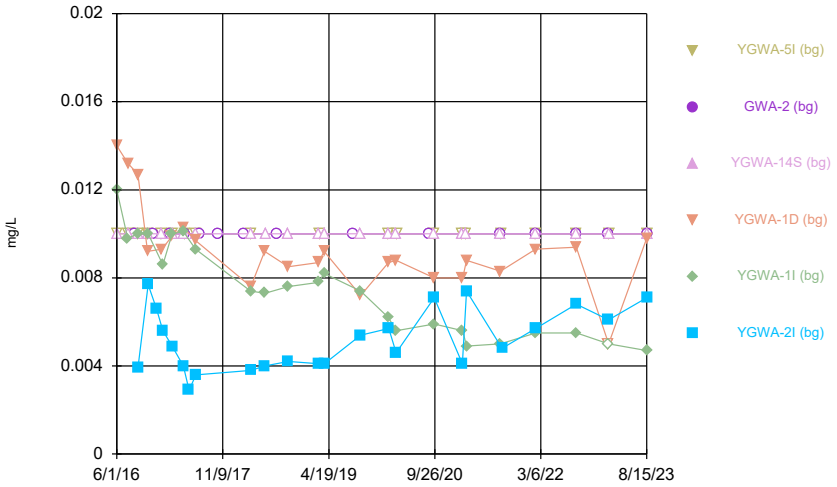
Time Series



Constituent: Molybdenum Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

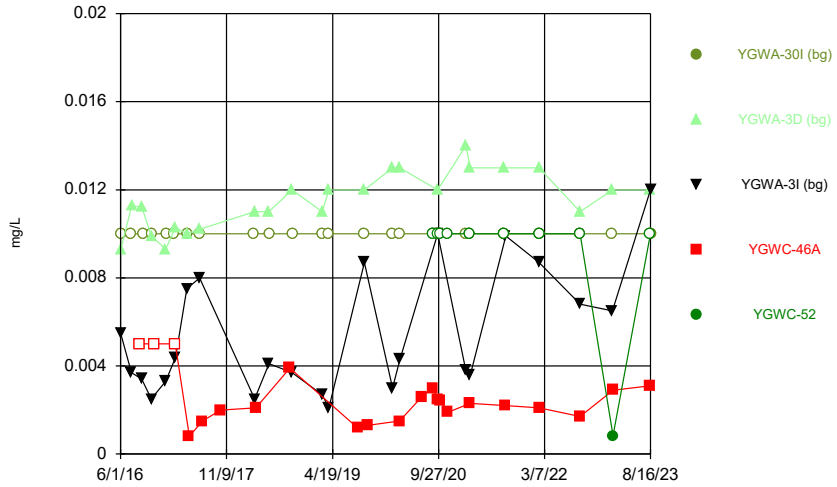
Time Series



Constituent: Molybdenum Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

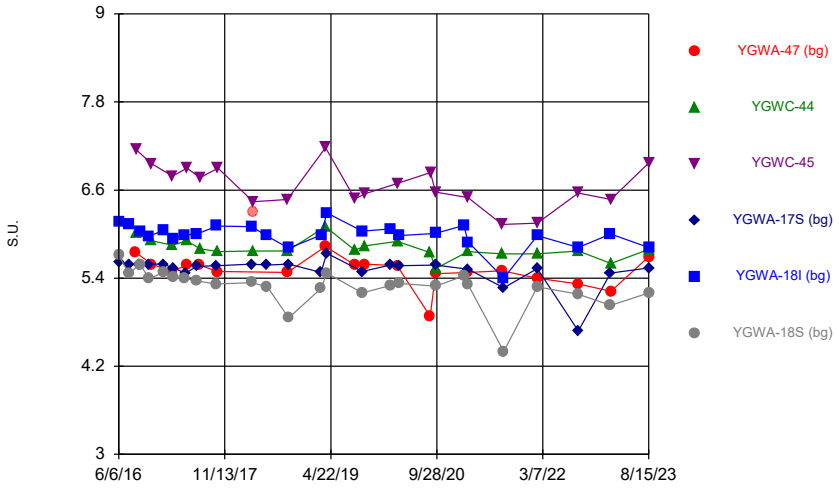
Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



Constituent: pH, Field Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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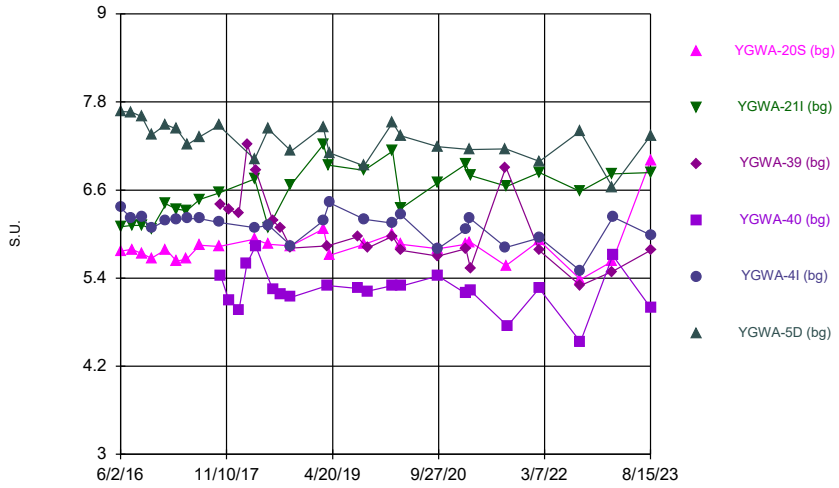
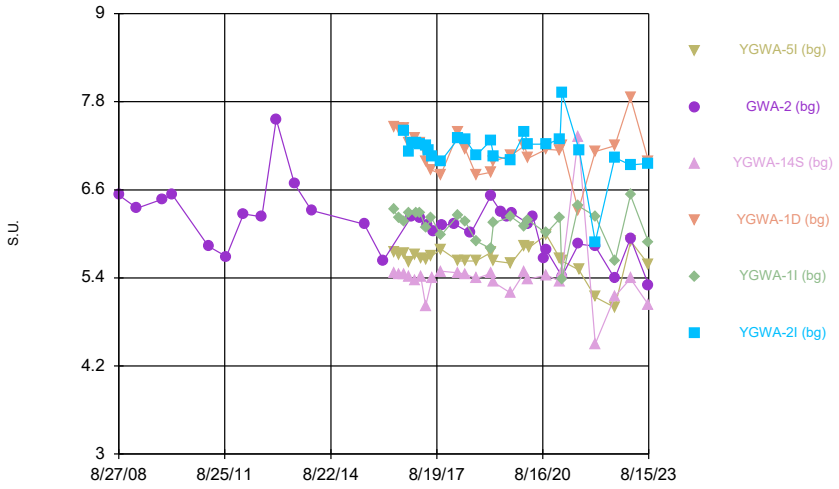
Time Series



Constituent: pH, Field Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG

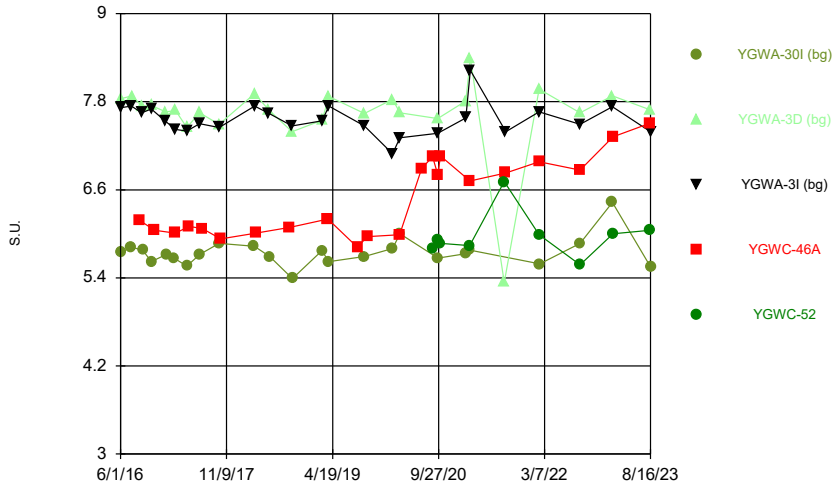
Time Series



Constituent: pH, Field Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG

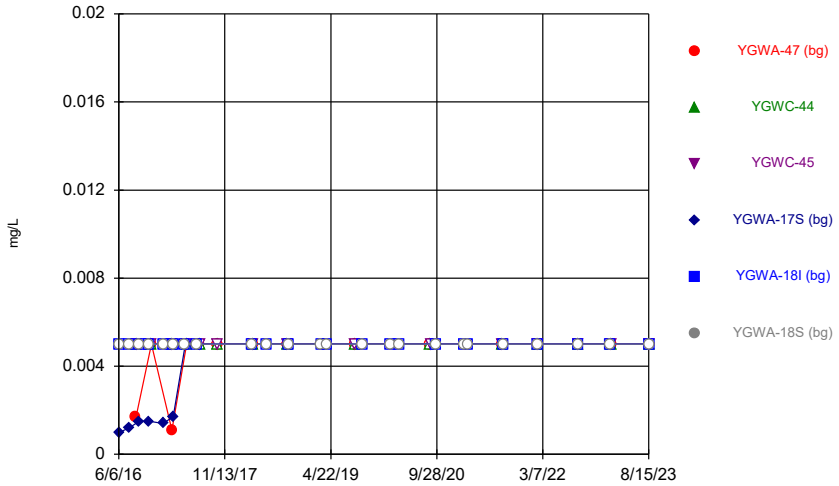
Time Series



Constituent: pH, Field Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

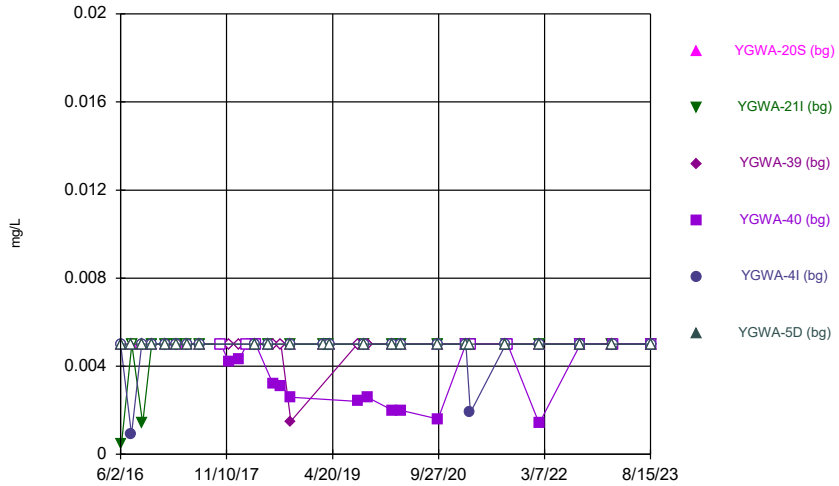
Time Series



Constituent: Selenium Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

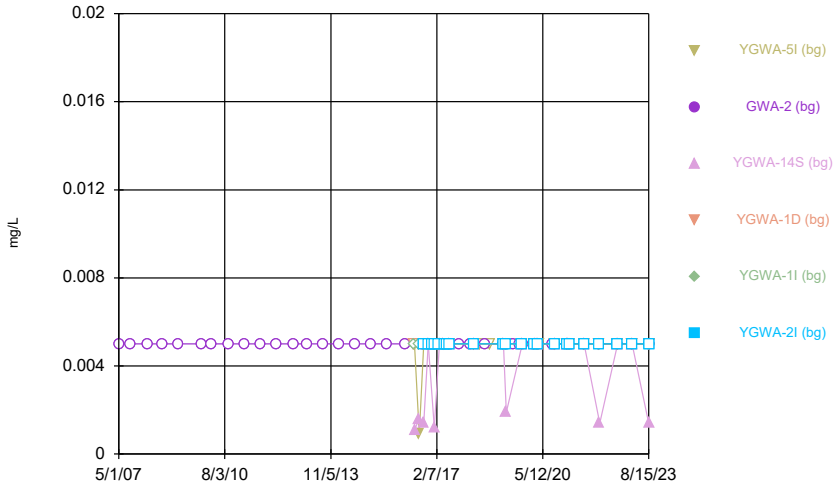
Time Series



Constituent: Selenium Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

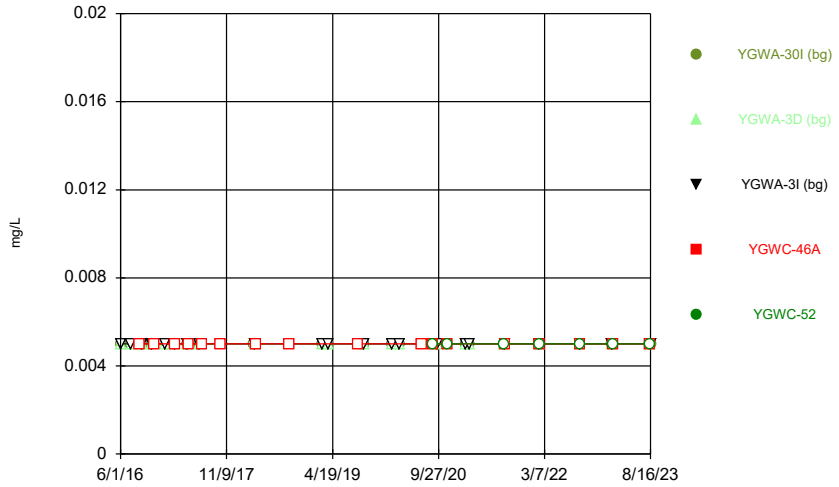
Time Series



Constituent: Selenium Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

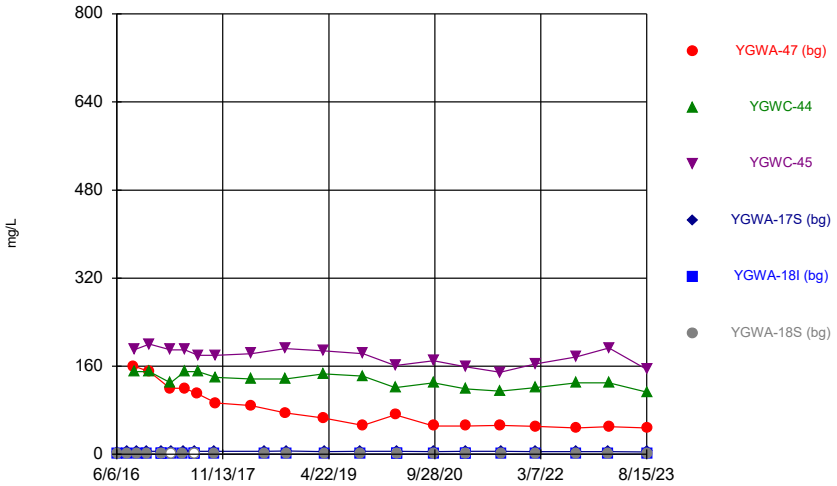
Time Series



Constituent: Selenium Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

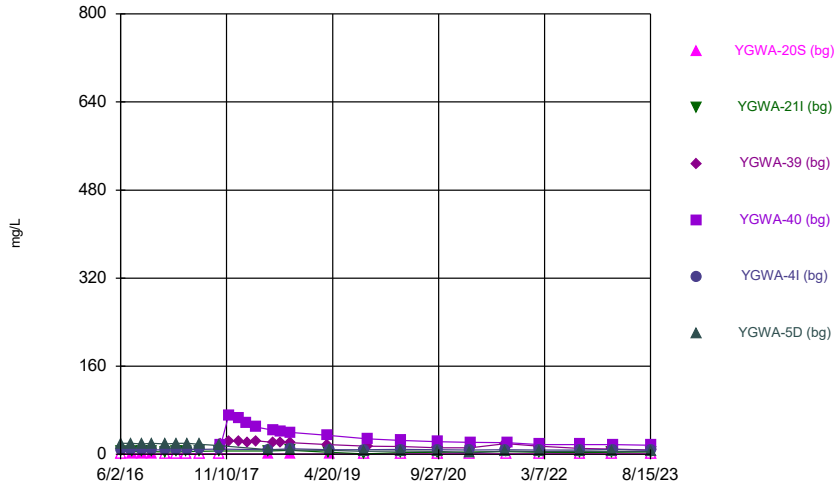
Time Series



Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

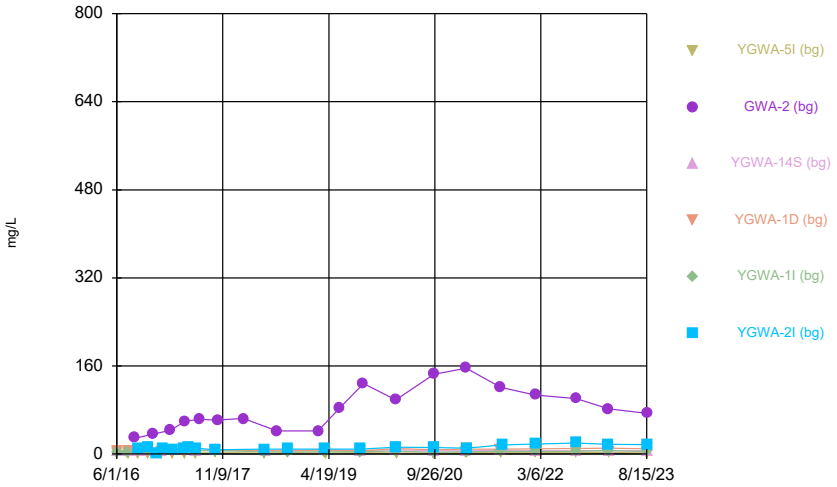
Time Series



Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG

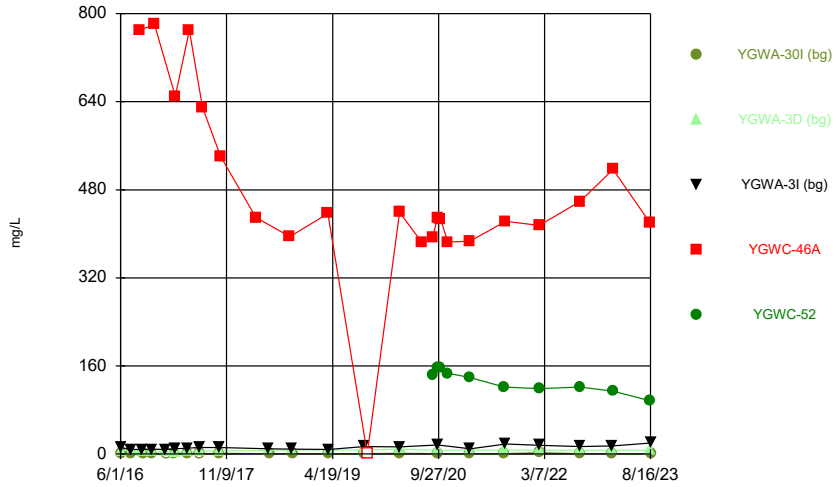
Time Series



Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

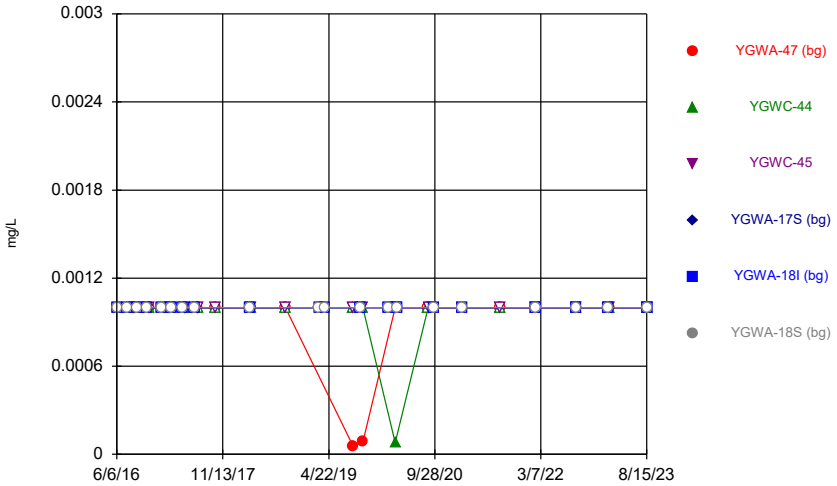
Time Series



Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

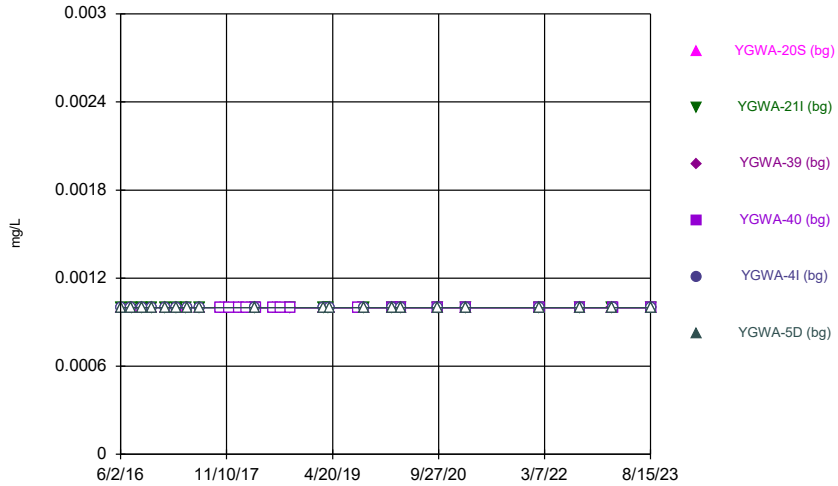
Time Series



Constituent: Thallium Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

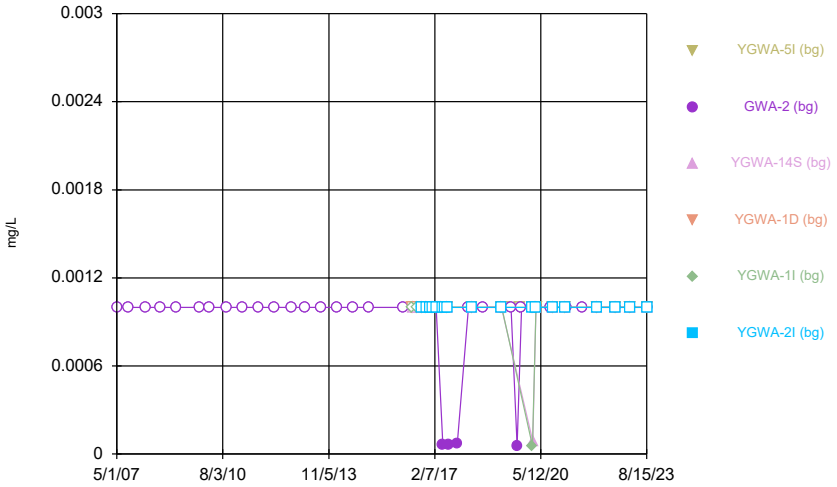
Time Series



Constituent: Thallium Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

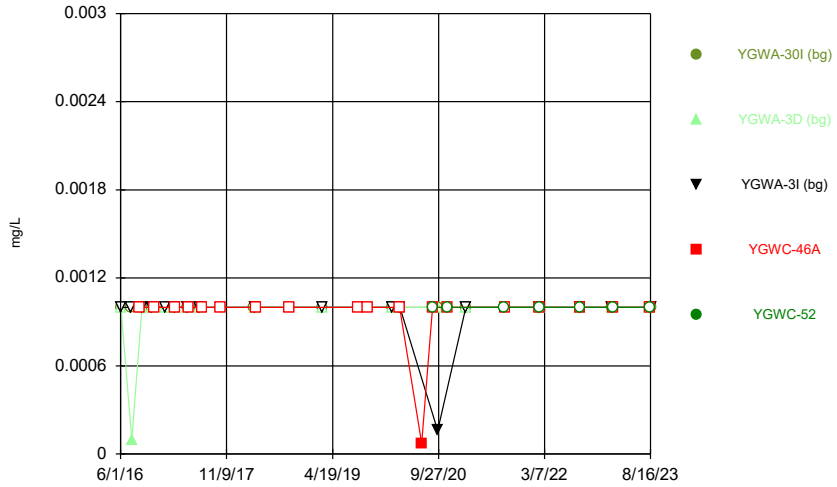
Time Series



Constituent: Thallium Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

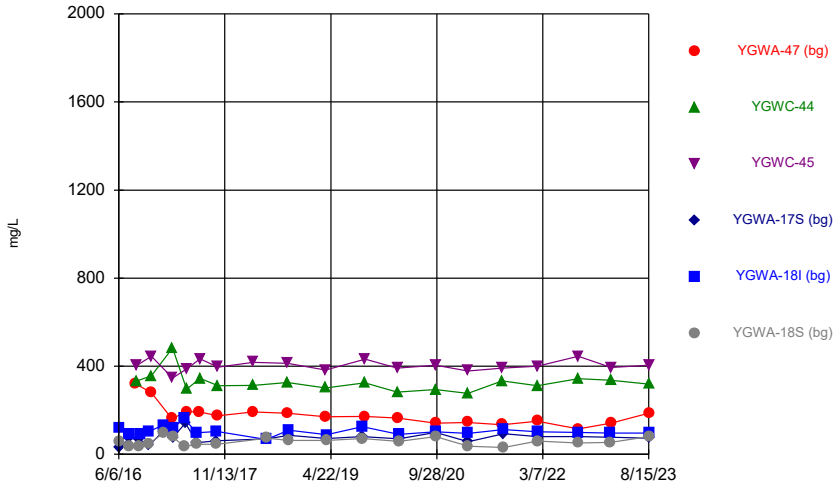
Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

Time Series



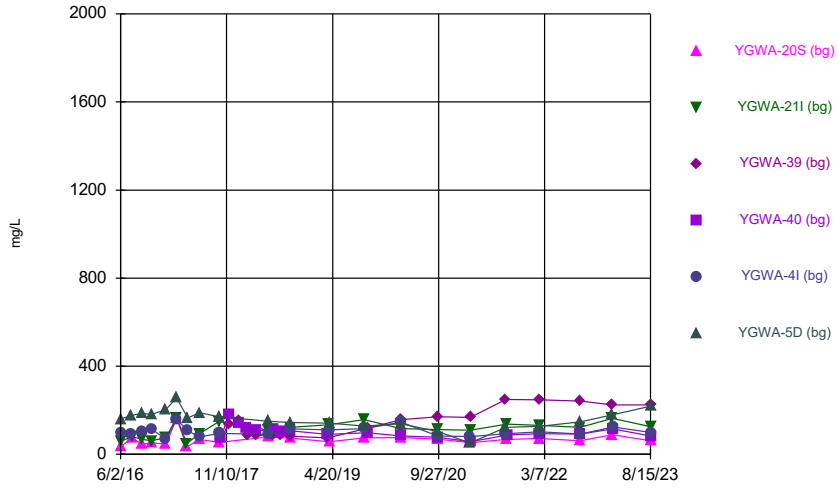
Constituent: Thallium Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



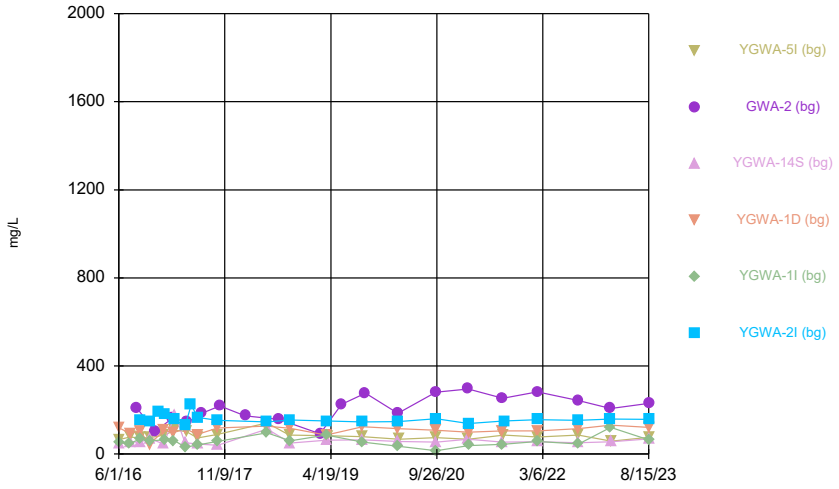
Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

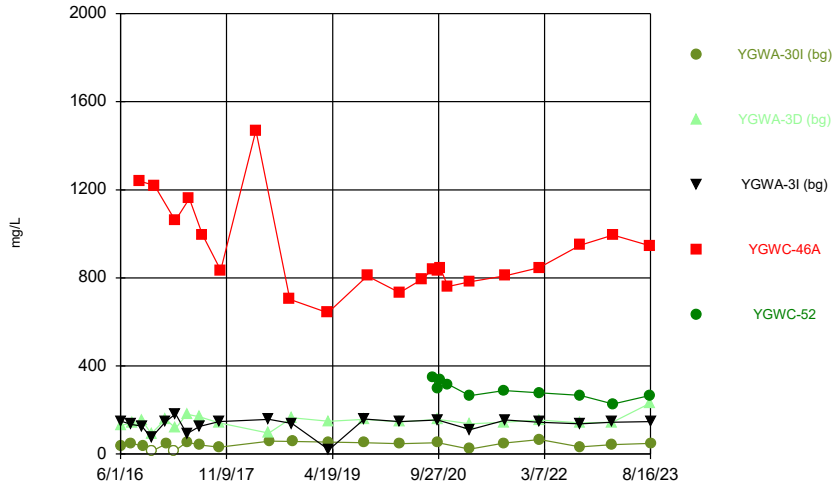
Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:02 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Hollow symbols indicate censored values.

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:03 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.003	<0.003
6/7/2016				<0.003		
7/27/2016				<0.003	0.0005 (J)	<0.003
8/30/2016	0.0028 (J)					
8/31/2016		<0.003	<0.003			
9/16/2016				<0.003		<0.003
9/19/2016					<0.003	
11/3/2016				<0.003	<0.003	<0.003
11/14/2016	<0.003		<0.003			
11/15/2016		<0.003				
1/11/2017				<0.003	<0.003	<0.003
2/24/2017	<0.003					
2/27/2017			<0.003			
2/28/2017		<0.003				
3/1/2017					<0.003	<0.003
3/2/2017				<0.003		
4/26/2017					<0.003	<0.003
5/2/2017				<0.003		
5/8/2017	0.0004 (J)	<0.003				
5/9/2017			<0.003			
6/28/2017					<0.003	<0.003
6/29/2017				<0.003		
7/11/2017	0.0006 (J)					
7/13/2017		<0.003	<0.003			
10/10/2017	<0.003	<0.003	<0.003			
3/28/2018				<0.003	<0.003	<0.003
4/2/2018	<0.003					
4/3/2018			<0.003			
4/4/2018		<0.003				
9/19/2018	<0.003	<0.003	<0.003			
3/5/2019				<0.003		<0.003
3/6/2019					<0.003	
4/2/2019				<0.003		
4/3/2019					<0.003	<0.003
8/20/2019	<0.003	<0.003	<0.003			
9/25/2019				<0.003		
9/26/2019					0.00056 (J)	<0.003
2/11/2020				<0.003	<0.003	<0.003
3/24/2020				<0.003	<0.003	<0.003
8/27/2020	0.00048 (J)	<0.003				
8/28/2020			0.0017 (J)			
9/22/2020	<0.003	<0.003				
9/23/2020			<0.003	<0.003	<0.003	<0.003
2/9/2021					<0.003	<0.003
3/1/2021	0.00048 (J)	<0.003	<0.003			
3/3/2021				<0.003	<0.003	0.00067 (J)
8/19/2021	<0.003	<0.003	<0.003			
8/26/2021						<0.003
8/27/2021				<0.003	<0.003	
2/8/2022	<0.003					
2/9/2022		<0.003	<0.003	<0.003	<0.003	<0.003
8/30/2022				<0.003	<0.003	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/9/2023 6:04 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)
8/31/2022	<0.003	<0.003	<0.003			
2/7/2023				0.0013 (J)	<0.003	<0.003
2/8/2023	<0.003	<0.003				
2/9/2023			<0.003			
8/15/2023	<0.003	0.0023 (J)	<0.003	<0.003	<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/9/2023 6:04 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		
2/8/2022			<0.003	<0.003		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
2/9/2022	<0.003	<0.003				
2/10/2022						<0.003
2/11/2022					<0.003	
8/30/2022		0.0046				<0.003
8/31/2022	<0.003		<0.003	<0.003	<0.003	
2/7/2023	<0.003	<0.003	<0.003			<0.003
2/8/2023				<0.003		
2/9/2023					<0.003	
8/15/2023	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/9/2023 6:04 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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.003				
3/27/2018			<0.003		<0.003	
3/28/2018						<0.003
3/29/2018	<0.003			<0.003		
8/6/2018		<0.003				
2/25/2019		<0.003				
2/26/2019			<0.003			
2/27/2019				<0.003	<0.003	<0.003
3/4/2019	<0.003					
4/3/2019	<0.003					
6/12/2019		<0.003				
8/19/2019		<0.003				
9/24/2019	<0.003					
10/8/2019		<0.003				
2/10/2020				0.00088 (J)	<0.003	
2/11/2020						0.00036 (J)
2/12/2020	<0.003		<0.003			
3/17/2020		<0.003				
3/18/2020			<0.003		0.0004 (J)	
3/19/2020				<0.003		0.0003 (J)
3/24/2020	<0.003					
8/26/2020		0.00042 (J)				
9/22/2020	<0.003	0.00044 (J)				
9/23/2020				<0.003	<0.003	<0.003
9/25/2020			<0.003			
2/8/2021	<0.003					
2/10/2021			<0.003			0.0013 (J)
2/12/2021				<0.003	<0.003	
3/2/2021	<0.003	<0.003	<0.003			
3/3/2021				<0.003	<0.003	<0.003
8/19/2021			<0.003	<0.003	<0.003	
8/20/2021		<0.003				
8/26/2021	<0.003					
8/27/2021						<0.003
2/8/2022		<0.003				
2/9/2022				<0.003	<0.003	<0.003
2/10/2022	<0.003		<0.003			
8/30/2022	<0.003	<0.003		<0.003		<0.003
8/31/2022			<0.003		<0.003	
2/7/2023		<0.003		<0.003	<0.003	<0.003
2/8/2023			<0.003			
2/9/2023	<0.003					
8/15/2023	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.003		
6/2/2016	<0.003	<0.003			
7/25/2016	<0.003		<0.003		
7/26/2016		0.002 (J)			
9/1/2016				<0.003	
9/14/2016			<0.003		
9/15/2016		0.0027 (J)			
9/19/2016	<0.003				
11/1/2016	<0.003	<0.003	<0.003		
11/16/2016				<0.003	
1/11/2017		<0.003	<0.003		
1/16/2017	<0.003				
2/21/2017	<0.003				
2/27/2017				<0.003	
3/1/2017			<0.003		
3/2/2017		0.0008 (J)			
4/26/2017	<0.003	<0.003	<0.003		
5/8/2017				<0.003	
6/28/2017		<0.003	<0.003		
6/30/2017	<0.003				
7/13/2017				<0.003	
10/11/2017				<0.003	
3/27/2018	<0.003				
3/28/2018		<0.003	<0.003		
4/4/2018				<0.003	
9/19/2018				<0.003	
2/26/2019	<0.003				
2/27/2019		<0.003	<0.003		
8/21/2019				<0.003	
2/11/2020			<0.003		
2/12/2020	<0.003	<0.003			
3/19/2020	<0.003	0.00064 (J)	<0.003		
7/6/2020				<0.003	
8/27/2020					<0.003
8/28/2020				0.00029 (J)	
9/22/2020					<0.003
9/23/2020		<0.003	<0.003	<0.003	
9/24/2020	<0.003				
10/7/2020				<0.003	<0.003
11/12/2020				<0.003	<0.003
2/10/2021		<0.003	<0.003		
2/11/2021	<0.003				
3/1/2021	<0.003				<0.003
3/2/2021				<0.003	
3/3/2021		<0.003	<0.003		
8/19/2021	<0.003	<0.003			
8/20/2021					<0.003
8/27/2021			<0.003	<0.003	
2/9/2022		0.0018 (J)	<0.003	<0.003	<0.003
2/11/2022	<0.003				
8/31/2022	<0.003	<0.003	<0.003	<0.003	<0.003
2/8/2023	<0.003	<0.003	<0.003		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
2/10/2023				<0.003	<0.003
8/15/2023		<0.003		<0.003	<0.003
8/16/2023	<0.003		<0.003		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/9/2023 6:04 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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	<0.005	<0.005	<0.005			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	
2/8/2022	0.0027 (J)					
2/9/2022		<0.005	<0.005	0.0024 (J)	0.0022 (J)	0.0024 (J)
8/30/2022				<0.005	<0.005	<0.005
8/31/2022	<0.005	<0.005	<0.005			
2/7/2023				<0.005	<0.005	<0.005
2/8/2023	<0.005	<0.005				
2/9/2023			<0.005			
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/9/2023 6:04 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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.00078 (J)	<0.005	<0.005		
8/26/2021			<0.005		<0.005	0.0016 (J)
8/27/2021	<0.005					
9/1/2021		<0.005				
9/3/2021				<0.005		
2/8/2022			0.0034 (J)	0.003 (J)		
2/9/2022	0.0021 (J)	0.0036 (J)				
2/10/2022						0.004 (J)
2/11/2022					0.0014 (J)	
8/30/2022		0.0022 (J)				0.0031 (J)
8/31/2022	<0.005		0.0029 (J)	<0.005	<0.005	
2/7/2023	<0.005	0.0028 (J)	0.0029 (J)			0.003 (J)
2/8/2023				<0.005		
2/9/2023					<0.005	
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/9/2023 6:04 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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						0.0013 (J)
3/29/2018	<0.005			0.0017 (J)		
6/5/2018				0.0013 (J)		
6/6/2018					<0.005	
6/7/2018	<0.005					0.00082 (J)
6/8/2018			<0.005			
8/6/2018		<0.005				
9/26/2018	<0.005					
10/1/2018			<0.005	0.0016 (J)	<0.005	0.0011 (J)
2/25/2019		<0.005				
2/26/2019			<0.005			
2/27/2019				0.0015 (J)	<0.005	0.001 (J)
3/4/2019	<0.005					
3/28/2019				0.00072 (J)	<0.005	
3/29/2019			<0.005			0.00063 (J)
4/3/2019	<0.005					
6/12/2019		0.00038 (J)				
8/19/2019		0.00095 (J)				
9/24/2019	<0.005			0.0014 (J)	<0.005	<0.005
9/25/2019			<0.005			
10/8/2019		<0.005				
2/10/2020				0.0026 (J)	0.0005 (J)	
2/11/2020						0.0044 (J)
2/12/2020	0.002 (J)		<0.005			
3/17/2020		<0.005				
3/18/2020			<0.005		<0.005	
3/19/2020				0.00095 (J)		0.00066 (J)
3/24/2020	<0.005					
8/26/2020		<0.005				
9/22/2020	<0.005	<0.005				
9/23/2020				0.0011 (J)	<0.005	0.001 (J)
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				<0.005	<0.005	
3/2/2021	<0.005	<0.005	<0.005			
3/3/2021				<0.005	<0.005	0.00098 (J)
8/19/2021			<0.005	<0.005	<0.005	
8/20/2021		<0.005				
8/26/2021	<0.005					
8/27/2021						<0.005
2/8/2022		0.0033 (J)				
2/9/2022				0.0031 (J)	0.0033 (J)	0.0037 (J)
2/10/2022	0.0016 (J)		0.0016 (J)			
8/30/2022	<0.005	0.0024 (J)		<0.005		0.0027 (J)
8/31/2022			<0.005		<0.005	
2/7/2023		<0.005		<0.005	<0.005	<0.005
2/8/2023			<0.005			
2/9/2023	<0.005					
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/9/2023 6:04 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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.0016 (J)	
3/3/2021		<0.005	<0.005		
8/19/2021	<0.005	<0.005			
8/20/2021					<0.005
8/27/2021			<0.005	0.0022 (J)	
2/9/2022		0.002 (J)	0.0018 (J)	<0.005	<0.005
2/11/2022	0.0014 (J)				
8/31/2022	<0.005	0.0028 (J)	<0.005	<0.005	<0.005
2/8/2023	<0.005	0.003 (J)	0.0024 (J)		
2/10/2023				<0.005	<0.005
8/15/2023		<0.005		<0.005	<0.005
8/16/2023	<0.005		<0.005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	0.029	0.089	0.055			
8/26/2021						0.015
8/27/2021				0.016	0.02	
2/8/2022	0.03					
2/9/2022		0.083	0.053	0.017	0.021	0.014
8/30/2022				0.017	0.017	0.012
8/31/2022	0.029	0.073	0.052			
2/7/2023				0.017	0.019	0.012
2/8/2023	0.031	0.081				
2/9/2023			0.049			
8/15/2023	0.032	0.084	0.049	0.016	0.02	0.012

Time Series

Constituent: Barium (mg/L) Analysis Run 10/9/2023 6:04 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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.011	0.028	0.032		
8/26/2021			0.038		0.012	0.0092
8/27/2021	0.013					
9/1/2021		0.0099				
9/3/2021				0.035		
2/8/2022			0.041	0.039		
2/9/2022	0.014	0.011				
2/10/2022						0.0084
2/11/2022					0.013	
8/30/2022		0.0085				0.0079
8/31/2022	0.011		0.035	0.035	0.013	
2/7/2023	0.014	0.01	0.03			0.0075
2/8/2023				0.037		
2/9/2023					0.014	
8/15/2023	0.012	0.0075	0.031	0.034	0.011	0.0074

Time Series

Constituent: Barium (mg/L) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		0.0533				
3/27/2018			<0.01		<0.01	
3/28/2018						<0.01
3/29/2018	0.021			<0.01		
6/5/2018				0.0069 (J)		
6/6/2018					0.0082 (J)	
6/7/2018	0.019					0.0037 (J)
6/8/2018			0.007 (J)			
8/6/2018		0.044				
9/26/2018	0.019					
10/1/2018			0.007 (J)	0.0062 (J)	0.0084 (J)	0.0038 (J)
2/25/2019		0.045				
2/26/2019			0.0067 (J)			
2/27/2019				0.0074 (J)	0.008 (J)	0.0035 (J)
3/4/2019	0.019					
3/28/2019				0.0082 (J)	0.0082 (J)	
3/29/2019			0.0066 (J)			0.0039 (J)
4/3/2019	0.023					
6/12/2019		0.063				
8/19/2019		0.065				
9/24/2019	0.019			0.0072 (J)	0.0086 (J)	0.0038 (J)
9/25/2019			0.0071 (J)			
10/8/2019		0.058				
2/10/2020				0.0066 (J)	0.0091 (J)	
2/11/2020						0.0036 (J)
2/12/2020	0.021		0.007 (J)			
3/17/2020		0.047				
3/18/2020			0.0076 (J)		0.0084 (J)	
3/19/2020				0.0076 (J)		0.0036 (J)
3/24/2020	0.021					
8/26/2020		0.044				
9/22/2020	0.019	0.045				
9/23/2020				0.0068 (J)	0.0079 (J)	0.0039 (J)
9/25/2020			0.0073 (J)			
2/8/2021	0.02					
2/10/2021			0.0078 (J)			0.0032 (J)
2/12/2021				0.0057 (J)	0.009 (J)	
3/2/2021	0.019	0.039	0.0076			
3/3/2021				0.0068	0.0094	0.0041 (J)
8/19/2021			0.0077	0.0065	0.0079	
8/20/2021		0.036				
8/26/2021	0.019					
8/27/2021						0.003 (J)
2/8/2022		0.037				
2/9/2022				0.0067	0.0088	0.0029 (J)
2/10/2022	0.02		0.0088			
8/30/2022	0.017	0.031		0.0066		0.003 (J)
8/31/2022			0.0075		0.0074	
2/7/2023		0.034		0.14	0.21	0.0026 (J)
2/8/2023			0.0089			
2/9/2023	0.019					
8/15/2023	0.018	0.03	0.0079	0.0059	0.0078	0.0031 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 10/9/2023 6:04 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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.044	
3/3/2021		0.0064	0.0031 (J)		
8/19/2021	0.0071	0.0052			
8/20/2021					0.019
8/27/2021			0.0039 (J)	0.043	
2/9/2022		0.0051	0.0031 (J)	0.042	0.018
2/11/2022	0.0077				
8/31/2022	0.0068	0.0048 (J)	0.003 (J)	0.036	0.017
2/8/2023	0.0066	0.0048 (J)	0.0029 (J)		
2/10/2023				0.041	0.016
8/15/2023		0.0046 (J)		0.04	0.019
8/16/2023	0.0066		0.0037 (J)		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/9/2023 6:04 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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
2/8/2022	5.6E-05 (J)					
2/9/2022		<0.0005	<0.0005	0.00011 (J)	<0.0005	8.9E-05 (J)
8/30/2022				0.0001 (J)	<0.0005	8.2E-05 (J)
8/31/2022	<0.0005	<0.0005	<0.0005			
2/7/2023				9.6E-05 (J)	<0.0005	7.1E-05 (J)
2/8/2023	<0.0005	<0.0005				
2/9/2023			<0.0005			
8/15/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	5.7E-05 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/9/2023 6:04 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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		<0.0005	<0.0005	0.00021 (J)		
8/26/2021			<0.0005		<0.0005	<0.0005
8/27/2021	5.9E-05 (J)					
9/1/2021		<0.0005				
9/3/2021				0.00024 (J)		
2/8/2022			<0.0005	0.00028 (J)		
2/9/2022	7.7E-05 (J)	<0.0005				
2/10/2022						<0.0005
2/11/2022					<0.0005	
8/30/2022		<0.0005				<0.0005
8/31/2022	<0.0005		<0.0005	0.00025 (J)	<0.0005	
2/7/2023	7.4E-05 (J)	<0.0005	<0.0005			<0.0005
2/8/2023				0.00026 (J)		
2/9/2023					<0.0005	
8/15/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/9/2023 6:04 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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.0005				
3/27/2018			<0.0005		<0.0005	
3/28/2018						<0.0005
3/29/2018	<0.0005			<0.0005		
6/7/2018	<0.0005					
8/6/2018		<0.0005				
9/26/2018	<0.0005					
2/25/2019		<0.0005				
2/26/2019			0.00016 (J)			
2/27/2019				<0.0005	<0.0005	<0.0005
3/4/2019	<0.0005					
3/28/2019				<0.0005	<0.0005	
3/29/2019			0.00017 (J)			<0.0005
4/3/2019	<0.0005					
6/12/2019		<0.0005				
8/19/2019		<0.0005				
9/24/2019	<0.0005			<0.0005	<0.0005	<0.0005
9/25/2019			0.00018 (J)			
10/8/2019		<0.0005				
2/10/2020				<0.0005	<0.0005	
2/11/2020						<0.0005
2/12/2020	<0.0005		0.00019 (J)			
3/17/2020		<0.0005				
3/18/2020			0.00021 (J)		<0.0005	
3/19/2020				<0.0005		<0.0005
3/24/2020	<0.0005					
8/26/2020		<0.0005				
9/22/2020	<0.0005	<0.0005				
9/23/2020				<0.0005	<0.0005	<0.0005
9/25/2020			0.00018 (J)			
2/8/2021	<0.0005					
2/10/2021			0.00019 (J)			<0.0005
2/12/2021				<0.0005	<0.0005	
3/2/2021	<0.0005	<0.0005	0.00018 (J)			
3/3/2021				<0.0005	<0.0005	<0.0005
8/19/2021			0.00022 (J)	<0.0005	<0.0005	
8/20/2021		<0.0005				
8/26/2021	<0.0005					
8/27/2021						<0.0005
2/8/2022		<0.0005				
2/9/2022				<0.0005	<0.0005	<0.0005
2/10/2022	<0.0005		0.00025 (J)			
8/30/2022	<0.0005	<0.0005		<0.0005		<0.0005
8/31/2022			0.0002 (J)		<0.0005	
2/7/2023		<0.0005		0.0011	0.00054	<0.0005
2/8/2023			0.00022 (J)			
2/9/2023	<0.0005					
8/15/2023	<0.0005	<0.0005	0.00018 (J)	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.0005		
6/2/2016	<0.0005	<0.0005			
7/25/2016	<0.0005		<0.0005		
7/26/2016		<0.0005			
9/1/2016				<0.0005	
9/14/2016			<0.0005		
9/15/2016		<0.0005			
9/19/2016	<0.0005				
11/1/2016	<0.0005	<0.0005	<0.0005		
11/16/2016				<0.0005	
1/11/2017		<0.0005	<0.0005		
1/16/2017	<0.0005				
2/21/2017	<0.0005				
2/27/2017				<0.0005	
3/1/2017			<0.0005		
3/2/2017		<0.0005			
4/26/2017	<0.0005	<0.0005	<0.0005		
5/8/2017				<0.0005	
6/28/2017		<0.0005	<0.0005		
6/30/2017	<0.0005				
7/13/2017				<0.0005	
10/11/2017				<0.0005	
3/27/2018	<0.0005				
3/28/2018		<0.0005	<0.0005		
4/4/2018				<0.0005	
9/19/2018				<0.0005	
2/26/2019	7.2E-05 (J)				
2/27/2019		<0.0005	<0.0005		
4/1/2019	<0.0005	<0.0005	<0.0005		
8/21/2019				<0.0005	
9/25/2019	<0.0005	<0.0005	<0.0005		
2/11/2020			<0.0005		
2/12/2020	<0.0005	<0.0005			
3/19/2020	<0.0005	<0.0005	<0.0005		
7/6/2020				<0.0005	
8/27/2020					<0.0005
8/28/2020				<0.0005	
9/22/2020					<0.0005
9/23/2020		<0.0005	5.9E-05 (J)	<0.0005	
9/24/2020	<0.0005				
10/7/2020				<0.0005	<0.0005
11/12/2020				<0.0005	<0.0005
2/10/2021		<0.0005	<0.0005		
2/11/2021	4.7E-05 (J)				
3/1/2021	<0.0005				<0.0005
3/2/2021				<0.0005	
3/3/2021		<0.0005	<0.0005		
8/19/2021	<0.0005	<0.0005			
8/20/2021					<0.0005
8/27/2021			<0.0005	<0.0005	
2/9/2022		<0.0005	<0.0005	<0.0005	<0.0005
2/11/2022	<0.0005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
8/31/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/8/2023	<0.0005	<0.0005	<0.0005		
2/10/2023				<0.0005	<0.0005
8/15/2023		<0.0005		<0.0005	<0.0005
8/16/2023	<0.0005		<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.04	<0.04
6/7/2016				<0.04		
7/27/2016				0.008 (J)	<0.04	0.0059 (J)
8/30/2016	0.0166 (J)					
8/31/2016		0.541	0.308			
9/16/2016				0.0086 (J)		0.0079 (J)
9/19/2016					<0.04	
11/3/2016				0.0077 (J)	<0.04	0.0082 (J)
11/14/2016	0.0166 (J)		0.368			
11/15/2016		0.706				
1/11/2017				0.0092 (J)	<0.04	0.0096 (J)
2/24/2017	0.0145 (J)					
2/27/2017			0.321			
2/28/2017		0.623				
3/1/2017					<0.04	<0.04
3/2/2017				0.0095 (J)		
4/26/2017					<0.04	0.0091 (J)
5/2/2017				<0.04		
5/8/2017	0.0141 (J)	0.69				
5/9/2017			0.338			
6/28/2017					<0.04	0.0079 (J)
6/29/2017				0.0074 (J)		
7/11/2017	0.0131 (J)					
7/13/2017		0.649	0.34			
10/4/2017				0.0077 (J)		0.009 (J)
10/5/2017					<0.04	
10/10/2017	0.0124 (J)	0.603	0.319			
4/2/2018	0.013 (J)					
4/3/2018			0.35			
4/4/2018		0.66				
6/7/2018					<0.04	
6/11/2018				0.01 (J)		0.0093 (J)
9/19/2018	0.012 (J)	0.66	0.35			
9/25/2018				0.0096 (J)	0.0046 (J)	0.007 (J)
3/27/2019	0.013 (J)	0.57	0.33			
4/2/2019				0.0066 (J)		
4/3/2019					<0.04	0.0053 (J)
9/25/2019				0.0081 (J)		
9/26/2019					0.0062 (J)	0.0072 (J)
10/8/2019	0.012 (J)	0.58				
10/9/2019			0.35			
3/17/2020	0.023 (J)	0.61	0.37			
3/24/2020				0.0092 (J)	0.0054 (J)	0.01 (J)
9/22/2020	0.0076 (J)	0.59				
9/23/2020			0.32	0.0066 (J)	0.021 (J)	0.006 (J)
3/1/2021	0.013 (J)	0.54	0.32			
3/3/2021				0.01 (J)	<0.04	0.0094 (J)
8/19/2021	0.011 (J)	0.56	0.31			
8/26/2021						<0.04
8/27/2021				0.011 (J)	<0.04	
2/8/2022	0.015 (J)					
2/9/2022		0.58	0.34	0.0098 (J)	<0.04	<0.04

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:04 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)
8/30/2022				0.013 (J)	<0.04	0.014 (J)
8/31/2022	0.0091 (J)	0.54	0.33			
2/7/2023				0.014 (J)	<0.04	<0.04
2/8/2023	0.011 (J)	0.59				
2/9/2023			0.35			
8/15/2023	<0.04	0.6	0.36	<0.04	<0.04	<0.04

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:04 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					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		<0.04				
9/3/2021				0.077		
2/8/2022			0.13	0.074		
2/9/2022	<0.04	<0.04				
2/10/2022						0.011 (J)
2/11/2022					<0.04	
8/30/2022		0.012 (J)				0.0098 (J)
8/31/2022	<0.04		0.14	0.062	<0.04	
2/7/2023	<0.04	<0.04	0.13			<0.04
2/8/2023				0.057		
2/9/2023					<0.04	
8/15/2023	<0.04	0.046 (J)	0.15 (J)	0.052 (J)	<0.04	<0.04

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:04 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)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			0.02 (J)		0.0087 (J)	
3/19/2020				0.0085 (J)		0.0073 (J)
3/24/2020	0.0068 (J)					
9/22/2020	0.0053 (J)	0.0079 (J)				
9/23/2020				<0.04	<0.04	<0.04
9/25/2020			0.02 (J)			
3/2/2021	0.011 (J)	<0.04	0.017 (J)			
3/3/2021				<0.04	<0.04	<0.04
8/19/2021			0.018 (J)	<0.04	<0.04	
8/20/2021		<0.04				
8/26/2021	<0.04					
8/27/2021						<0.04
2/8/2022		<0.04				
2/9/2022				<0.04	<0.04	<0.04
2/10/2022	<0.04		0.02 (J)			
8/30/2022	<0.04	<0.04		<0.04		<0.04
8/31/2022			0.015 (J)		<0.04	
2/7/2023		<0.04		<0.04	<0.04	<0.04
2/8/2023			0.015 (J)			
2/9/2023	<0.04					
8/15/2023	<0.04	<0.04	0.017 (J)	<0.04	0.0094 (J)	<0.04

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.04		
6/2/2016	<0.04	<0.04			
7/25/2016	<0.04		<0.04		
7/26/2016		0.0097 (J)			
9/1/2016				2.12	
9/14/2016			<0.04		
9/15/2016		0.0102 (J)			
9/19/2016	<0.04				
11/1/2016	<0.04	<0.04	<0.04		
11/16/2016				2.03	
1/11/2017		<0.04	<0.04		
1/16/2017	<0.04				
2/21/2017	<0.04				
2/27/2017				1.29	
3/1/2017			<0.04		
3/2/2017		0.0084 (J)			
4/26/2017	<0.04	<0.04	<0.04		
5/8/2017				1.71	
6/28/2017		<0.04	<0.04		
6/30/2017	<0.04				
7/13/2017				1.62	
10/4/2017	<0.04	<0.04	<0.04		
10/11/2017				1.17	
4/4/2018				1.2	
6/7/2018		0.004 (J)			
6/8/2018			<0.04		
6/11/2018	0.014 (J)				
9/19/2018				1.2	
10/1/2018		<0.04	<0.04		
10/2/2018	<0.04				
3/27/2019				0.89	
4/1/2019	<0.04	<0.04	<0.04		
9/25/2019	<0.04	0.0054 (J)	<0.04		
10/9/2019				1.1	
3/17/2020				1.3	
3/19/2020	0.0052 (J)	0.0073 (J)	0.0053 (J)		
7/6/2020				2	
8/27/2020					0.014 (J)
8/28/2020				1.8	
9/22/2020					<0.04
9/23/2020		0.012 (J)	0.0073 (J)	2	
9/24/2020	0.0075 (J)				
10/7/2020				1.8	0.018 (J)
11/12/2020				1.8	0.012 (J)
3/1/2021	<0.04				0.015 (J)
3/2/2021				1.9	
3/3/2021		<0.04	<0.04		
8/19/2021	<0.04	<0.04			
8/20/2021					<0.04
8/27/2021			<0.04	1.9	
2/9/2022		0.01 (J)	<0.04	2.1	0.0089 (J)
2/11/2022	<0.04				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
8/31/2022	<0.04	<0.04	<0.04	2.1	<0.04
2/8/2023	<0.04	<0.04	<0.04		
2/10/2023				2	<0.04
8/15/2023		<0.04		2.1	0.014 (J)
8/16/2023	<0.04		<0.04		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/9/2023 6:04 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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/27/2021				<0.0005	<0.0005	
2/8/2022	<0.0005					
2/9/2022		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/30/2022				<0.0005	<0.0005	<0.0005
8/31/2022	<0.0005	<0.0005	<0.0005			
2/7/2023				<0.0005	<0.0005	<0.0005
2/8/2023	0.00032 (J)	<0.0005				
2/9/2023			<0.0005			
8/15/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/9/2023 6:04 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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		<0.0005	0.0003 (J)	<0.0005		
8/26/2021			0.00049 (J)		<0.0005	<0.0005
8/27/2021	<0.0005					
9/1/2021		<0.0005				
9/3/2021				<0.0005		
2/8/2022			0.00063	<0.0005		
2/9/2022	<0.0005	<0.0005				
2/10/2022						<0.0005
2/11/2022					<0.0005	
8/30/2022		<0.0005				<0.0005
8/31/2022	<0.0005		0.00044 (J)	<0.0005	<0.0005	
2/7/2023	<0.0005	0.00012 (J)	0.00014 (J)			<0.0005
2/8/2023				<0.0005		
2/9/2023					<0.0005	
8/15/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/9/2023 6:04 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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.0005				
3/27/2018			<0.0005		<0.0005	
3/28/2018						<0.0005
3/29/2018	<0.0005			<0.0005		
6/7/2018	<0.0005					
8/6/2018		<0.0005				
9/26/2018	<0.0005					
2/25/2019		<0.0005				
2/26/2019			<0.0005			
2/27/2019				<0.0005	<0.0005	<0.0005
3/4/2019	<0.0005					
3/28/2019				<0.0005	<0.0005	
3/29/2019			<0.0005			<0.0005
4/3/2019	<0.0005					
6/12/2019		<0.0005				
8/19/2019		<0.0005				
9/24/2019	<0.0005			<0.0005	<0.0005	<0.0005
9/25/2019			<0.0005			
10/8/2019		<0.0005				
2/10/2020				<0.0005	<0.0005	
2/11/2020						<0.0005
2/12/2020	<0.0005		<0.0005			
3/17/2020		<0.0005				
3/18/2020			<0.0005		<0.0005	
3/19/2020				<0.0005		<0.0005
3/24/2020	<0.0005					
8/26/2020		<0.0005				
9/22/2020	<0.0005	<0.0005				
9/23/2020				<0.0005	<0.0005	<0.0005
9/25/2020			<0.0005			
2/8/2021	<0.0005					
2/10/2021			<0.0005			<0.0005
2/12/2021				<0.0005	<0.0005	
3/2/2021	<0.0005	<0.0005	<0.0005			
3/3/2021				<0.0005	<0.0005	<0.0005
8/19/2021			<0.0005	<0.0005	<0.0005	
8/20/2021		<0.0005				
8/26/2021	<0.0005					
8/27/2021						<0.0005
2/8/2022		<0.0005				
2/9/2022				<0.0005	<0.0005	<0.0005
2/10/2022	<0.0005		<0.0005			
8/30/2022	<0.0005	<0.0005		<0.0005		<0.0005
8/31/2022			<0.0005		<0.0005	
2/7/2023		0.00012 (J)		<0.0005	<0.0005	<0.0005
2/8/2023			<0.0005			
2/9/2023	<0.0005					
8/15/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.0005		
6/2/2016	<0.0005	<0.0005			
7/25/2016	<0.0005		<0.0005		
7/26/2016		<0.0005			
9/1/2016				<0.0005	
9/14/2016			<0.0005		
9/15/2016		<0.0005			
9/19/2016	<0.0005				
11/1/2016	<0.0005	<0.0005	<0.0005		
11/16/2016				<0.0005	
1/11/2017		0.0001 (J)	8E-05 (J)		
1/16/2017	<0.0005				
2/21/2017	<0.0005				
2/27/2017				<0.0005	
3/1/2017			<0.0005		
3/2/2017		<0.0005			
4/26/2017	<0.0005	<0.0005	<0.0005		
5/8/2017				0.0001 (J)	
6/28/2017		<0.0005	<0.0005		
6/30/2017	<0.0005				
7/13/2017				<0.0005	
10/11/2017				<0.0005	
3/27/2018	<0.0005				
3/28/2018		<0.0005	<0.0005		
4/4/2018				<0.0005	
9/19/2018				<0.0005	
2/26/2019	<0.0005				
2/27/2019		<0.0005	<0.0005		
4/1/2019	<0.0005	<0.0005	<0.0005		
8/21/2019				0.00012 (J)	
9/25/2019	<0.0005	<0.0005	<0.0005		
10/9/2019				<0.0005	
2/11/2020			<0.0005		
2/12/2020	<0.0005	<0.0005			
3/17/2020				0.00012 (J)	
3/19/2020	<0.0005	<0.0005	<0.0005		
7/6/2020				<0.0005	
8/27/2020					<0.0005
8/28/2020				<0.0005	
9/23/2020		<0.0005	<0.0005		
9/24/2020	<0.0005				
11/12/2020				<0.0005	<0.0005
2/10/2021		<0.0005	<0.0005		
2/11/2021	<0.0005				
3/1/2021	<0.0005				
3/3/2021		<0.0005	<0.0005		
8/19/2021	<0.0005	<0.0005			
8/20/2021					<0.0005
8/27/2021			<0.0005	<0.0005	
2/9/2022		<0.0005	<0.0005	<0.0005	<0.0005
2/11/2022	<0.0005				
8/31/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
2/8/2023	<0.0005	<0.0005	0.00013 (J)		
2/10/2023				<0.0005	<0.0005
8/15/2023		<0.0005		<0.0005	<0.0005
8/16/2023	<0.0005		<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					6.2	1.4
6/7/2016				2.2		
7/27/2016				2	4.73	1.19
8/30/2016	20.9					
8/31/2016		27.3	46.7			
9/16/2016				1.97		1.5
9/19/2016					4.76	
11/3/2016				1.99	5.25	1.31
11/14/2016	18.6		50.6			
11/15/2016		27.8				
1/11/2017				2.28	4.74	1.25
2/24/2017	16.1					
2/27/2017			49.4			
2/28/2017		26.4				
3/1/2017					5.37	1.26
3/2/2017				2.15		
4/26/2017					4.28	1.05
5/2/2017				1.95		
5/8/2017	14.6	29.9				
5/9/2017			56			
6/28/2017					4.95	1.06
6/29/2017				2.02		
7/11/2017	14.3					
7/13/2017		30.2	54.8			
10/4/2017				2.03		1.1
10/5/2017					5.28	
10/10/2017	12.1	27.2	52.8			
4/2/2018	<25					
4/3/2018			50.6			
4/4/2018		30.1				
6/7/2018					4.8	
6/11/2018				2.1		1.4
9/19/2018	11.1 (J)	29.2	50.5			
9/25/2018				2.1	4.6	1
3/27/2019	10.8 (J)	27.9	48.8			
4/2/2019				2.5		
4/3/2019					5.3	1.2
9/25/2019				2.6		
9/26/2019					4.9	1.1
10/8/2019	9.7	28.1				
10/9/2019			47.9			
3/17/2020	14.8	31.9	54.8			
3/24/2020				2.7	5.3	1
9/22/2020	10.1	30.4				
9/23/2020			50	2.6	5.2	0.91 (J)
3/1/2021	10.3	31.9	50.7			
3/3/2021				2.5	5.2	0.96 (J)
8/19/2021	9.6	31.7	50.4			
8/26/2021						0.98 (J)
8/27/2021				2.7	5.1	
2/8/2022	9.4					
2/9/2022		30.8	49.3	2.8	5.1	0.87 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:04 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)
8/30/2022				3	5.7	0.77 (J)
8/31/2022	9.6	30.8	51.8			
2/7/2023				2.9	5.5	0.79 (J)
2/8/2023	9.2	30.9				
2/9/2023			46.2			
8/15/2023	9.6	30	46.3	2.9	5.1	0.8 (J)

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:04 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					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		9.5				
9/3/2021				5.6		
2/8/2022			15.2	6		
2/9/2022	2.3	9.8				
2/10/2022						24.8
2/11/2022					7.5	
8/30/2022		7.3				24.8
8/31/2022	2.4		16.3	6.2	8.9	
2/7/2023	2.4	7.5	16.1			26.6
2/8/2023				5.9		
2/9/2023					9.6	
8/15/2023	2.2	6.1	17.2	5.3	7.8	25

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:04 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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			1.1		2.1	
3/19/2020				15		27.4
3/24/2020	2.5					
9/22/2020	2.6	31				
9/23/2020				14.1	1.8	26.3
9/25/2020			1.3			
3/2/2021	2.6	34.2	1.2			
3/3/2021				14.1	1.8	25.6
8/19/2021			1.2	14.2	2	
8/20/2021		26.5				
8/26/2021	2.5					
8/27/2021						22.6
2/8/2022		25.6				
2/9/2022				14.9	2.1	23.4
2/10/2022	2.5		1.3			
8/30/2022	2.5	23.5		14.9		25.4
8/31/2022			1.3		1.9	
2/7/2023		22.3		15	2.2	25.6
2/8/2023			1.5			
2/9/2023	2.8					
8/15/2023	2.6	20.3	1.3	13.5	1.8	23.2

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			21		
6/2/2016	1.3	28			
7/25/2016	1.17		20.3		
7/26/2016		24.5			
9/1/2016				96.8	
9/14/2016			19.7		
9/15/2016		27			
9/19/2016	1.05				
11/1/2016	1.14	25.6	18.4		
11/16/2016				107	
1/11/2017		27.5	20.3		
1/16/2017	1.23				
2/21/2017	1.25				
2/27/2017				104	
3/1/2017			18.6		
3/2/2017		27.5			
4/26/2017	1.03	30.4	25.6		
5/8/2017				103	
6/28/2017		29.8	23.9		
6/30/2017	1.13				
7/13/2017				83.7	
10/4/2017	1.09	29.7	22.1		
10/11/2017				69	
4/4/2018				51.9	
6/7/2018		29.1			
6/8/2018			21.9 (J)		
6/11/2018	1.1				
9/19/2018				51.9	
10/1/2018		26.9	19.7		
10/2/2018	1.1				
3/27/2019				54.2	
4/1/2019	1.3	30.1	20.4 (J)		
9/25/2019	1.1	29.5	22.4		
10/9/2019				64.2	
3/17/2020				70.4	
3/19/2020	1.2	31.5	21.9		
7/6/2020				105	
8/27/2020					52.3
8/28/2020				102	
9/22/2020					53.5
9/23/2020		28.6	23.6	104	
9/24/2020	1.1				
10/7/2020				105	53.8
11/12/2020				110	53.6
3/1/2021	1.2				50.6
3/2/2021				110	
3/3/2021		29.8	20.6		
8/19/2021	1.2	28.1			
8/20/2021					47.9
8/27/2021			24.7	108	
2/9/2022		30.3	23.7	109	42.2
2/11/2022	1.5				

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
8/31/2022	1.3	28.7	23.5	110	41.8
2/8/2023	1.3	28.9	23.3		
2/10/2023				105	36.7
8/15/2023		27.4		111	34.6
8/16/2023	1.4		24.9		

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					6.8	6.4
6/7/2016				4.5		
7/27/2016				4.5	6.7	6.2
8/30/2016	5.2					
8/31/2016		13	5.8			
9/16/2016				4.5		6.1
9/19/2016					7	
11/3/2016				5.4	7.5	7.4
11/14/2016	6.4		5.8			
11/15/2016		14				
1/11/2017				4.7	6.5	6.1
2/24/2017	5.5					
2/27/2017			5			
2/28/2017		12				
3/1/2017					6.9	6
3/2/2017				4.8		
4/26/2017					7	6.5
5/2/2017				4.6		
5/8/2017	5.8	13				
5/9/2017			4.6			
6/28/2017					7	6.4
6/29/2017				4.5		
7/11/2017	5.8					
7/13/2017		13	4.7			
10/4/2017				4.7		6.8
10/5/2017					7	
10/10/2017	5.9	14	4.5			
4/2/2018	4.8					
4/3/2018			4.6			
4/4/2018		13.4				
6/7/2018					6.8	
6/11/2018				4.9		6.8
9/19/2018	4	14.2	4.7			
9/25/2018				5.6	7.9	7.8
3/27/2019	4.3	14	4.6			
4/2/2019				4.8		
4/3/2019					6.9	6.3
9/25/2019				5.7		
9/26/2019					7	7.1
10/8/2019	4.4	14.8				
10/9/2019			5.1			
3/17/2020	4.1	14	4.6			
3/24/2020				5	7	6.8
9/22/2020	4.2	14.4				
9/23/2020			4.9	6.6	7.2	7.2
3/1/2021	3.7	14	5			
3/3/2021				7.1	7	7.2
8/19/2021	3.5	13	4.1			
8/26/2021						7.3
8/27/2021				8.5	7.4	
2/8/2022	3.2					
2/9/2022		13.5	4.9	10.9	7.5	7

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 10/9/2023 6:04 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)
8/30/2022				12	7.9	7
8/31/2022	3.5	14.5	5.4			
2/7/2023				11.4	7.4	6.4
2/8/2023	3.5	14.9				
2/9/2023			5.9			
8/15/2023	3.5	13.4	5.6	11.6	7.3	6.7

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		1.8				
9/3/2021				5.5		
2/8/2022			7.4	6.2		
2/9/2022	2.8	1.7				
2/10/2022						3.2
2/11/2022					4.1	
8/30/2022		2.4				3.5
8/31/2022	2.9		6.7	6.3	4.4	
2/7/2023	2.9	2.4	5.6			3.3
2/8/2023				6.9		
2/9/2023					4.5	
8/15/2023	2.8	2.3	4.5	5.6	4.4	3.1

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			5.2		1.4	
3/19/2020				1.1		0.97 (J)
3/24/2020	4.3					
9/22/2020	4.2	4.2				
9/23/2020				0.99 (J)	1.2	0.88 (J)
9/25/2020			5.3			
3/2/2021	4.3	4.1	4.9			
3/3/2021				0.96 (J)	1.2	0.86 (J)
8/19/2021			5	1.1	1.3	
8/20/2021		5.2				
8/26/2021	4.3					
8/27/2021						0.99 (J)
2/8/2022		5.7				
2/9/2022				1	1.3	1 (J)
2/10/2022	4.4		4.7			
8/30/2022	4.4	6.3		1.3		1.2
8/31/2022			4.6		1.5	
2/7/2023		6.1		1.3	1.5	1.1
2/8/2023			4.9			
2/9/2023	5					
8/15/2023	4.1	5.6	4.1	1.1	1.4	0.93 (J)

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			1.3		
6/2/2016	1.9	1.4			
7/25/2016	1.7		1.3		
7/26/2016		1.6			
9/1/2016				37	
9/14/2016			1.3		
9/15/2016		1.5			
9/19/2016	1.6				
11/1/2016	1.8	1.7	1.4		
11/16/2016				37	
1/11/2017		1.2	1.1		
1/16/2017	1.7				
2/21/2017	1.7				
2/27/2017				33	
3/1/2017			1.1		
3/2/2017		1.2			
4/26/2017	1.7	1.2	1.1		
5/8/2017				33	
6/28/2017		1.3	1.2		
6/30/2017	1.8				
7/13/2017				32	
10/4/2017	1.8	1.5	1.2		
10/11/2017				29	
4/4/2018				26.6	
6/7/2018		1.2			
6/8/2018			1.2		
6/11/2018	2				
9/19/2018				26.5	
10/1/2018		1.5	1.2		
10/2/2018	1.8				
3/27/2019				20.9	
4/1/2019	1.7	1.2	1.1		
9/25/2019	1.6	1.1	1.1		
10/9/2019				25	
3/17/2020				24.8	
3/19/2020	1.8	1.2	1.1		
7/6/2020				25.8	
8/27/2020					3.9
8/28/2020				25.9	
9/22/2020					4.1
9/23/2020		1.1	1	28.1	
9/24/2020	1.5				
10/7/2020				28.2	4
11/12/2020				26.7	3.8
3/1/2021	1.6				3.7
3/2/2021				27.4	
3/3/2021		1.1	0.99 (J)		
8/19/2021	1.6	1.1			
8/20/2021					3.1
8/27/2021			1.1	29.3	
2/9/2022		1.1	1.1	28.2	3.2
2/11/2022	2.1				

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
8/31/2022	1.8	1.3	1.3	29.9	3.4
2/8/2023	1.6	1.2	1.1		
2/10/2023				33.5	3.3
8/15/2023		1.1		32.2	3
8/16/2023	1.5		1.1		

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					0.0012 (J)	<0.005
6/7/2016				<0.005		
7/27/2016				0.0008 (J)	0.0007 (J)	0.0006 (J)
8/30/2016	<0.005					
8/31/2016		<0.005	<0.005			
9/16/2016				<0.005		<0.005
9/19/2016					<0.005	
11/3/2016				<0.005	<0.005	<0.005
11/14/2016	0.0093 (J)		0.0061 (J)			
11/15/2016		<0.005				
1/11/2017				<0.005	<0.005	<0.005
2/24/2017	<0.005					
2/27/2017			<0.005			
2/28/2017		<0.005				
3/1/2017					0.0012 (J)	<0.005
3/2/2017				0.001 (J)		
4/26/2017					0.0005 (J)	0.0003 (J)
5/2/2017				0.0007 (J)		
5/8/2017	<0.005	<0.005				
5/9/2017			<0.005			
6/28/2017					0.0006 (J)	<0.005
6/29/2017				0.0006 (J)		
7/11/2017	<0.005					
7/13/2017		<0.005	0.0006 (J)			
10/10/2017	<0.005	<0.005	<0.005			
3/28/2018				<0.005	<0.005	<0.005
4/2/2018	<0.005					
4/3/2018			<0.005			
4/4/2018		<0.005				
9/19/2018	<0.005	<0.005	<0.005			
3/5/2019				<0.005		<0.005
3/6/2019					<0.005	
8/20/2019	<0.005	<0.005	<0.005			
2/11/2020				0.00087 (J)	0.001 (J)	0.00088 (J)
3/24/2020				0.00087 (J)	0.00095 (J)	0.0011 (J)
8/27/2020	<0.005	<0.005				
8/28/2020			<0.005			
9/22/2020	<0.005	<0.005				
9/23/2020			0.00058 (J)	0.00098 (J)	0.00092 (J)	0.0012 (J)
2/9/2021					0.00083 (J)	0.0013 (J)
3/1/2021	<0.005	<0.005	<0.005			
3/3/2021				0.00082 (J)	0.00087 (J)	0.001 (J)
8/19/2021	<0.005	<0.005	<0.005			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	
2/8/2022	<0.005					
2/9/2022		<0.005	<0.005	<0.005	<0.005	0.0014 (J)
8/30/2022				<0.005	<0.005	0.0015 (J)
8/31/2022	<0.005	<0.005	<0.005			
2/7/2023				<0.005	<0.005	0.0016 (J)
2/8/2023	<0.005	<0.005				
2/9/2023			<0.005			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/9/2023 6:04 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)
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005	0.0013 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.005	<0.005
6/7/2016	<0.005	<0.005				
7/26/2016					<0.005	<0.005
7/27/2016	0.0005 (J)					
7/28/2016		<0.005				
9/14/2016					<0.005	<0.005
9/19/2016	<0.005	<0.005				
11/2/2016	<0.005				<0.005	<0.005
11/3/2016		<0.005				
1/12/2017						<0.005
1/13/2017	<0.005	<0.005			<0.005	
3/6/2017	<0.005	<0.005			<0.005	
3/7/2017						<0.005
4/26/2017	0.0007 (J)	<0.005				
5/1/2017					<0.005	0.0004 (J)
6/27/2017						<0.005
6/29/2017	0.0005 (J)	<0.005			<0.005	
10/11/2017			<0.005			
10/12/2017				<0.005		
11/20/2017			<0.005	<0.005		
1/10/2018				<0.005		
1/11/2018			<0.005			
2/19/2018				<0.005		
2/20/2018			<0.005			
3/29/2018	<0.005	<0.005			<0.005	<0.005
4/3/2018			<0.005	<0.005		
6/28/2018			<0.005	<0.005		
8/7/2018			<0.005	<0.005		
9/24/2018			<0.005	<0.005		
3/4/2019					<0.005	<0.005
3/5/2019	<0.005	<0.005				
8/21/2019			<0.005	0.00053 (J)		
10/9/2019			<0.005	0.0012 (J)		
2/12/2020	0.00045 (J)	<0.005	<0.005	0.00065 (J)	<0.005	<0.005
3/24/2020	0.00077 (J)	<0.005		0.00055 (J)		<0.005
3/25/2020			<0.005		0.00058 (J)	
9/22/2020					<0.005	0.0011 (J)
9/24/2020	0.00076 (J)	<0.005	<0.005	<0.005		
2/8/2021						<0.005
2/9/2021	0.00056 (J)	<0.005			<0.005	
2/10/2021			<0.005	<0.005		
3/2/2021						<0.005
3/3/2021	<0.005				0.0013 (J)	
3/4/2021		<0.005	<0.005	<0.005		
8/26/2021			<0.005		<0.005	<0.005
8/27/2021	<0.005					
9/1/2021		<0.005				
9/3/2021				<0.005		
2/8/2022			<0.005	<0.005		
2/9/2022	<0.005	<0.005				
2/10/2022						<0.005
2/11/2022					<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/9/2023 6:04 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)
8/30/2022		<0.005				<0.005
8/31/2022	<0.005		<0.005	<0.005	<0.005	
2/7/2023	<0.005	<0.005	<0.005			<0.005
2/8/2023				<0.005		
2/9/2023					<0.005	
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/9/2023 6:04 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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						<0.005
3/29/2018	<0.005			<0.005		
8/6/2018		<0.005				
2/25/2019		<0.005				
2/26/2019			<0.005			
2/27/2019				<0.005	<0.005	<0.005
3/4/2019	<0.005					
3/28/2019				<0.005	0.0021 (J)	
3/29/2019			<0.005			<0.005
6/12/2019		<0.005				
8/19/2019		<0.005				
9/24/2019				0.00072 (J)	0.0028 (J)	<0.005
9/25/2019			<0.005			
10/8/2019		<0.005				
2/10/2020				0.00042 (J)	<0.005	
2/11/2020						<0.005
2/12/2020	0.00043 (J)		<0.005			
3/17/2020		<0.005				
3/18/2020			<0.005		0.00044 (J)	
3/19/2020				0.00084 (J)		0.00048 (J)
3/24/2020	0.0014 (J)					
8/26/2020		<0.005				
9/22/2020	<0.005	<0.005				
9/23/2020				0.00062 (J)	0.00058 (J)	<0.005
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				<0.005	<0.005	
3/2/2021	<0.005	<0.005	<0.005			
3/3/2021				<0.005	<0.005	<0.005
8/19/2021			<0.005	<0.005	<0.005	
8/20/2021		<0.005				
8/26/2021	<0.005					
8/27/2021						<0.005
2/8/2022		<0.005				
2/9/2022				<0.005	<0.005	<0.005
2/10/2022	<0.005		<0.005			
8/30/2022	<0.005	<0.005		0.0011 (J)		<0.005
8/31/2022			<0.005		<0.005	
2/7/2023		<0.005		<0.005	0.0013 (J)	<0.005
2/8/2023			<0.005			
2/9/2023	0.0012 (J)					
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.005		
6/2/2016	<0.005	0.0013 (J)			
7/25/2016	<0.005		<0.005		
7/26/2016		<0.005			
9/1/2016				<0.005	
9/14/2016			<0.005		
9/15/2016		<0.005			
9/19/2016	<0.005				
11/1/2016	<0.005	<0.005	<0.005		
11/16/2016				<0.005	
1/11/2017		<0.005	<0.005		
1/16/2017	<0.005				
2/21/2017	<0.005				
2/27/2017				<0.005	
3/1/2017			0.0004 (J)		
3/2/2017		0.0006 (J)			
4/26/2017	0.0016 (J)	<0.005	<0.005		
5/8/2017				<0.005	
6/28/2017		<0.005	<0.005		
6/30/2017	<0.005				
7/13/2017				<0.005	
10/11/2017				<0.005	
3/27/2018	<0.005				
3/28/2018		<0.005	<0.005		
4/4/2018				<0.005	
9/19/2018				<0.005	
2/26/2019	<0.005				
2/27/2019		<0.005	<0.005		
4/1/2019	<0.005	<0.005	<0.005		
8/21/2019				<0.005	
9/25/2019	<0.005	0.0014 (J)	0.0019 (J)		
2/11/2020			<0.005		
2/12/2020	<0.005	<0.005			
3/19/2020	<0.005	<0.005	<0.005		
7/6/2020				<0.005	
8/27/2020					<0.005
8/28/2020				<0.005	
9/22/2020					0.00073 (J)
9/23/2020		<0.005	<0.005	<0.005	
9/24/2020	<0.005				
10/7/2020				<0.005	0.00086 (J)
11/12/2020				<0.005	<0.005
2/10/2021		<0.005	<0.005		
2/11/2021	<0.005				
3/1/2021	<0.005				0.00094 (J)
3/2/2021				<0.005	
3/3/2021		<0.005	<0.005		
8/19/2021	<0.005	<0.005			
8/20/2021					<0.005
8/27/2021			<0.005	<0.005	
2/9/2022		<0.005	<0.005	<0.005	0.0012 (J)
2/11/2022	<0.005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
8/31/2022	<0.005	<0.005	<0.005	<0.005	<0.005
2/8/2023	0.0021 (J)	<0.005	<0.005		
2/10/2023				<0.005	0.0021 (J)
8/15/2023		<0.005		<0.005	<0.005
8/16/2023	<0.005		<0.005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/9/2023 6:04 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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	0.00099 (J)	0.0014 (J)	0.00048 (J)			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	
2/8/2022	0.0013 (J)					
2/9/2022		0.0027 (J)	0.00051 (J)	<0.005	<0.005	<0.005
8/30/2022				<0.005	<0.005	<0.005
8/31/2022	0.00096 (J)	0.00099 (J)	0.00069 (J)			
2/7/2023				<0.005	<0.005	<0.005
2/8/2023	0.0011 (J)	0.0014 (J)				
2/9/2023			0.00077 (J)			
8/15/2023	0.00072 (J)	0.00084 (J)	0.00053 (J)	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/9/2023 6:04 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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.0065	0.00071 (J)	<0.005		
8/26/2021			0.0011 (J)		0.00042 (J)	<0.005
8/27/2021	<0.005					
9/1/2021		0.0068				
9/3/2021				<0.005		
2/8/2022			0.0012 (J)	<0.005		
2/9/2022	<0.005	0.0078				
2/10/2022						<0.005
2/11/2022					<0.005	
8/30/2022		0.0066				<0.005
8/31/2022	<0.005		0.00085 (J)	<0.005	<0.005	
2/7/2023	<0.005	0.014	0.00066 (J)			<0.005
2/8/2023				<0.005		
2/9/2023					<0.005	
8/15/2023	<0.005	0.011	0.00072 (J)	<0.005	<0.005	<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/9/2023 6:04 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)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						<0.005
3/29/2018	<0.005			<0.005		
6/5/2018				<0.005		
6/6/2018					<0.005	
6/7/2018	<0.005					<0.005
6/8/2018			<0.005			
8/6/2018		0.003 (J)				
9/26/2018	<0.005					
10/1/2018			<0.005	<0.005	0.00059 (J)	<0.005
2/25/2019		0.001 (J)				
2/26/2019			<0.005			
2/27/2019				<0.005	0.00064 (J)	<0.005
3/4/2019	<0.005					
3/28/2019				<0.005	0.00091 (J)	
3/29/2019			<0.005			<0.005
4/3/2019	<0.005					
6/12/2019		0.003 (J)				
8/19/2019		0.0035 (J)				
9/24/2019	<0.005			<0.005	0.0013 (J)	<0.005
9/25/2019			<0.005			
10/8/2019		0.0039 (J)				
2/10/2020				<0.005	0.0016 (J)	
2/11/2020						<0.005
2/12/2020	<0.005		<0.005			
3/17/2020		0.003 (J)				
3/18/2020			<0.005		0.00087 (J)	
3/19/2020				<0.005		<0.005
3/24/2020	<0.005					
8/26/2020		0.2 (O)				
9/22/2020	<0.005	0.16 (O)				
9/23/2020				<0.005	0.0013 (J)	<0.005
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				0.00086 (J)	0.0028 (J)	
3/2/2021	<0.005	0.21 (O)	<0.005			
3/3/2021				<0.005	0.003 (J)	<0.005
8/19/2021			<0.005	0.00055 (J)	0.0017 (J)	
8/20/2021		0.074 (O)				
8/26/2021	<0.005					
8/27/2021						<0.005
2/8/2022		0.072 (O)				
2/9/2022				0.00072 (J)	0.0023 (J)	<0.005
2/10/2022	<0.005		<0.005			
8/30/2022	<0.005	0.075 (O)		<0.005		<0.005
8/31/2022			<0.005		0.00085 (J)	
2/7/2023		0.034		0.00097 (J)	0.0048 (J)	<0.005
2/8/2023			<0.005			
2/9/2023	<0.005					
8/15/2023	<0.005	0.031	<0.005	<0.005	0.00072 (J)	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/9/2023 6:04 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)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.00096 (J)	
3/3/2021		<0.005	<0.005		
8/19/2021	0.0052	<0.005			
8/20/2021					0.0013 (J)
8/27/2021			<0.005	0.00056 (J)	
2/9/2022		<0.005	<0.005	0.0006 (J)	0.0015 (J)
2/11/2022	0.0038 (J)				
8/31/2022	0.004 (J)	<0.005	<0.005	0.0017 (J)	0.00096 (J)
2/8/2023	0.0031 (J)	<0.005	<0.005		
2/10/2023				0.0016 (J)	0.00055 (J)
8/15/2023		<0.005		0.0012 (J)	0.0017 (J)
8/16/2023	0.0028 (J)		<0.005		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
3/3/2021				0.59 (U)	0.565 (U)	0.352 (U)
8/19/2021	1.07 (U)	0.261 (U)	1.38			
8/26/2021						0.686 (U)
8/27/2021				0.9 (U)	0.761 (U)	
2/8/2022	0.4 (U)					
2/9/2022		0.332 (U)	1.11	0.133 (U)	0.571 (U)	0.0618 (U)
8/30/2022				1.08	1.01	0.611 (U)
8/31/2022	0.714 (U)	0.145 (U)	0.598 (U)			
2/7/2023				0.367 (U)	0.485 (U)	0.656 (U)
2/8/2023	0.375 (U)	0.193 (U)				
2/9/2023			1.29			
8/15/2023	0.947 (U)	1.15	1.34	0.0388 (U)	0.655 (U)	0.347 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021			0.636 (U)	0.818 (U)		
8/26/2021			0.674 (U)		1.17 (U)	4.68
8/27/2021	0.779 (U)					
9/1/2021		1.86				
9/3/2021				0.971 (U)		
2/8/2022			0.834	0.534 (U)		
2/9/2022	0.504 (U)	1.94				
2/10/2022						3.33
2/11/2022					0.996	
8/30/2022		1.27				5.34
8/31/2022	0.184 (U)		0.937	0.513 (U)	0.962	
2/7/2023	0.794 (U)	1.53	1.41			3.99
2/8/2023				1.56		
2/9/2023					1.12	
8/15/2023	0.165 (U)	1.68	0.608 (U)	0.325 (U)	1.14	3.44

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
9/25/2019			0.707 (U)			
10/8/2019		1.32 (U)				
2/10/2020				1.41	1.25 (U)	
2/11/2020						0.817 (U)
2/12/2020	0.913 (U)		1.07 (U)			
3/17/2020		1 (U)				
3/18/2020			0.207 (U)		0.458 (U)	
3/19/2020				1.1		0.715 (U)
8/26/2020		1.75				
9/22/2020	0.428 (U)	0.688 (U)				
9/23/2020				1.35 (U)	0.00884 (U)	0.565 (U)
9/25/2020			0.603 (U)			
2/8/2021	0.613 (U)					
2/10/2021			0.353 (U)			1.04 (U)
2/12/2021				0.366 (U)	0.458 (U)	
3/2/2021	0.579 (U)	0.948 (U)	0.71 (U)			
3/3/2021				0.492 (U)	0.105 (U)	0.459 (U)
8/19/2021			0.786 (U)	1.17 (U)	0.0732 (U)	
8/20/2021		0.528 (U)				
8/26/2021	0.798 (U)					
8/27/2021						0.409 (U)
2/8/2022		0.462 (U)				
2/9/2022				1.19	0.422 (U)	0.894 (U)
2/10/2022	0.375 (U)		0 (U)			
8/30/2022	0.72 (U)	1.52		0.827		0.699 (U)
8/31/2022			0.421 (U)		0.49 (U)	
2/7/2023		1		0.92 (U)	0.661 (U)	0.536 (U)
2/8/2023			0.83 (U)			
2/9/2023	0.0815 (U)					
8/15/2023	0.846 (U)	0.833 (U)	0.652 (U)	0.935 (U)	0.726 (U)	0.611 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				1.64	
3/3/2021		3.58	2.03		
8/19/2021	0.234 (U)	3.53			
8/20/2021					0.496 (U)
8/27/2021			1.34	1.83	
2/9/2022		3.28	1.91	1.74	0.926
2/10/2022	0.268 (U)				
8/31/2022	0.506 (U)	2.12	1.33	1.51	0.322 (U)
2/8/2023	0.417 (U)	2.74	1.18		
2/10/2023				1.92	0.786 (U)
8/15/2023		2.79		1.92	0.319 (U)
8/16/2023	0.895 (U)		1.87		

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:04 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			<0.3			
4/4/2018		<0.1				
6/7/2018					<0.1	
6/11/2018				<0.1		<0.1
9/19/2018	<0.1	<0.1	<0.3			
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	<0.3			
9/25/2019				<0.1		
9/26/2019					<0.1	<0.1
10/8/2019	0.034 (J)	<0.1				
10/9/2019			<0.3			
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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
2/9/2021					<0.1	<0.1
3/1/2021	<0.1	<0.1	0.073 (J)			
3/3/2021				<0.1	<0.1	<0.1
8/19/2021	<0.1	<0.1	0.075 (J)			
8/26/2021						<0.1
8/27/2021				<0.1	<0.1	
2/8/2022	<0.1					
2/9/2022		<0.1	0.063 (J)	<0.1	<0.1	<0.1
8/30/2022				<0.1	<0.1	<0.1
8/31/2022	0.065 (J)	0.055 (J)	0.1			
2/7/2023				<0.1	<0.1	<0.1
2/8/2023	0.077 (J)	0.062 (J)				
2/9/2023			0.11			
8/15/2023	<0.1	<0.1	0.07 (J)	<0.1	<0.1	<0.1

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:04 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	<0.3				
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		<0.3				
1/12/2017						0.04 (J)
1/13/2017	<0.1	<0.3			<0.1	
3/6/2017	<0.1	<0.3			<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	<0.3			<0.1	
10/3/2017		<0.3				<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	<0.3			<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		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
2/8/2021						0.055 (J)
2/9/2021	<0.1	0.092 (J)			<0.1	
2/10/2021			<0.1	<0.1		
3/2/2021						<0.1
3/3/2021	<0.1				<0.1	
3/4/2021		0.091 (J)	<0.1	<0.1		
8/26/2021			0.063 (J)		<0.1	0.061 (J)
8/27/2021	<0.1					
9/1/2021		0.11				
9/3/2021				<0.1		
2/8/2022			0.052 (J)	<0.1		
2/9/2022	<0.1	0.1				
2/10/2022						0.055 (J)
2/11/2022					<0.1	
8/30/2022		0.1				0.085 (J)
8/31/2022	<0.1		0.065 (J)	0.05 (J)	0.061 (J)	
2/7/2023	<0.1	0.1	0.076 (J)			0.082 (J)
2/8/2023				<0.1		
2/9/2023					0.067 (J)	
8/15/2023	<0.1	0.061 (J)	<0.1	<0.1	<0.1	<0.1

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:04 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				<0.3		
11/2/2016			<0.1			
11/4/2016	<0.1				<0.1	<0.3
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				<0.3	<0.1	
3/3/2017						<0.3
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			<0.3	<0.1	
6/28/2017						0.11 (J)
6/30/2017			<0.1			
7/17/2017		0.14 (J)				
10/3/2017	<0.1			<0.3	<0.1	<0.3
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			<0.3		
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	<0.3	<0.1	<0.3
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)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:04 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		<0.3				
9/24/2019	<0.1			0.063 (J)	<0.1	0.081 (J)
9/25/2019			<0.1			
10/8/2019		0.052 (J)				
2/10/2020				0.061 (J)	<0.1	
2/11/2020						0.075 (J)
2/12/2020	<0.1		<0.1			
3/17/2020		0.053 (J)				
3/18/2020			<0.1		<0.1	
3/19/2020				0.064 (J)		0.093 (J)
3/24/2020	<0.1					
8/26/2020		0.068 (J)				
9/22/2020	<0.1	0.058 (J)				
9/23/2020				0.058 (J)	<0.1	0.08 (J)
9/25/2020			<0.1			
2/8/2021	<0.1					
2/10/2021			<0.1			0.094 (J)
2/12/2021				0.068 (J)	<0.1	
3/2/2021	<0.1	0.073 (J)	<0.1			
3/3/2021				0.078 (J)	<0.1	0.085 (J)
8/19/2021			<0.1	0.074 (J)	<0.1	
8/20/2021		0.06 (J)				
8/26/2021	<0.1					
8/27/2021						0.12
2/8/2022		0.064 (J)				
2/9/2022				0.057 (J)	<0.1	0.094 (J)
2/10/2022	<0.1		<0.1			
8/30/2022	<0.1	0.086 (J)		0.093 (J)		0.12
8/31/2022			0.053 (J)		0.065 (J)	
2/7/2023		0.095 (J)		0.093 (J)	0.071 (J)	0.12
2/8/2023			0.059 (J)			
2/9/2023	<0.1					
8/15/2023	<0.1	0.065 (J)	<0.1	0.057 (J)	<0.1	0.081 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:04 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	<0.47	<0.1		
10/11/2017				<0.3	
3/27/2018	<0.1				
3/28/2018		0.56	<0.1		
4/4/2018				<0.3	
6/7/2018		0.48			
6/8/2018			0.2 (J)		
6/11/2018	<0.1				
9/19/2018				<0.3	
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				<0.3	
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				<0.3	
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		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
2/11/2021	<0.1				
3/1/2021	<0.1				<0.1
3/2/2021				0.12	
3/3/2021		0.44	0.1		
8/19/2021	<0.1	0.47			
8/20/2021					<0.1
8/27/2021			0.12	0.13	
2/9/2022		0.43	0.097 (J)	0.12	<0.1
2/11/2022	<0.1				
8/31/2022	0.06 (J)	0.42	0.13	0.12	0.059 (J)
2/8/2023	0.064 (J)	0.56	0.16		
2/10/2023				0.17	0.063 (J)
8/15/2023		0.42		0.12	<0.1
8/16/2023	<0.1		0.11		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.001	<0.001
6/7/2016				<0.001		
7/27/2016				<0.001	<0.001	<0.001
8/30/2016	<0.001					
8/31/2016		<0.001	<0.001			
9/16/2016				<0.001		<0.001
9/19/2016					<0.001	
11/3/2016				<0.001	<0.001	<0.001
11/14/2016	<0.001		<0.001			
11/15/2016		<0.001				
1/11/2017				<0.001	<0.001	<0.001
2/24/2017	<0.001					
2/27/2017			<0.001			
2/28/2017		<0.001				
3/1/2017					<0.001	<0.001
3/2/2017				8E-05 (J)		
4/26/2017					<0.001	<0.001
5/2/2017				<0.001		
5/8/2017	<0.001	<0.001				
5/9/2017			0.0001 (J)			
6/28/2017					<0.001	0.0001 (J)
6/29/2017				8E-05 (J)		
7/11/2017	<0.001					
7/13/2017		<0.001	<0.001			
10/10/2017	<0.001	<0.001	<0.001			
3/28/2018				<0.001	<0.001	<0.001
4/2/2018	<0.001					
4/3/2018			<0.001			
4/4/2018		<0.001				
9/19/2018	<0.001	<0.001	<0.001			
3/5/2019				<0.001		<0.001
3/6/2019					<0.001	
4/2/2019				<0.001		
4/3/2019					<0.001	<0.001
8/20/2019	<0.001	<0.001	<0.001			
9/25/2019				<0.001		
9/26/2019					<0.001	<0.001
2/11/2020				<0.001	<0.001	<0.001
3/24/2020				6.4E-05 (J)	7.1E-05 (J)	5.4E-05 (J)
8/27/2020	<0.001	<0.001				
8/28/2020			<0.001			
9/22/2020	<0.001	<0.001				
9/23/2020			<0.001	4.1E-05 (J)	6E-05 (J)	9.7E-05 (J)
2/9/2021					5E-05 (J)	9.4E-05 (J)
3/1/2021	<0.001	<0.001	<0.001			
3/3/2021				<0.001	<0.001	7.6E-05 (J)
8/19/2021	<0.001	<0.001	<0.001			
8/26/2021						<0.001
8/27/2021				<0.001	<0.001	
2/8/2022	<0.001					
2/9/2022		<0.001	<0.001	<0.001	<0.001	<0.001
8/30/2022				<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/9/2023 6:04 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)
8/31/2022	<0.001	<0.001	<0.001			
2/7/2023				<0.001	<0.001	<0.001
2/8/2023	<0.001	<0.001				
2/9/2023			<0.001			
8/15/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/9/2023 6:04 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		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
2/8/2022			<0.001	<0.001		
2/9/2022	<0.001	<0.001				
2/10/2022						<0.001
2/11/2022					<0.001	
8/30/2022		<0.001				<0.001
8/31/2022	<0.001		<0.001	<0.001	<0.001	
2/7/2023	<0.001	<0.001	<0.001			<0.001
2/8/2023				<0.001		
2/9/2023					<0.001	
8/15/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/9/2023 6:04 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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.001				
3/27/2018			<0.001		<0.001	
3/28/2018						<0.001
3/29/2018	<0.001			<0.001		
8/6/2018		<0.001				
2/25/2019		<0.001				
2/26/2019			<0.001			
2/27/2019				<0.001	<0.001	<0.001
3/4/2019	<0.001					
4/3/2019	<0.001					
6/12/2019		<0.001				
8/19/2019		<0.001				
9/24/2019	9E-05 (J)					
10/8/2019		<0.001				
2/10/2020				4.9E-05 (J)	<0.001	
2/11/2020						<0.001
2/12/2020	<0.001		<0.001			
3/17/2020		<0.001				
3/18/2020			<0.001		<0.001	
3/19/2020				0.00012 (J)		<0.001
3/24/2020	6.8E-05 (J)					
8/26/2020		<0.001				
9/22/2020	4.2E-05 (J)	0.0001 (J)				
9/23/2020				<0.001	0.00021 (J)	0.0011 (J)
9/25/2020			<0.001			
2/8/2021	3.7E-05 (J)					
2/10/2021			4.8E-05 (J)			0.00015 (J)
2/12/2021				4.4E-05 (J)	0.00038 (J)	
3/2/2021	9.2E-05 (J)	<0.001	<0.001			
3/3/2021				5.6E-05 (J)	<0.001	<0.001
8/19/2021			<0.001	<0.001	<0.001	
8/20/2021		<0.001				
8/26/2021	<0.001					
8/27/2021						<0.001
2/8/2022		<0.001				
2/9/2022				<0.001	<0.001	<0.001
2/10/2022	<0.001		<0.001			
8/30/2022	<0.001	<0.001		<0.001		<0.001
8/31/2022			<0.001		<0.001	
2/7/2023		<0.001		<0.001	<0.001	<0.001
2/8/2023			<0.001			
2/9/2023	<0.001					
8/15/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.001		
6/2/2016	<0.001	0.00056 (J)			
7/25/2016	<0.001		<0.001		
7/26/2016		0.0001 (J)			
9/1/2016				<0.001	
9/14/2016			<0.001		
9/15/2016		0.0002 (J)			
9/19/2016	<0.001				
11/1/2016	<0.001	<0.001	<0.001		
11/16/2016				<0.001	
1/11/2017		<0.001	<0.001		
1/16/2017	<0.001				
2/21/2017	<0.001				
2/27/2017				<0.001	
3/1/2017			<0.001		
3/2/2017		0.0002 (J)			
4/26/2017	<0.001	<0.001	<0.001		
5/8/2017				<0.001	
6/28/2017		<0.001	<0.001		
6/30/2017	<0.001				
7/13/2017				<0.001	
10/11/2017				<0.001	
3/27/2018	<0.001				
3/28/2018		<0.001	<0.001		
4/4/2018				<0.001	
9/19/2018				<0.001	
2/26/2019	<0.001				
2/27/2019		<0.001	<0.001		
8/21/2019				<0.001	
2/11/2020			<0.001		
2/12/2020	<0.001	<0.001			
3/19/2020	<0.001	0.00017 (J)	<0.001		
7/6/2020				<0.001	
8/27/2020					9.2E-05 (J)
8/28/2020				<0.001	
9/22/2020					6E-05 (J)
9/23/2020		<0.001	0.00015 (J)	<0.001	
9/24/2020	<0.001				
10/7/2020				<0.001	<0.001
11/12/2020				4.4E-05 (J)	6.4E-05 (J)
2/10/2021		<0.001	<0.001		
2/11/2021	4.6E-05 (J)				
3/1/2021	<0.001				8.7E-05 (J)
3/2/2021				<0.001	
3/3/2021		<0.001	<0.001		
8/19/2021	<0.001	<0.001			
8/20/2021					<0.001
8/27/2021			<0.001	<0.001	
2/9/2022		<0.001	<0.001	<0.001	<0.001
2/11/2022	<0.001				
8/31/2022	<0.001	<0.001	<0.001	<0.001	<0.001
2/8/2023	<0.001	<0.001	<0.001		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
2/10/2023				<0.001	<0.001
8/15/2023		<0.001		<0.001	<0.001
8/16/2023	<0.001		<0.001		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/9/2023 6:04 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)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
8/19/2021	0.0038 (J)	0.013 (J)	0.012 (J)			
8/26/2021						0.0019 (J)
8/27/2021				<0.03	0.0032 (J)	
2/8/2022	0.0039 (J)					
2/9/2022		0.014 (J)	0.012 (J)	<0.03	0.0032 (J)	0.0015 (J)
8/30/2022				<0.03	0.0036 (J)	0.0014 (J)
8/31/2022	0.0037 (J)	0.013 (J)	0.012 (J)			
2/7/2023				<0.03	0.003 (J)	0.0012 (J)
2/8/2023	0.0037 (J)	0.014 (J)				
2/9/2023			0.01 (J)			
8/15/2023	0.004 (J)	0.013 (J)	0.012 (J)	<0.03	<0.03	0.00077 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/9/2023 6:04 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)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		0.0062 (J)	0.0084 (J)	<0.03		
8/26/2021			0.0082 (J)		0.0094 (J)	0.0075 (J)
8/27/2021	<0.03					
9/1/2021		0.0057 (J)				
9/3/2021				<0.03		
2/8/2022			0.008 (J)	0.00076 (J)		
2/9/2022	0.00082 (J)	0.0061 (J)				
2/10/2022						0.0076 (J)
2/11/2022					0.012 (J)	
8/30/2022		0.0079 (J)				0.0068 (J)
8/31/2022	<0.03		0.0065 (J)	<0.03	0.013 (J)	
2/7/2023	<0.03	0.0059 (J)	0.0065 (J)			0.0059 (J)
2/8/2023				0.00074 (J)		
2/9/2023					0.014 (J)	
8/15/2023	<0.03	0.0062 (J)	0.0064 (J)	<0.03	0.0083 (J)	0.0059 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/9/2023 6:04 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)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
9/25/2019			<0.03			
10/8/2019		0.0015 (J)				
2/10/2020				0.011 (J)	0.0023 (J)	
2/11/2020						0.0012 (J)
2/12/2020	0.0032 (J)		<0.03			
3/17/2020		0.0017 (J)				
3/18/2020			<0.03		0.0024 (J)	
3/19/2020				0.013 (J)		0.0022 (J)
3/24/2020	0.0033 (J)					
8/26/2020		0.0032 (J)				
9/22/2020	0.0034 (J)	0.0029 (J)				
9/23/2020				0.014 (J)	0.0024 (J)	0.0016 (J)
9/25/2020			<0.03			
2/8/2021	0.0032 (J)					
2/10/2021			<0.03			0.0039 (J)
2/12/2021				0.01 (J)	0.0025 (J)	
3/2/2021	0.0031 (J)	0.0033 (J)	<0.03			
3/3/2021				0.012 (J)	0.0025 (J)	0.0016 (J)
8/19/2021			<0.03	0.013 (J)	0.0023 (J)	
8/20/2021		0.0028 (J)				
8/26/2021	0.0032 (J)					
8/27/2021						0.0058 (J)
2/8/2022		0.0031 (J)				
2/9/2022				0.013 (J)	0.0027 (J)	0.006 (J)
2/10/2022	0.0036 (J)		<0.03			
8/30/2022	0.0035 (J)	0.0025 (J)		0.013 (J)		0.0044 (J)
8/31/2022			<0.03		<0.03	
2/7/2023		0.0022 (J)		0.006 (J)	0.0029 (J)	0.0047 (J)
2/8/2023			<0.03			
2/9/2023	0.0036 (J)					
8/15/2023	<0.03	<0.03	<0.03	0.0079 (J)	0.002 (J)	<0.03

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/9/2023 6:04 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)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.013 (J)	
3/3/2021		0.024 (J)	0.017 (J)		
8/19/2021	0.0012 (J)	0.023 (J)			
8/20/2021					0.0043 (J)
8/27/2021			0.026 (J)	0.014 (J)	
2/9/2022		0.026 (J)	0.021 (J)	0.014 (J)	0.0042 (J)
2/11/2022	0.0014 (J)				
8/31/2022	0.0012 (J)	0.021 (J)	0.022 (J)	0.015 (J)	0.0037 (J)
2/8/2023	0.0011 (J)	0.023 (J)	0.018 (J)		
2/10/2023				0.011 (J)	0.0033 (J)
8/15/2023		0.023 (J)		0.012 (J)	0.004 (J)
8/16/2023	<0.03		0.025 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.0002	<0.0002
6/7/2016				9.5E-05 (J)		
7/27/2016				<0.0002	<0.0002	<0.0002
8/30/2016	<0.0002					
8/31/2016		<0.0002	<0.0002			
9/16/2016				<0.0002		<0.0002
9/19/2016					<0.0002	
11/3/2016				<0.0002	<0.0002	<0.0002
11/14/2016	<0.0002		<0.0002			
11/15/2016		<0.0002				
1/11/2017				<0.0002	<0.0002	<0.0002
2/24/2017	<0.0002					
2/27/2017			<0.0002			
2/28/2017		<0.0002				
3/1/2017					<0.0002	<0.0002
3/2/2017				<0.0002		
4/26/2017					<0.0002	<0.0002
5/2/2017				<0.0002		
5/8/2017	<0.0002	<0.0002				
5/9/2017			<0.0002			
6/28/2017					<0.0002	<0.0002
6/29/2017				<0.0002		
7/11/2017	<0.0002					
7/13/2017		<0.0002	<0.0002			
10/10/2017	<0.0002	<0.0002	<0.0002			
3/28/2018				<0.0002	<0.0002	<0.0002
4/2/2018	<0.0002					
4/3/2018			<0.0002			
4/4/2018		<0.0002				
9/19/2018	5.3E-05 (J)	6E-05 (J)	7.1E-05 (J)			
9/25/2018				<0.0002	<0.0002	<0.0002
3/5/2019				<0.0002		<0.0002
3/6/2019					<0.0002	
8/20/2019	<0.0002	<0.0002	<0.0002			
2/11/2020				<0.0002	<0.0002	<0.0002
8/27/2020	<0.0002	<0.0002				
8/28/2020			<0.0002			
2/9/2021					<0.0002	<0.0002
3/3/2021				<0.0002	<0.0002	<0.0002
8/19/2021	<0.0002	<0.0002	<0.0002			
8/26/2021						<0.0002
8/27/2021				<0.0002	<0.0002	
2/8/2022	<0.0002					
2/9/2022		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/30/2022				<0.0002	<0.0002	<0.0002
8/31/2022	<0.0002	<0.0002	<0.0002			
2/7/2023				0.00018 (J)	0.00013 (J)	0.00017 (J)
2/8/2023	<0.0002	<0.0002				
2/9/2023			<0.0002			
8/15/2023	0.00014 (J)	<0.0002	<0.0002	<0.0002	0.00014 (J)	0.00015 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.0002	<0.0002
6/7/2016	9.6E-05 (J)	9.6E-05 (J)				
7/26/2016					<0.0002	<0.0002
7/27/2016	<0.0002					
7/28/2016		<0.0002				
9/14/2016					<0.0002	<0.0002
9/19/2016	<0.0002	<0.0002				
11/2/2016	<0.0002				<0.0002	<0.0002
11/3/2016		<0.0002				
1/12/2017						<0.0002
1/13/2017	<0.0002	<0.0002			<0.0002	
3/6/2017	<0.0002	<0.0002			<0.0002	
3/7/2017						<0.0002
4/26/2017	<0.0002	<0.0002				
5/1/2017					<0.0002	<0.0002
6/27/2017						<0.0002
6/29/2017	<0.0002	<0.0002			<0.0002	
10/11/2017			<0.0002			
10/12/2017				<0.0002		
11/20/2017			7E-05 (J)	8E-05 (J)		
1/10/2018				<0.0002		
1/11/2018			<0.0002			
2/19/2018				<0.0002		
2/20/2018			<0.0002			
3/29/2018	<0.0002	<0.0002			<0.0002	<0.0002
4/3/2018			<0.0002	<0.0002		
6/28/2018			<0.0002	3.6E-05 (J)		
8/7/2018			<0.0002	<0.0002		
9/24/2018			<0.0002	<0.0002		
9/25/2018	<0.0002	<0.0002				
9/26/2018					<0.0002	<0.0002
3/4/2019					<0.0002	<0.0002
3/5/2019	<0.0002	<0.0002				
8/21/2019			<0.0002	<0.0002		
2/12/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/8/2021						<0.0002
2/9/2021	<0.0002	<0.0002			<0.0002	
2/10/2021			<0.0002	<0.0002		
3/2/2021						<0.0002
3/3/2021	<0.0002				<0.0002	
3/4/2021		<0.0002	<0.0002	<0.0002		
8/26/2021			<0.0002		<0.0002	<0.0002
8/27/2021	<0.0002					
9/1/2021		<0.0002				
9/3/2021				0.00012 (J)		
2/8/2022			<0.0002	0.00013 (J)		
2/9/2022	<0.0002	<0.0002				
2/10/2022						<0.0002
2/11/2022					<0.0002	
8/30/2022		<0.0002				<0.0002
8/31/2022	<0.0002		<0.0002	0.00064	<0.0002	
2/7/2023	0.00015 (J)	0.00017 (J)	<0.0002			<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/9/2023 6:04 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)
2/8/2023				<0.0002		
2/9/2023					<0.0002	
8/15/2023	<0.0002	<0.0002	<0.0002	0.00037	0.00013 (J)	0.00015 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/9/2023 6:04 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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.0002				
3/27/2018			<0.0002		<0.0002	
3/28/2018						<0.0002
3/29/2018	<0.0002			<0.0002		
8/6/2018		<0.0002				
9/26/2018	<0.0002					
2/25/2019		7.4E-05 (J)				
2/26/2019			6.1E-05 (J)			
2/27/2019				5.1E-05 (J)	5.4E-05 (J)	<0.0002
3/4/2019	<0.0002					
3/28/2019				4E-05 (J)	<0.0002	
3/29/2019			<0.0002			<0.0002
6/12/2019		<0.0002				
8/19/2019		<0.0002				
9/24/2019				<0.0002	<0.0002	<0.0002
9/25/2019			<0.0002			
10/8/2019		<0.0002				
2/10/2020				<0.0002	<0.0002	
2/11/2020						<0.0002
2/12/2020	<0.0002		<0.0002			
5/6/2020		<0.0002				
8/26/2020		<0.0002				
9/22/2020		<0.0002				
2/8/2021	<0.0002					
2/10/2021			<0.0002			<0.0002
2/12/2021				<0.0002	<0.0002	
3/2/2021	<0.0002	<0.0002				
8/20/2021		<0.0002				
8/26/2021	<0.0002					
2/8/2022		<0.0002				
2/9/2022				<0.0002	<0.0002	<0.0002
2/10/2022	<0.0002		<0.0002			
8/30/2022	<0.0002	<0.0002		<0.0002		<0.0002
8/31/2022			<0.0002		<0.0002	
2/7/2023		0.00013 (J)		<0.0002	<0.0002	<0.0002
2/8/2023			<0.0002			
2/9/2023	<0.0002					
8/15/2023	0.00014 (J)	<0.0002	0.00016 (J)	0.00015 (J)	0.00015 (J)	0.00015 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.0002		
6/2/2016	<0.0002	<0.0002			
7/25/2016	<0.0002		<0.0002		
7/26/2016		<0.0002			
9/1/2016				<0.0002	
9/14/2016			<0.0002		
9/15/2016		<0.0002			
9/19/2016	<0.0002				
11/1/2016	<0.0002	<0.0002	<0.0002		
11/16/2016				<0.0002	
1/11/2017		<0.0002	<0.0002		
1/16/2017	<0.0002				
2/21/2017	<0.0002				
2/27/2017				<0.0002	
3/1/2017			<0.0002		
3/2/2017		<0.0002			
4/26/2017	<0.0002	<0.0002	<0.0002		
5/8/2017				<0.0002	
6/28/2017		<0.0002	<0.0002		
6/30/2017	<0.0002				
7/13/2017				<0.0002	
10/11/2017				<0.0002	
3/27/2018	<0.0002				
3/28/2018		<0.0002	<0.0002		
4/4/2018				<0.0002	
9/19/2018				7E-05 (J)	
2/26/2019	6.8E-05 (J)				
2/27/2019		6.2E-05 (J)	6.1E-05 (J)		
4/1/2019	8.2E-05 (J)	9.6E-05 (J)	8.4E-05 (J)		
8/21/2019				<0.0002	
9/25/2019	<0.0002	<0.0002	<0.0002		
2/11/2020			<0.0002		
2/12/2020	<0.0002	<0.0002			
7/6/2020				<0.0002	
8/27/2020					<0.0002
8/28/2020				<0.0002	
11/12/2020				<0.0002	<0.0002
2/10/2021		<0.0002	<0.0002		
2/11/2021	<0.0002				
8/20/2021					<0.0002
8/27/2021				<0.0002	
2/9/2022		<0.0002	<0.0002	<0.0002	<0.0002
2/11/2022	<0.0002				
8/31/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/8/2023	<0.0002	<0.0002	<0.0002		
2/10/2023				<0.0002	<0.0002
8/15/2023		0.00014 (J)		<0.0002	<0.0002
8/16/2023	<0.0002		<0.0002		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.01	<0.01
6/7/2016				<0.01		
7/27/2016				<0.01	<0.01	<0.01
8/30/2016	<0.01					
8/31/2016		<0.01	0.0024 (J)			
9/16/2016				<0.01		<0.01
9/19/2016					<0.01	
11/3/2016				<0.01	<0.01	<0.01
11/14/2016	<0.01		<0.01			
11/15/2016		<0.01				
1/11/2017				<0.01	<0.01	<0.01
2/24/2017	<0.01					
2/27/2017			0.0018 (J)			
2/28/2017		0.0005 (J)				
3/1/2017					<0.01	<0.01
3/2/2017				<0.01		
4/26/2017					<0.01	<0.01
5/2/2017				<0.01		
5/8/2017	<0.01	<0.01				
5/9/2017			0.0015 (J)			
6/28/2017					<0.01	<0.01
6/29/2017				<0.01		
7/11/2017	<0.01					
7/13/2017		<0.01	0.0015 (J)			
10/10/2017	<0.01	<0.01	0.0015 (J)			
3/28/2018				<0.01	<0.01	<0.01
4/2/2018	<0.01					
4/3/2018			<0.01			
4/4/2018		<0.01				
9/19/2018	<0.01	<0.01	<0.01			
3/5/2019				<0.01		<0.01
3/6/2019					<0.01	
8/20/2019	<0.01	<0.01	0.0011 (J)			
10/8/2019	<0.01	<0.01				
10/9/2019			0.0012 (J)			
2/11/2020				<0.01	<0.01	<0.01
3/17/2020	<0.01	<0.01	0.0016 (J)			
3/24/2020				<0.01	<0.01	<0.01
8/27/2020	<0.01	<0.01				
8/28/2020			0.0013 (J)			
9/22/2020	<0.01	<0.01				
9/23/2020			0.0011 (J)	<0.01	<0.01	<0.01
2/9/2021					<0.01	<0.01
3/1/2021	<0.01	<0.01	0.0012 (J)			
3/3/2021				<0.01	<0.01	<0.01
8/19/2021	<0.01	<0.01	0.0012 (J)			
8/26/2021						<0.01
8/27/2021				<0.01	<0.01	
2/8/2022	<0.01					
2/9/2022		<0.01	0.0012 (J)	<0.01	<0.01	<0.01
8/30/2022				<0.01	<0.01	<0.01
8/31/2022	<0.01	<0.01	0.0011 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/9/2023 6:04 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)
2/7/2023				<0.01	<0.01	<0.01
2/8/2023	<0.01	<0.01				
2/9/2023			0.00097 (J)			
8/15/2023	<0.01	<0.01	0.0011 (J)	<0.01	<0.01	<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.01	0.0035 (J)
6/7/2016	<0.01	<0.01				
7/26/2016					<0.01	0.0042 (J)
7/27/2016	<0.01					
7/28/2016		<0.01				
9/14/2016					<0.01	0.0041 (J)
9/19/2016	<0.01	<0.01				
11/2/2016	<0.01				<0.01	0.0039 (J)
11/3/2016		<0.01				
1/12/2017						0.0041 (J)
1/13/2017	<0.01	<0.01			<0.01	
3/6/2017	<0.01	0.0007 (J)			<0.01	
3/7/2017						0.0047 (J)
4/26/2017	<0.01	0.0008 (J)				
5/1/2017					<0.01	0.0045 (J)
6/27/2017						0.004 (J)
6/29/2017	<0.01	<0.01			<0.01	
10/11/2017			0.0094 (J)			
10/12/2017				<0.01		
11/20/2017			0.0081 (J)	<0.01		
1/10/2018				<0.01		
1/11/2018			0.0074 (J)			
2/19/2018				<0.01		
2/20/2018			<0.01			
3/29/2018	<0.01	<0.01			<0.01	<0.01
4/3/2018			0.006 (J)	<0.01		
6/28/2018			0.005 (J)	<0.01		
8/7/2018			0.0045 (J)	<0.01		
9/24/2018			0.0035 (J)	<0.01		
3/4/2019					<0.01	<0.01
3/5/2019	<0.01	<0.01				
8/21/2019			0.0021 (J)	<0.01		
10/9/2019			0.0018 (J)	<0.01		
2/12/2020	<0.01	<0.01	0.0025 (J)	<0.01	<0.01	0.0011 (J)
3/24/2020	<0.01	<0.01		<0.01		0.0011 (J)
3/25/2020			0.002 (J)		<0.01	
9/22/2020					<0.01	0.00099 (J)
9/24/2020	<0.01	<0.01	0.0016 (J)	<0.01		
2/8/2021						0.0011 (J)
2/9/2021	<0.01	<0.01			<0.01	
2/10/2021			0.0013 (J)	<0.01		
3/2/2021						<0.01
3/3/2021	<0.01				<0.01	
3/4/2021		<0.01	0.0014 (J)	<0.01		
8/26/2021			0.0027 (J)		<0.01	0.001 (J)
8/27/2021	<0.01					
9/1/2021		<0.01				
9/3/2021				<0.01		
2/8/2022			0.0035 (J)	<0.01		
2/9/2022	<0.01	<0.01				
2/10/2022						0.00096 (J)
2/11/2022					<0.01	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/9/2023 6:04 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)
8/30/2022		<0.01				0.00089 (J)
8/31/2022	<0.01		0.0036 (J)	<0.01	<0.01	
2/7/2023	<0.01	<0.01	0.0045 (J)			0.00095 (J)
2/8/2023				<0.01		
2/9/2023					<0.01	
8/15/2023	<0.01	<0.01	0.0061 (J)	<0.01	<0.01	0.0009 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/9/2023 6:04 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)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/11/2020						0.0057 (J)
2/12/2020	<0.01		<0.01			
3/18/2020			<0.01		0.0056 (J)	
3/19/2020				0.0088 (J)		0.0046 (J)
3/24/2020	<0.01					
8/26/2020		<0.01				
9/22/2020	<0.01					
9/23/2020				0.008 (J)	0.0059 (J)	0.0071 (J)
9/25/2020			<0.01			
2/8/2021	<0.01					
2/10/2021			<0.01			0.0041 (J)
2/12/2021				0.008 (J)	0.0056 (J)	
3/2/2021	<0.01		<0.01			
3/3/2021				0.0088 (J)	0.0049 (J)	0.0074 (J)
8/19/2021			<0.01	0.0083 (J)	0.005 (J)	
8/20/2021		<0.01				
8/26/2021	<0.01					
8/27/2021						0.0048 (J)
2/8/2022		<0.01				
2/9/2022				0.0093 (J)	0.0055 (J)	0.0057 (J)
2/10/2022	<0.01		<0.01			
8/30/2022	<0.01	<0.01		0.0094 (J)		0.0068 (J)
8/31/2022			<0.01		0.0055 (J)	
2/7/2023		<0.01		<0.01	<0.01	0.0061 (J)
2/8/2023			<0.01			
2/9/2023	<0.01					
8/15/2023	<0.01	<0.01	<0.01	0.0098 (J)	0.0047 (J)	0.0071 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/9/2023 6:04 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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/2/2021				0.0023 (J)	
3/3/2021		0.013	0.0036 (J)		
8/19/2021	<0.01	0.013			
8/20/2021					<0.01
8/27/2021			0.0099 (J)	0.0022 (J)	
2/9/2022		0.013	0.0087 (J)	0.0021 (J)	<0.01
2/11/2022	<0.01				
8/31/2022	<0.01	0.011	0.0068 (J)	0.0017 (J)	<0.01
2/8/2023	<0.01	0.012	0.0065 (J)		
2/10/2023				0.0029 (J)	0.00083 (J)
8/15/2023		0.012		0.0031 (J)	<0.01
8/16/2023	<0.01		0.012		

Time Series

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
2/9/2021					6.12	5.43
3/1/2021	5.48	5.76	6.5			
3/3/2021				5.52	5.89	5.31
8/19/2021	5.5	5.73	6.13			
8/26/2021						4.4
8/27/2021				5.27	5.4	
2/8/2022	5.4					
2/9/2022		5.73	6.15	5.53	5.98	5.28
8/30/2022				4.68	5.82	5.18
8/31/2022	5.32	5.77	6.56			
2/7/2023				5.47	6	5.03
2/8/2023	5.22	5.6				
2/9/2023			6.47			
8/15/2023	5.69	5.79	6.97	5.54	5.82	5.2

Time Series

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
2/9/2021	5.86	6.95			6.06	
2/10/2021			5.8	5.19		
3/2/2021						7.15
3/3/2021	5.89				6.21	
3/4/2021		6.8	5.54	5.23		
8/26/2021			6.91		5.82	7.16
8/27/2021	5.57					
9/1/2021		6.65				
9/3/2021				4.75		
2/8/2022			5.78	5.26		
2/9/2022	5.91	6.84				
2/10/2022						6.99
2/11/2022					5.95	
8/30/2022		6.58				7.4
8/31/2022	5.38		5.3	4.53	5.5	
2/7/2023	5.63	6.82	5.49			6.64
2/8/2023				5.71		
2/9/2023					6.23	
8/15/2023	7	6.84	5.78	5	5.99	7.34

Time Series

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/6/2018					6.17	
6/7/2018	5.63					7.29
6/8/2018			5.45			
8/6/2018		6.01				
9/26/2018	5.63					
10/1/2018			5.39	6.8	5.9	7.07
2/25/2019		6.51				
2/26/2019			5.46			
2/27/2019				6.84	5.8	7.27
3/4/2019	5.75					
3/28/2019				6.99	6.15	
3/29/2019			5.34			7.06
4/3/2019	5.63					
6/12/2019		6.3				
8/19/2019		6.23				
9/24/2019	5.6			7.07	6.23	7.01
9/25/2019			5.19			
10/8/2019		6.28				
2/10/2020				7.2	6.1	
2/11/2020						7.38
2/12/2020	5.83		5.48			
3/17/2020		6.14				
3/18/2020			5.38		6.19	
3/19/2020				7.03		7.22
3/24/2020	5.81					
5/6/2020		6.24				
8/26/2020		5.67				
9/22/2020	5.99	5.78				
9/23/2020				7.15	6.01	7.22
9/25/2020			5.44			
2/8/2021	5.67					
2/10/2021			5.35			7.29
2/12/2021				7.14	6.21	
3/2/2021	5.63	5.42	5.49			
3/3/2021				7.2	5.38	7.92
8/19/2021			7.32	6.32	6.38	
8/20/2021		5.86				
8/26/2021	5.51					
8/27/2021						7.14
2/8/2022		5.83				
2/9/2022				7.12	6.24	5.89
2/10/2022	5.14		4.5			
8/30/2022	5	5.39		7.2		7.04
8/31/2022			5.15		5.64	
2/7/2023		5.94		7.86	6.53	6.94
2/8/2023			5.39			
2/9/2023	5.9					
8/15/2023	5.58	5.3	5.03	6.98	5.88	6.96

Time Series

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
3/1/2021	5.78				5.84
3/2/2021				6.72	
3/3/2021		8.39	8.23		
8/19/2021		5.34			
8/20/2021					6.71
8/27/2021			7.39	6.83	
2/9/2022		7.97	7.66	6.98	5.99
2/11/2022	5.59				
8/31/2022	5.87	7.65	7.49	6.87	5.58
2/8/2023	6.43	7.88	7.73		
2/10/2023				7.32	6
8/15/2023		7.69		7.51	6.05
8/16/2023	5.55		7.39		

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.005	<0.005
6/7/2016				0.001 (J)		
7/27/2016				0.0012 (J)	<0.005	<0.005
8/30/2016	0.0017 (J)					
8/31/2016		<0.005	<0.005			
9/16/2016				0.0015 (J)		<0.005
9/19/2016					<0.005	
11/3/2016				0.0015 (J)	<0.005	<0.005
11/14/2016	<0.005		<0.005			
11/15/2016		<0.005				
1/11/2017				0.0014 (J)	<0.005	<0.005
2/24/2017	0.0011 (J)					
2/27/2017			<0.005			
2/28/2017		<0.005				
3/1/2017					<0.005	<0.005
3/2/2017				0.0017 (J)		
4/26/2017					<0.005	<0.005
5/2/2017				<0.005		
5/8/2017	<0.005	<0.005				
5/9/2017			<0.005			
6/28/2017					<0.005	<0.005
6/29/2017				<0.005		
7/11/2017	<0.005					
7/13/2017		<0.005	<0.005			
10/10/2017	<0.005	<0.005	<0.005			
3/28/2018				<0.005	<0.005	<0.005
4/2/2018	<0.005					
4/3/2018			<0.005			
4/4/2018		<0.005				
6/7/2018					<0.005	
6/11/2018				<0.005		<0.005
9/19/2018	<0.005	<0.005	<0.005			
9/25/2018				<0.005	<0.005	<0.005
3/5/2019				<0.005		<0.005
3/6/2019					<0.005	
4/2/2019				<0.005		
4/3/2019					<0.005	<0.005
8/20/2019	<0.005	<0.005	<0.005			
9/25/2019				<0.005		
9/26/2019					<0.005	<0.005
2/11/2020				<0.005	<0.005	<0.005
3/24/2020				<0.005	<0.005	<0.005
8/27/2020	<0.005	<0.005				
8/28/2020			<0.005			
9/23/2020				<0.005	<0.005	<0.005
2/9/2021					<0.005	<0.005
3/3/2021				<0.005	<0.005	<0.005
8/19/2021	<0.005	<0.005	<0.005			
8/26/2021						<0.005
8/27/2021				<0.005	<0.005	
2/8/2022	<0.005					
2/9/2022		<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/9/2023 6:04 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)
8/30/2022				<0.005	<0.005	<0.005
8/31/2022	<0.005	<0.005	<0.005			
2/7/2023				<0.005	<0.005	<0.005
2/8/2023	<0.005	<0.005				
2/9/2023			<0.005			
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/9/2023 6:04 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)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/4/2021		<0.005	<0.005	<0.005		
8/26/2021			<0.005		<0.005	<0.005
8/27/2021	<0.005					
9/1/2021		<0.005				
9/3/2021				<0.005		
2/8/2022			<0.005	0.0014 (J)		
2/9/2022	<0.005	<0.005				
2/10/2022						<0.005
2/11/2022					<0.005	
8/30/2022		<0.005				<0.005
8/31/2022	<0.005		<0.005	<0.005	<0.005	
2/7/2023	<0.005	<0.005	<0.005			<0.005
2/8/2023				<0.005		
2/9/2023					<0.005	
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/9/2023 6:04 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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/19/2018		<0.005				
3/27/2018			<0.005		<0.005	
3/28/2018						<0.005
3/29/2018	<0.005			<0.005		
6/7/2018	<0.005					
8/6/2018		<0.005				
9/26/2018	<0.005					
2/25/2019		<0.005				
2/26/2019			<0.005			
2/27/2019				<0.005	<0.005	<0.005
3/4/2019	<0.005					
3/28/2019				<0.005	<0.005	
3/29/2019			0.0019 (J)			<0.005
4/3/2019	<0.005					
6/12/2019		<0.005				
8/19/2019		<0.005				
9/24/2019	<0.005			<0.005	<0.005	<0.005
9/25/2019			<0.005			
10/8/2019		<0.005				
2/10/2020				<0.005	<0.005	
2/11/2020						<0.005
2/12/2020	<0.005		<0.005			
3/17/2020		<0.005				
3/18/2020			<0.005		<0.005	
3/19/2020				<0.005		<0.005
3/24/2020	<0.005					
8/26/2020		<0.005				
9/22/2020	<0.005	<0.005				
9/23/2020				<0.005	<0.005	<0.005
9/25/2020			<0.005			
2/8/2021	<0.005					
2/10/2021			<0.005			<0.005
2/12/2021				<0.005	<0.005	
3/2/2021	<0.005	<0.005	<0.005			
3/3/2021				<0.005	<0.005	<0.005
8/19/2021			<0.005	<0.005	<0.005	
8/20/2021		<0.005				
8/26/2021	<0.005					
8/27/2021						<0.005
2/8/2022		<0.005				
2/9/2022				<0.005	<0.005	<0.005
2/10/2022	<0.005		0.0014 (J)			
8/30/2022	<0.005	<0.005		<0.005		<0.005
8/31/2022			<0.005		<0.005	
2/7/2023		<0.005		<0.005	<0.005	<0.005
2/8/2023			<0.005			
2/9/2023	<0.005					
8/15/2023	<0.005	<0.005	0.0014 (J)	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.005		
6/2/2016	<0.005	<0.005			
7/25/2016	<0.005		<0.005		
7/26/2016		<0.005			
9/1/2016				<0.005	
9/14/2016			<0.005		
9/15/2016		<0.005			
9/19/2016	<0.005				
11/1/2016	<0.005	<0.005	<0.005		
11/16/2016				<0.005	
1/11/2017		<0.005	<0.005		
1/16/2017	<0.005				
2/21/2017	<0.005				
2/27/2017				<0.005	
3/1/2017			<0.005		
3/2/2017		<0.005			
4/26/2017	<0.005	<0.005	<0.005		
5/8/2017				<0.005	
6/28/2017		<0.005	<0.005		
6/30/2017	<0.005				
7/13/2017				<0.005	
10/11/2017				<0.005	
3/27/2018	<0.005				
3/28/2018		<0.005	<0.005		
4/4/2018				<0.005	
9/19/2018				<0.005	
2/26/2019	<0.005				
2/27/2019		<0.005	<0.005		
4/1/2019	<0.005	<0.005	<0.005		
8/21/2019				<0.005	
9/25/2019	<0.005	<0.005	<0.005		
2/11/2020			<0.005		
2/12/2020	<0.005	<0.005			
3/19/2020	<0.005	<0.005	<0.005		
7/6/2020				<0.005	
8/27/2020					<0.005
8/28/2020				<0.005	
9/23/2020		<0.005	<0.005		
9/24/2020	<0.005				
11/12/2020				<0.005	<0.005
2/10/2021		<0.005	<0.005		
2/11/2021	<0.005				
3/1/2021	<0.005				
3/3/2021		<0.005	<0.005		
8/19/2021	<0.005	<0.005			
8/20/2021					<0.005
8/27/2021			<0.005	<0.005	
2/9/2022		<0.005	<0.005	<0.005	<0.005
2/11/2022	<0.005				
8/31/2022	<0.005	<0.005	<0.005	<0.005	<0.005
2/8/2023	<0.005	<0.005	<0.005		
2/10/2023				<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
8/15/2023		<0.005		<0.005	<0.005
8/16/2023	<0.005		<0.005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:04 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	<1.5
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	<1.5
6/29/2017				5.2		
7/11/2017	110					
7/13/2017		150	180			
10/4/2017				5.3		1.7
10/5/2017					1.6	
10/10/2017	93	140	180			
4/2/2018	88.8					
4/3/2018			183			
4/4/2018		137				
6/7/2018					0.68 (J)	
6/11/2018				5.2		0.95 (J)
9/19/2018	75	137	192			
9/25/2018				6.1	1	1.5
3/27/2019	65.9	146	188			
4/2/2019				5.1		
4/3/2019					0.82 (J)	1.3
9/25/2019				5.5		
9/26/2019					0.64 (J)	1
10/8/2019	52.3	142				
10/9/2019			183			
3/17/2020	71.6	121	161			
3/24/2020				5.4	<1	0.99 (J)
9/22/2020	51.5	130				
9/23/2020			170	5.1	0.53 (J)	1.1
3/1/2021	51.6	119	159			
3/3/2021				5.2	<1	1
8/19/2021	52.6	115	149			
8/26/2021						1.2
8/27/2021				5.3	0.59 (J)	
2/8/2022	50.9					
2/9/2022		121	164	4.8	0.51 (J)	1.1

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:04 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)
8/30/2022				4.7	0.78 (J)	1.3
8/31/2022	48	130	177			
2/7/2023				4.9	0.78 (J)	1.2
2/8/2023	50.5	130				
2/9/2023			193			
8/15/2023	47.7	113	154	4.6	0.51 (J)	0.88 (J)

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:04 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					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		5				
9/3/2021				21.3		
2/8/2022			14.6	17.9		
2/9/2022	<1	3.9				
2/10/2022						4.9
2/11/2022					7.7	
8/30/2022		3.2				5.7
8/31/2022	<1		10.9	17.9	8	
2/7/2023	<1	3.8	9.7			5.2
2/8/2023				17.5		
2/9/2023					8.9	
8/15/2023	<1	4.1	7.6	16.4	7.5	4.8

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			8.1		5.3	
3/19/2020				10		12.4
3/24/2020	2.1					
9/22/2020	2.1	145				
9/23/2020				8.1	3.4	11.8
9/25/2020			6.1			
3/2/2021	2.3	156	6			
3/3/2021				9	4.4	10.6
8/19/2021			6.7	8.9	4.9	
8/20/2021		121				
8/26/2021	2.4					
8/27/2021						16.7
2/8/2022		107				
2/9/2022				9.3	5.1	18
2/10/2022	2.4		6.2			
8/30/2022	2.4	101		10.2		20.1
8/31/2022			5.8		4.8	
2/7/2023		82.4		10.6	6.6	17.8
2/8/2023			6.1			
2/9/2023	2.9					
8/15/2023	2.2	74.2	6	9.6	4.6	17.2

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:04 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	<1.5				
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	<1.5				
7/13/2017				630	
10/4/2017	1.4	6.2	12		
10/11/2017				540	
4/4/2018				430	
6/7/2018		6.7			
6/8/2018			9.6		
6/11/2018	1.1				
9/19/2018				395	
10/1/2018		7.1	9.1		
10/2/2018	1				
3/27/2019				437	
4/1/2019	0.96 (J)	7.2	8.5		
9/25/2019	0.81 (J)	7	13.8		
10/9/2019				<1	
3/17/2020				439	
3/19/2020	1.6	9	12.9		
7/6/2020				385	
8/27/2020					144
8/28/2020				394	
9/22/2020					156
9/23/2020		6.9	16.8	430	
9/24/2020	0.69 (J)				
10/7/2020				427	156
11/12/2020				385	147
3/1/2021	0.88 (J)				139
3/2/2021				387	
3/3/2021		7	9.6		
8/19/2021	1	7.5			
8/20/2021					122
8/27/2021			18.2	423	
2/9/2022		7.2	16	415	119
2/11/2022	2.8				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
8/31/2022	1.1	6.9	13.9	459	122
2/8/2023	0.96 (J)	7.5	14.7		
2/10/2023				517	114
8/15/2023		6.8		419	96.5
8/16/2023	0.9 (J)		20.3		

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					<0.001	<0.001
6/7/2016				<0.001		
7/27/2016				<0.001	<0.001	<0.001
8/30/2016	<0.001					
8/31/2016		<0.001	<0.001			
9/16/2016				<0.001		<0.001
9/19/2016					<0.001	
11/3/2016				<0.001	<0.001	<0.001
11/14/2016	<0.001		<0.001			
11/15/2016		<0.001				
1/11/2017				<0.001	<0.001	<0.001
2/24/2017	<0.001					
2/27/2017			<0.001			
2/28/2017		<0.001				
3/1/2017					<0.001	<0.001
3/2/2017				<0.001		
4/26/2017					<0.001	<0.001
5/2/2017				<0.001		
5/8/2017	<0.001	<0.001				
5/9/2017			<0.001			
6/28/2017					<0.001	<0.001
6/29/2017				<0.001		
7/11/2017	<0.001					
7/13/2017		<0.001	<0.001			
10/10/2017	<0.001	<0.001	<0.001			
3/28/2018				<0.001	<0.001	<0.001
4/2/2018	<0.001					
4/3/2018			<0.001			
4/4/2018		<0.001				
9/19/2018	<0.001	<0.001	<0.001			
3/5/2019				<0.001		<0.001
3/6/2019					<0.001	
4/2/2019				<0.001		
4/3/2019					<0.001	<0.001
8/20/2019	5.8E-05 (J)	<0.001	<0.001			
9/25/2019				<0.001		
9/26/2019					<0.001	<0.001
10/8/2019	8.4E-05 (J)	<0.001				
10/9/2019			<0.001			
2/11/2020				<0.001	<0.001	<0.001
3/17/2020	<0.001	8E-05 (J)	<0.001			
3/24/2020				<0.001	<0.001	<0.001
8/27/2020	<0.001	<0.001				
8/28/2020			<0.001			
9/23/2020				<0.001	<0.001	<0.001
2/9/2021					<0.001	<0.001
8/19/2021	<0.001	<0.001	<0.001			
2/8/2022	<0.001					
2/9/2022		<0.001	<0.001	<0.001	<0.001	<0.001
8/30/2022				<0.001	<0.001	<0.001
8/31/2022	<0.001	<0.001	<0.001			
2/7/2023				<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
2/8/2023	<0.001	<0.001				
2/9/2023			<0.001			
8/15/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016					<0.001	<0.001
6/7/2016	<0.001	<0.001				
7/26/2016					<0.001	<0.001
7/27/2016	<0.001					
7/28/2016		<0.001				
9/14/2016					<0.001	<0.001
9/19/2016	<0.001	<0.001				
11/2/2016	<0.001				<0.001	<0.001
11/3/2016		<0.001				
1/12/2017						<0.001
1/13/2017	<0.001	<0.001			<0.001	
3/6/2017	<0.001	<0.001			<0.001	
3/7/2017						<0.001
4/26/2017	<0.001	<0.001				
5/1/2017					<0.001	<0.001
6/27/2017						<0.001
6/29/2017	<0.001	<0.001			<0.001	
10/11/2017			<0.001			
10/12/2017				<0.001		
11/20/2017			<0.001	<0.001		
1/10/2018				<0.001		
1/11/2018			<0.001			
2/19/2018				<0.001		
2/20/2018			<0.001			
3/29/2018	<0.001	<0.001			<0.001	<0.001
4/3/2018			<0.001	<0.001		
6/28/2018			<0.001	<0.001		
8/7/2018			<0.001	<0.001		
9/24/2018			<0.001	<0.001		
9/25/2018		<0.001				
3/4/2019					<0.001	<0.001
3/5/2019	<0.001	<0.001				
4/2/2019		<0.001				
4/3/2019	<0.001				<0.001	<0.001
8/21/2019			<0.001	<0.001		
9/24/2019		<0.001				<0.001
9/25/2019	<0.001				<0.001	
2/12/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
3/24/2020	<0.001	<0.001		<0.001		<0.001
3/25/2020			<0.001		<0.001	
9/22/2020					<0.001	<0.001
9/24/2020	<0.001	<0.001	<0.001	<0.001		
2/8/2021						<0.001
2/9/2021	<0.001	<0.001			<0.001	
2/10/2021			<0.001	<0.001		
2/8/2022			<0.001	<0.001		
2/9/2022	<0.001	<0.001				
2/10/2022						<0.001
2/11/2022					<0.001	
8/30/2022		<0.001				<0.001
8/31/2022	<0.001		<0.001	<0.001	<0.001	
2/7/2023	<0.001	<0.001	<0.001			<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/9/2023 6:04 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)
2/8/2023				<0.001		
2/9/2023					<0.001	
8/15/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/9/2023 6:04 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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/27/2018			<0.001		<0.001	
3/28/2018						<0.001
3/29/2018	<0.001			<0.001		
8/6/2018		<0.001				
2/25/2019		<0.001				
2/26/2019			<0.001			
2/27/2019				<0.001	<0.001	<0.001
3/4/2019	<0.001					
4/3/2019	<0.001					
6/12/2019		<0.001				
8/19/2019		5.5E-05 (J)				
9/24/2019	<0.001					
10/8/2019		<0.001				
2/10/2020				<0.001	5.5E-05 (J)	
2/11/2020						<0.001
2/12/2020	<0.001		8.9E-05 (J)			
3/17/2020		<0.001				
3/18/2020			<0.001		<0.001	
3/19/2020				<0.001		<0.001
3/24/2020	<0.001					
8/26/2020		<0.001				
9/22/2020	<0.001	<0.001				
9/23/2020				<0.001	<0.001	<0.001
9/25/2020			<0.001			
2/8/2021	<0.001					
2/10/2021			<0.001			<0.001
2/12/2021				<0.001	<0.001	
3/2/2021		<0.001				
8/20/2021		<0.001				
2/8/2022		<0.001				
2/9/2022				<0.001	<0.001	<0.001
2/10/2022	<0.001		<0.001			
8/30/2022	<0.001	<0.001		<0.001		<0.001
8/31/2022			<0.001		<0.001	
2/7/2023		<0.001		<0.001	<0.001	<0.001
2/8/2023			<0.001			
2/9/2023	<0.001					
8/15/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			<0.001		
6/2/2016	<0.001	<0.001			
7/25/2016	<0.001		<0.001		
7/26/2016		0.0001 (J)			
9/1/2016				<0.001	
9/14/2016			<0.001		
9/15/2016		<0.001			
9/19/2016	<0.001				
11/1/2016	<0.001	<0.001	<0.001		
11/16/2016				<0.001	
1/11/2017		<0.001	<0.001		
1/16/2017	<0.001				
2/21/2017	<0.001				
2/27/2017				<0.001	
3/1/2017			<0.001		
3/2/2017		<0.001			
4/26/2017	<0.001	<0.001	<0.001		
5/8/2017				<0.001	
6/28/2017		<0.001	<0.001		
6/30/2017	<0.001				
7/13/2017				<0.001	
10/11/2017				<0.001	
3/27/2018	<0.001				
3/28/2018		<0.001	<0.001		
4/4/2018				<0.001	
9/19/2018				<0.001	
2/26/2019	<0.001				
2/27/2019		<0.001	<0.001		
8/21/2019				<0.001	
10/9/2019				<0.001	
2/11/2020			<0.001		
2/12/2020	<0.001	<0.001			
3/17/2020				<0.001	
3/19/2020	<0.001	<0.001	<0.001		
7/6/2020				7.3E-05 (J)	
8/27/2020					<0.001
8/28/2020				<0.001	
9/23/2020		<0.001	0.00016 (J)		
9/24/2020	<0.001				
11/12/2020				<0.001	<0.001
2/10/2021		<0.001	<0.001		
2/11/2021	<0.001				
8/20/2021					<0.001
8/27/2021				<0.001	
2/9/2022		<0.001	<0.001	<0.001	<0.001
2/11/2022	<0.001				
8/31/2022	<0.001	<0.001	<0.001	<0.001	<0.001
2/8/2023	<0.001	<0.001	<0.001		
2/10/2023				<0.001	<0.001
8/15/2023		<0.001		<0.001	<0.001
8/16/2023	<0.001		<0.001		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-47 (bg)	YGWC-44	YGWC-45	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)
6/6/2016					120	58
6/7/2016				28		
7/27/2016				74	94	35
8/30/2016	319					
8/31/2016		332	402			
9/16/2016				67		35
9/19/2016					92	
11/3/2016				41	104	48
11/14/2016	280		445			
11/15/2016		356				
1/11/2017				104	133	95
2/24/2017	162					
2/27/2017			346			
2/28/2017		483				
3/1/2017					119	79
3/2/2017				77		
4/26/2017					162	36
5/2/2017				142		
5/8/2017	194	296				
5/9/2017			388			
6/28/2017					98	45
6/29/2017				53		
7/11/2017	193					
7/13/2017		345	433			
10/4/2017				61		45
10/5/2017					104	
10/10/2017	175	311	396			
4/2/2018	192					
4/3/2018			418			
4/4/2018		313				
6/7/2018					68	
6/11/2018				70		74
9/19/2018	186	326	413			
9/25/2018				86	109	63
3/27/2019	170	302	383			
4/2/2019				72		
4/3/2019					89	63
9/25/2019				81		
9/26/2019					126	72
10/8/2019	172	324				
10/9/2019			432			
3/17/2020	165	283	391			
3/24/2020				71	91	59
9/22/2020	141	294				
9/23/2020			404	99	103	81
3/1/2021	145	276	379			
3/3/2021				57	95	37
8/19/2021	134	333	391			
8/26/2021						31
8/27/2021				93	112	
2/8/2022	151					
2/9/2022		311	400	81	103	60

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/9/2023 6:04 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)
8/30/2022				81	100	52
8/31/2022	116	343	445			
2/7/2023				78	96	55
2/8/2023	141	337				
2/9/2023			394			
8/15/2023	186	319	404	74	96	81

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
9/1/2021		137				
9/3/2021				88		
2/8/2022			248	93		
2/9/2022	72	131				
2/10/2022						127
2/11/2022					102	
8/30/2022		122				148
8/31/2022	62		242	92	92	
2/7/2023	89	163	224			180
2/8/2023				115		
2/9/2023					124	
8/15/2023	62	126	225	83	99	219

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/9/2023 6:04 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 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/18/2020			57		35	
3/19/2020				116		148
3/24/2020	68					
9/22/2020	75	281				
9/23/2020				108	15	161
9/25/2020			54			
3/2/2021	67	296	67			
3/3/2021				99	39	138
8/19/2021			54	105	44	
8/20/2021		254				
8/26/2021	86					
8/27/2021						150
2/8/2022		283				
2/9/2022				105	57	156
2/10/2022	77		56			
8/30/2022	86	244		116		153
8/31/2022			51		46	
2/7/2023		207		131	121	159
2/8/2023			56			
2/9/2023	59					
8/15/2023	76	230	69	121	65	157

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
6/1/2016			150		
6/2/2016	36	130			
7/25/2016	50		135		
7/26/2016		141			
9/1/2016				1240	
9/14/2016			127		
9/15/2016		153			
9/19/2016	35				
11/1/2016	<25	92	75		
11/16/2016				1220	
1/11/2017		159	148		
1/16/2017	47				
2/21/2017	<25				
2/27/2017				1060	
3/1/2017			182		
3/2/2017		117			
4/26/2017	55	181	92		
5/8/2017				1160	
6/28/2017		169	126		
6/30/2017	42				
7/13/2017				996	
10/4/2017	31	141	147		
10/11/2017				835	
4/4/2018				1470	
6/7/2018		95			
6/8/2018			158		
6/11/2018	59				
9/19/2018				702	
10/1/2018		165	138		
10/2/2018	57				
3/27/2019				641	
4/1/2019	54	149	19 (J)		
9/25/2019	51	157	159		
10/9/2019				809	
3/17/2020				733	
3/19/2020	47	146	148		
7/6/2020				793	
8/27/2020					349
8/28/2020				838	
9/22/2020					296
9/23/2020		157	155	832	
9/24/2020	51				
10/7/2020				842	336
11/12/2020				760	317
3/1/2021	23				265
3/2/2021				782	
3/3/2021		137	111		
8/19/2021	50	144			
8/20/2021					289
8/27/2021			155	810	
2/9/2022		154	145	846	278
2/11/2022	66				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

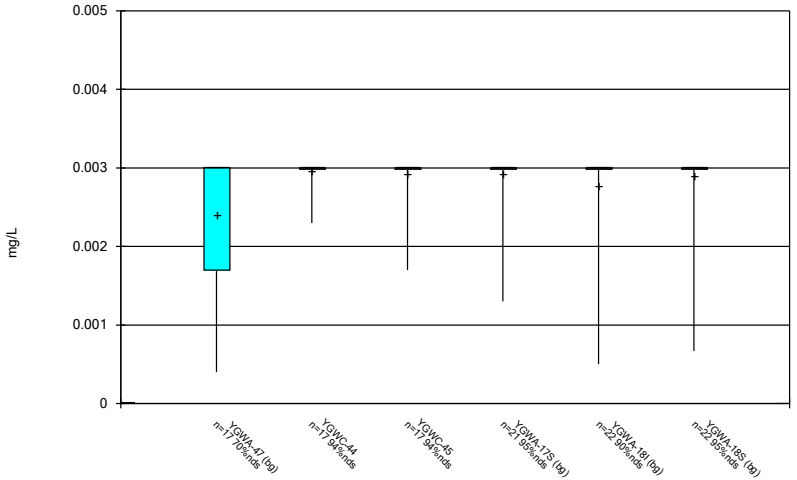
Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/9/2023 6:04 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-46A	YGWC-52
8/31/2022	33	141	137	948	266
2/8/2023	43	144	145		
2/10/2023				995	228
8/15/2023		231		945	267
8/16/2023	48		148		

FIGURE B.

Box & Whiskers Plot



Constituent: Antimony Analysis Run 10/9/2023 6:05 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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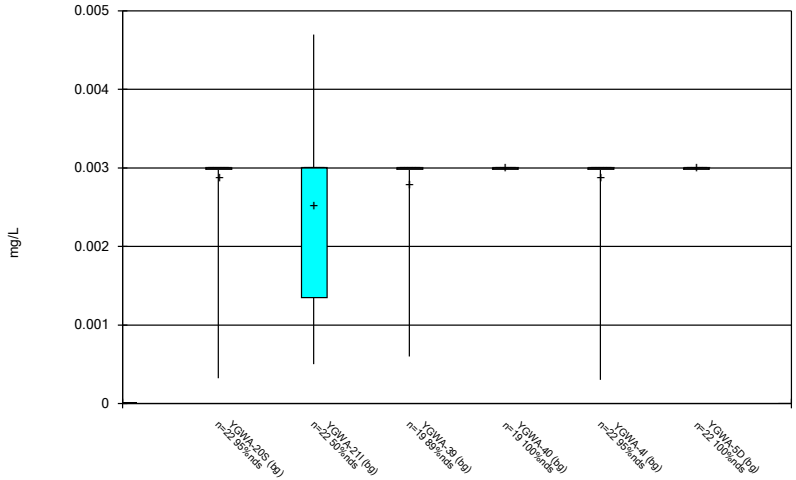
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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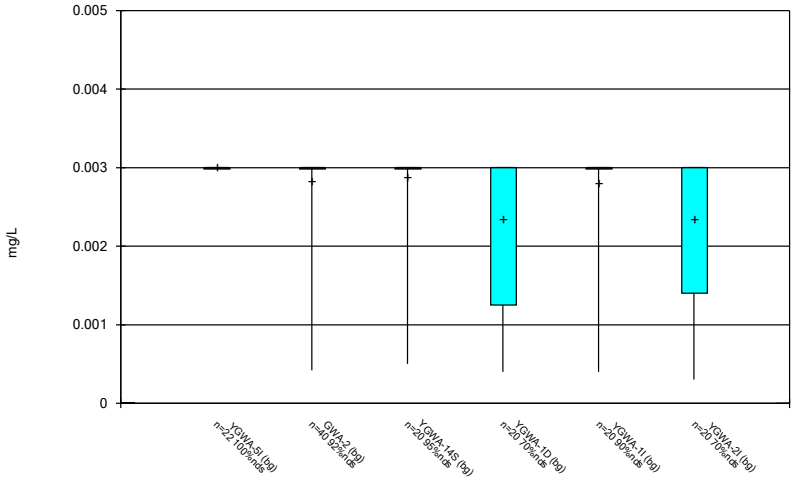
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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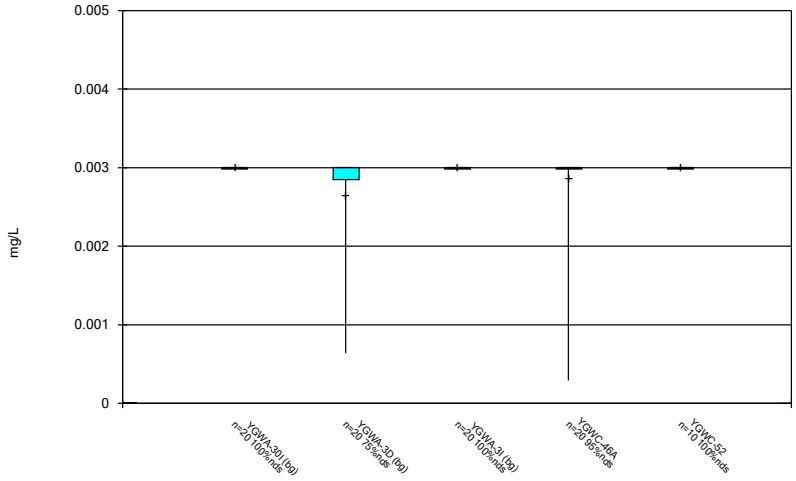
Box & Whiskers Plot



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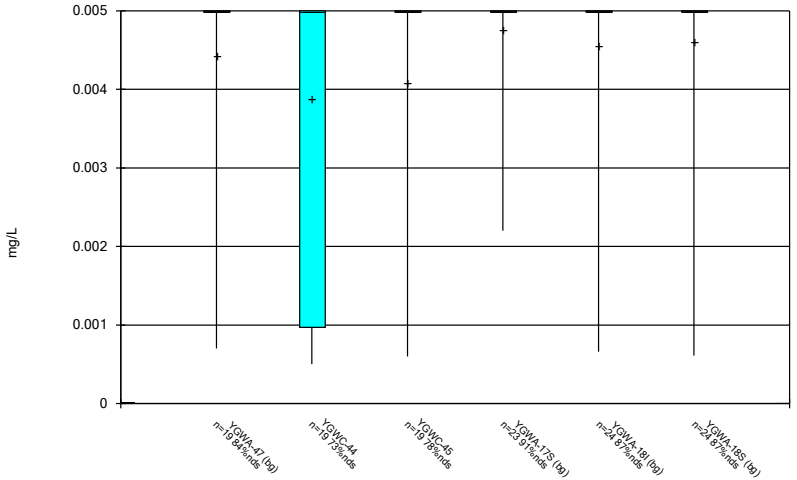
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



Constituent: Arsenic Analysis Run 10/9/2023 6:05 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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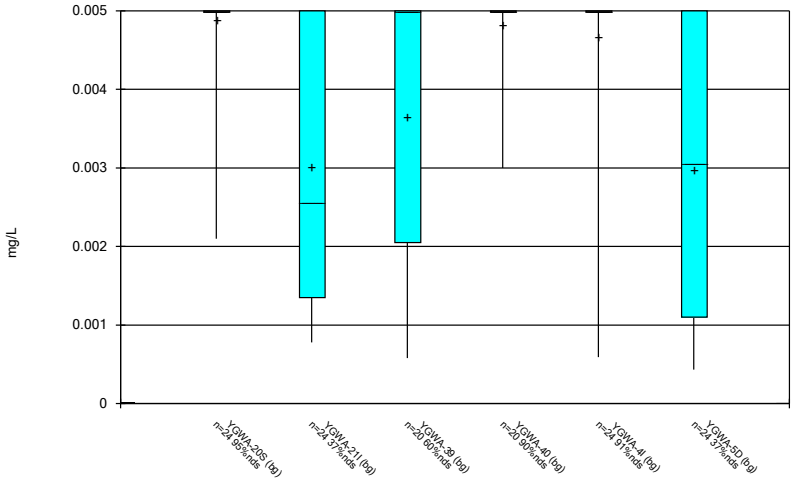
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 10/9/2023 6:05 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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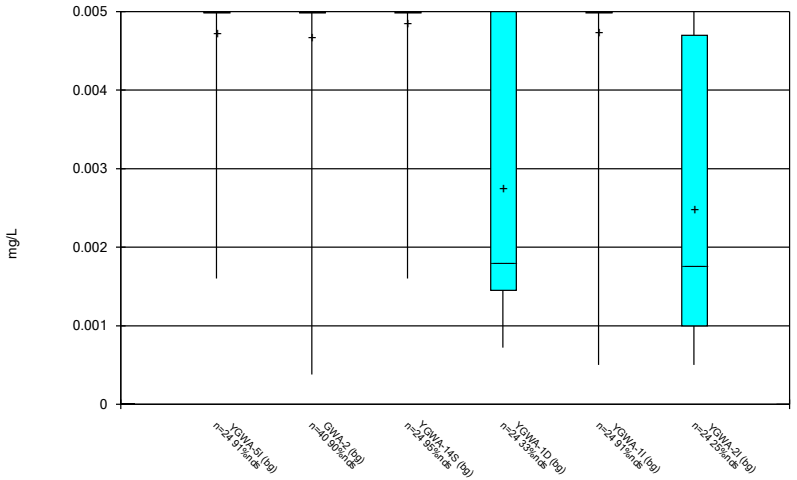
Box & Whiskers Plot



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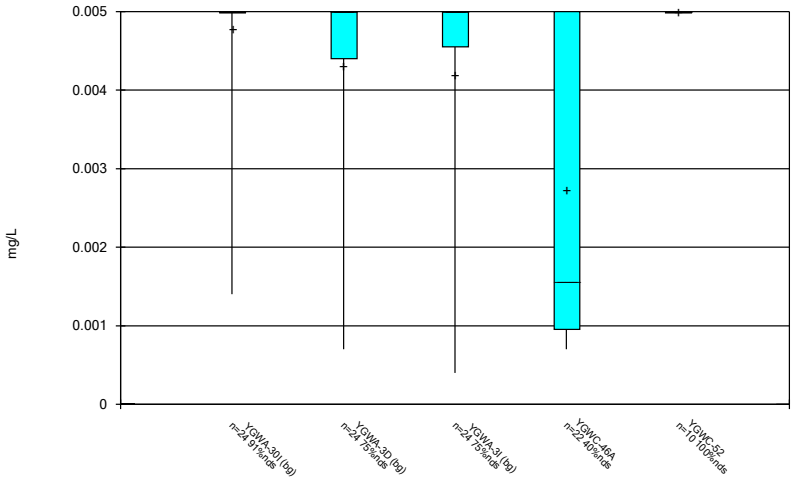
Box & Whiskers Plot



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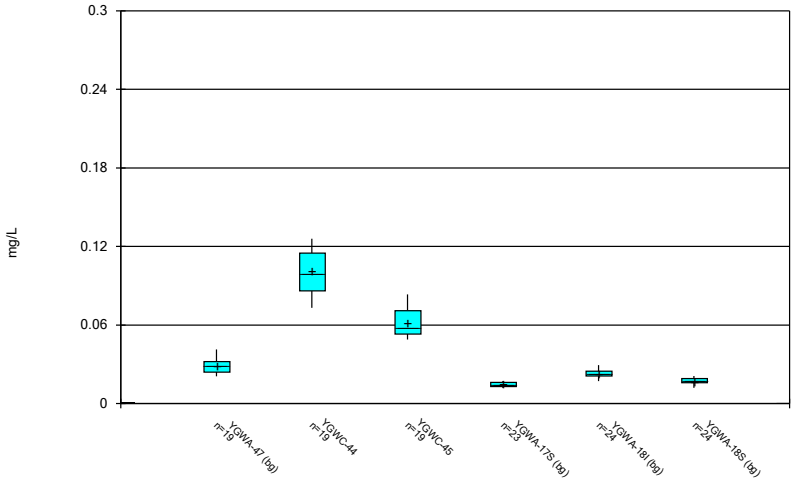
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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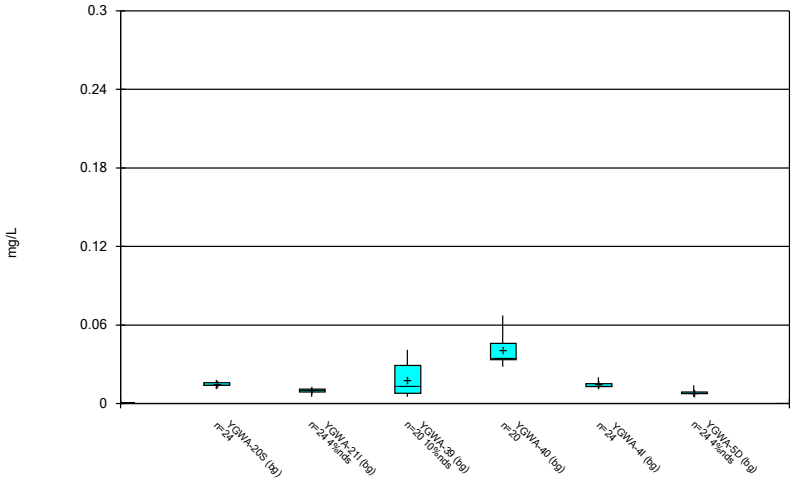
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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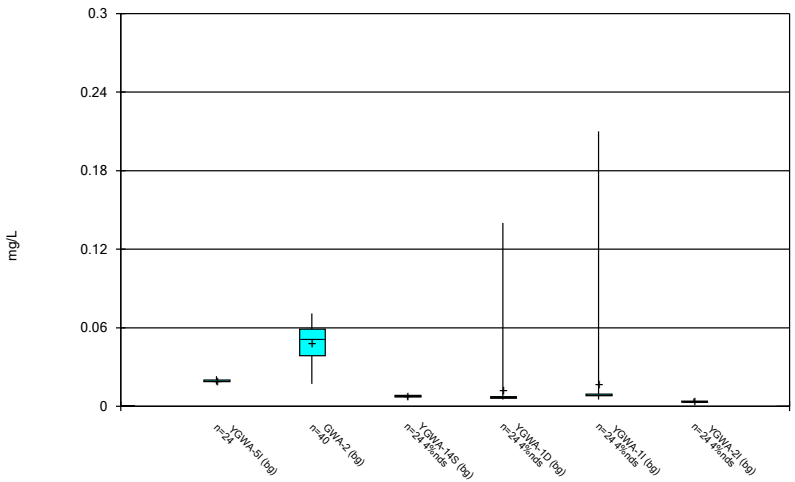
Box & Whiskers Plot



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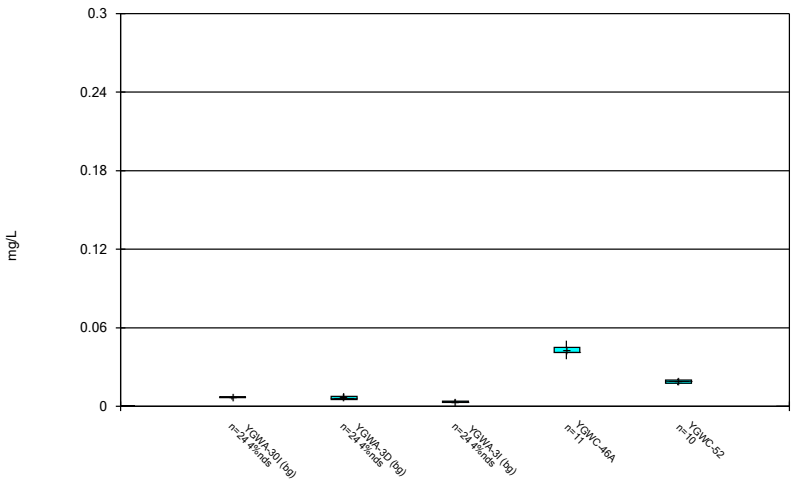
Box & Whiskers Plot



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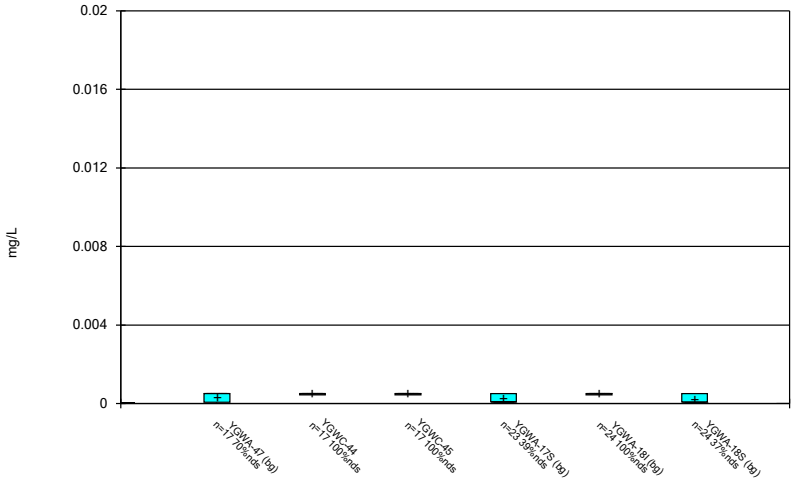
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 10/9/2023 6:05 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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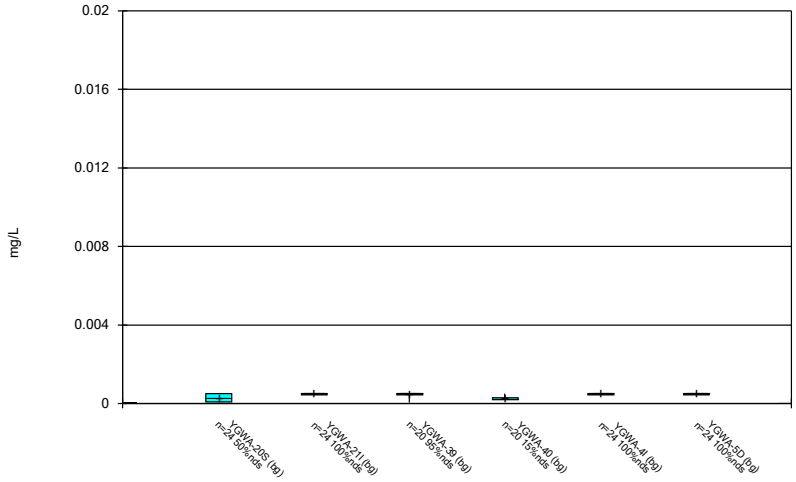
Box & Whiskers Plot



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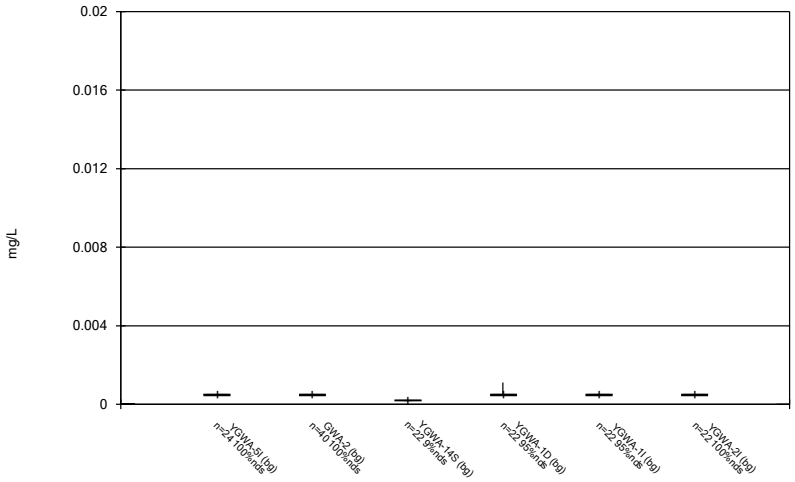
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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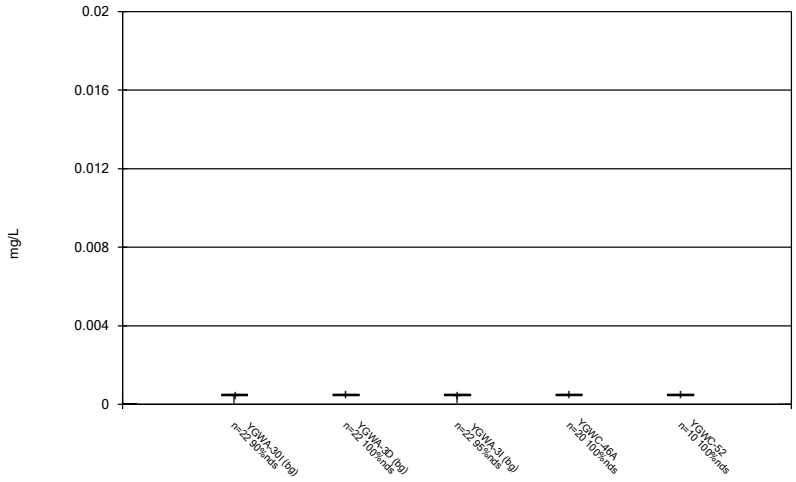

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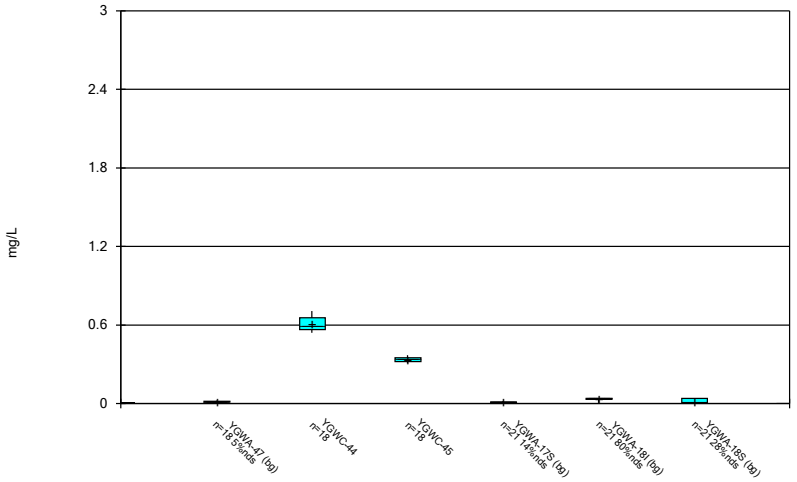
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



Constituent: Boron, total Analysis Run 10/9/2023 6:05 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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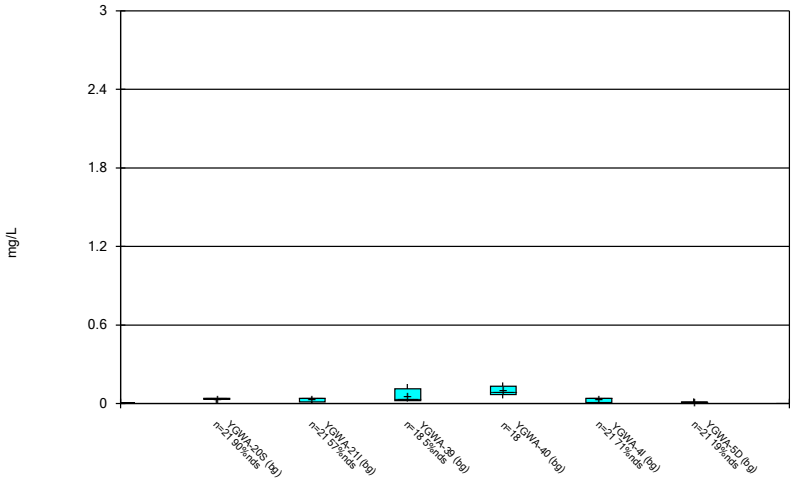
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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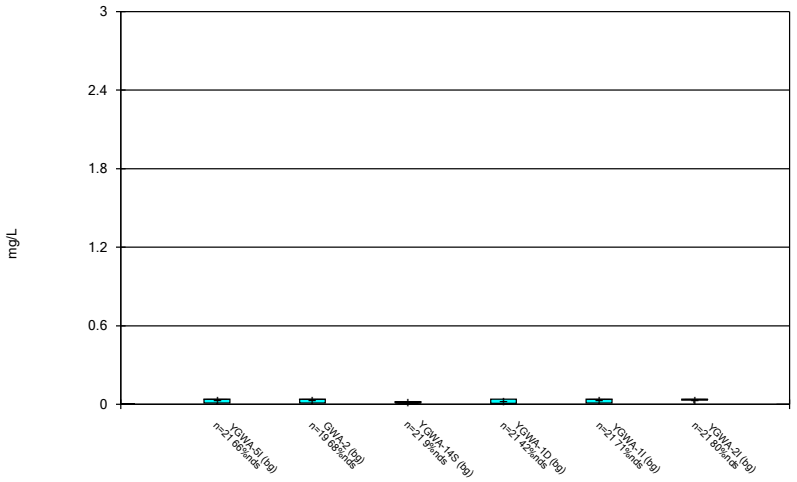
Box & Whiskers Plot



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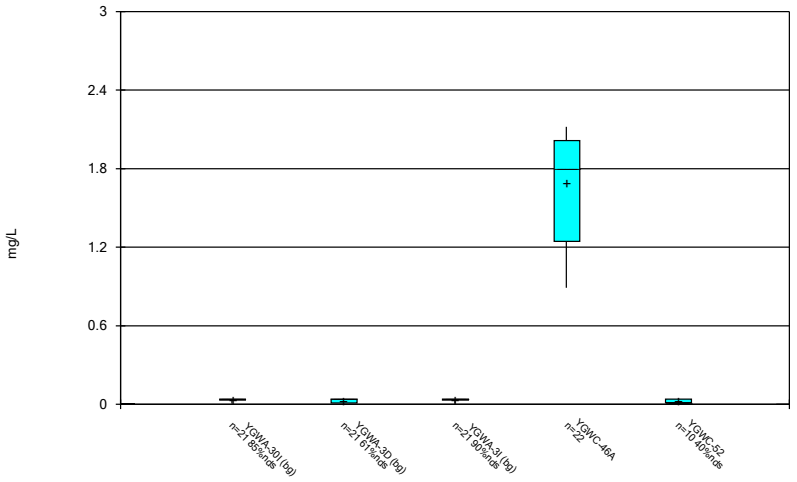
Box & Whiskers Plot



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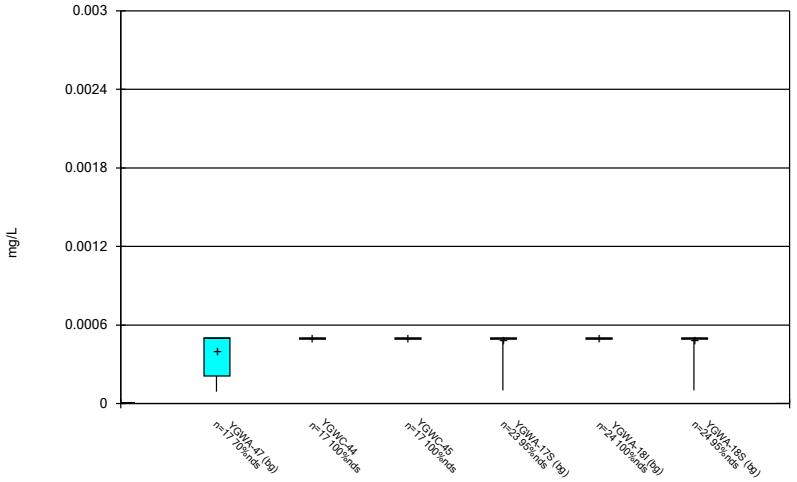
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/9/2023 6:05 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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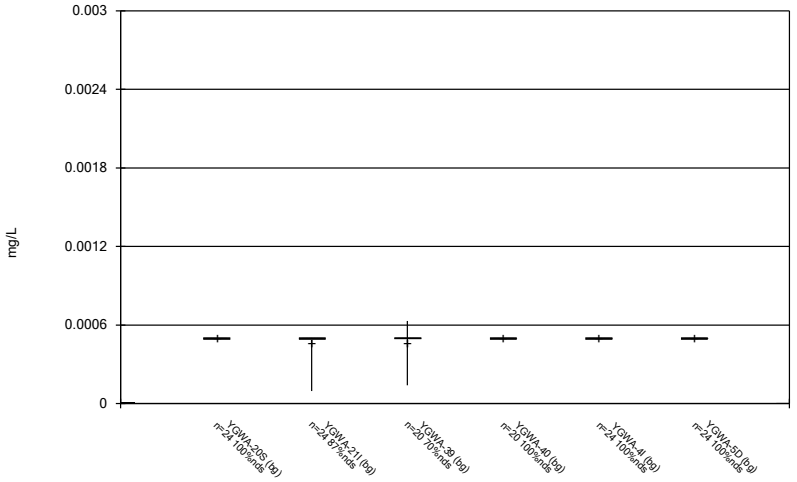
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/9/2023 6:05 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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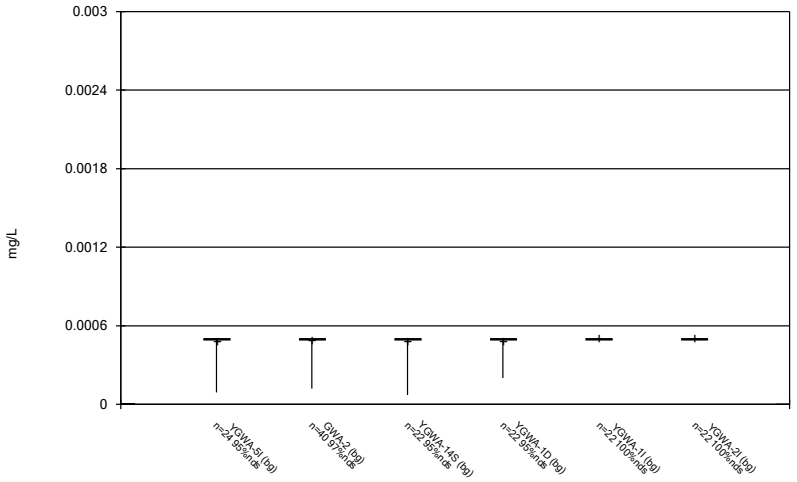
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/9/2023 6:05 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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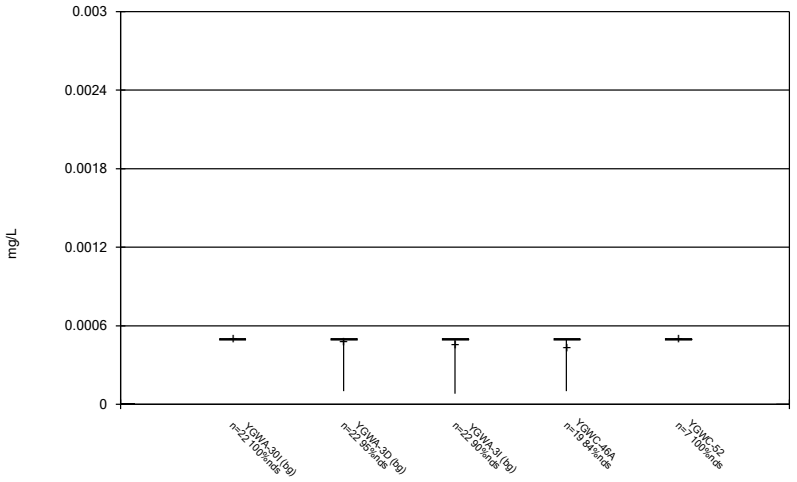
Box & Whiskers Plot



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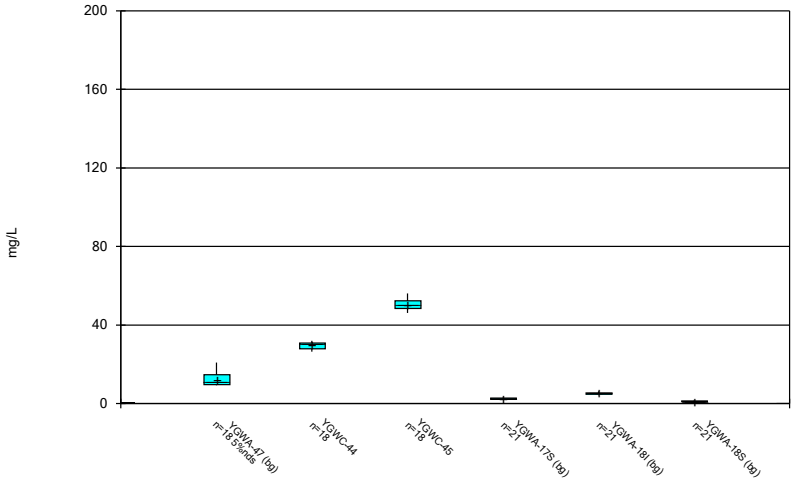
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 10/9/2023 6:05 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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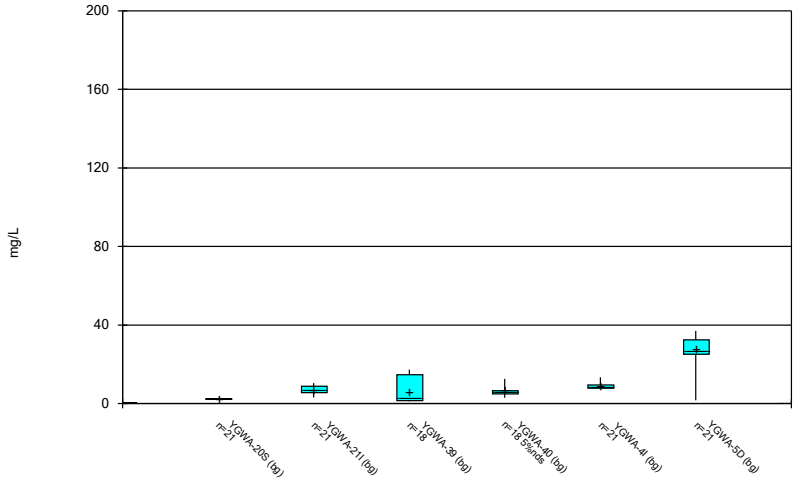
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 10/9/2023 6:05 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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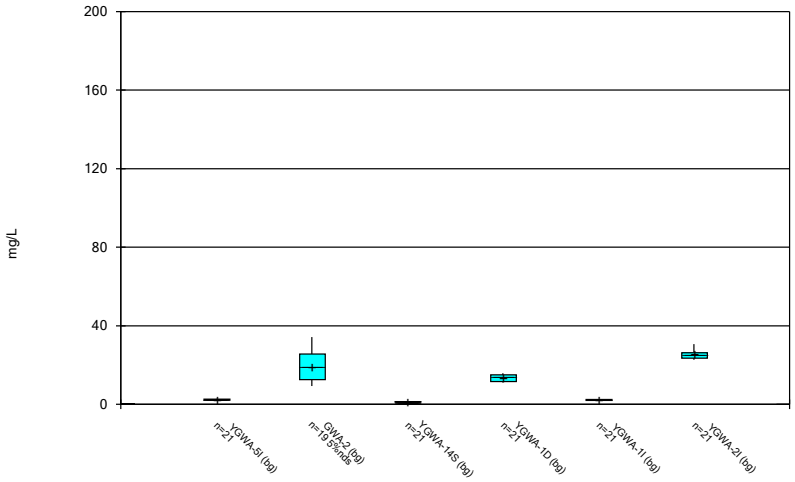
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 10/9/2023 6:05 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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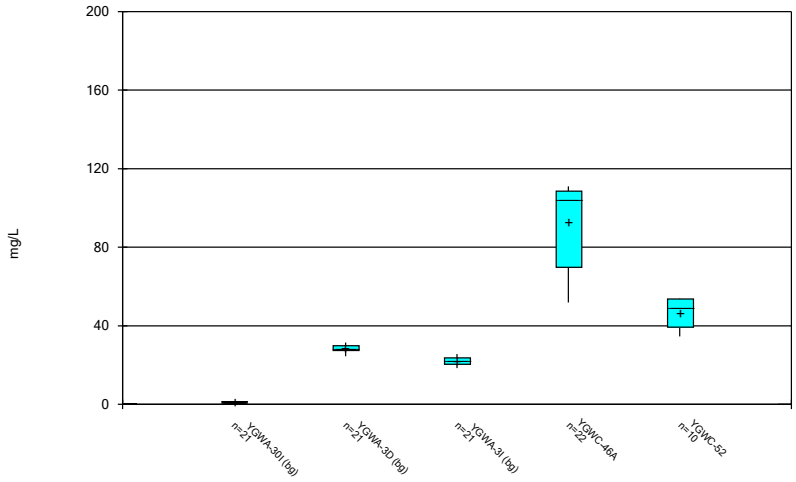
Box & Whiskers Plot



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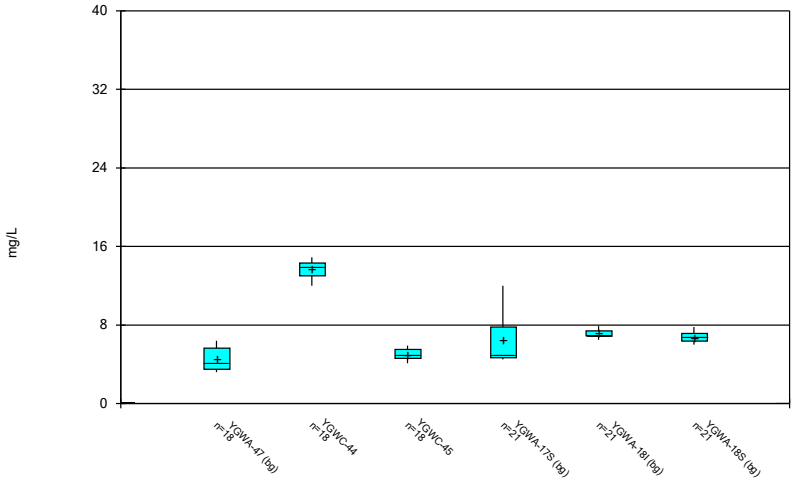
Box & Whiskers Plot



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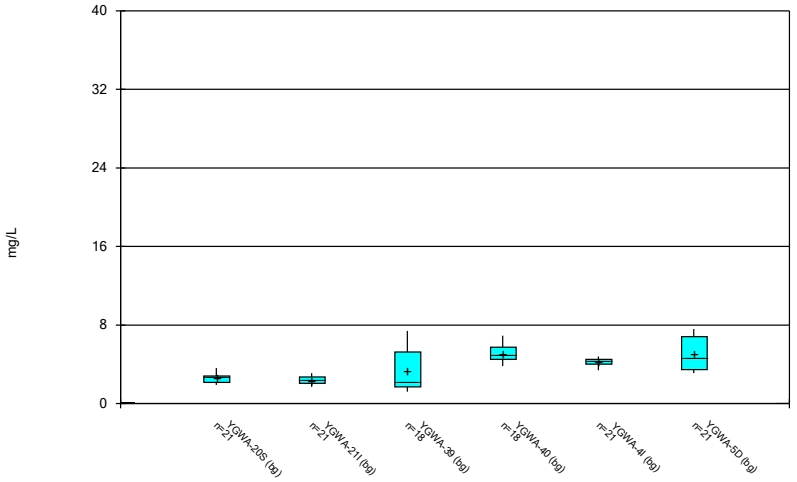
Box & Whiskers Plot



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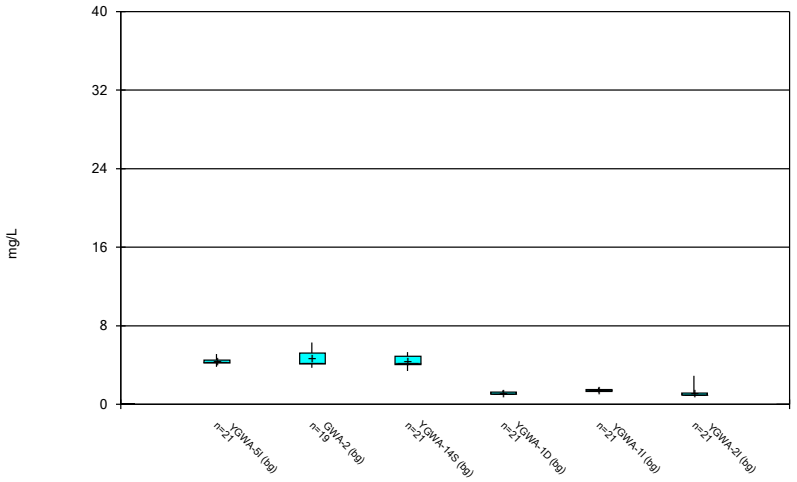
Box & Whiskers Plot



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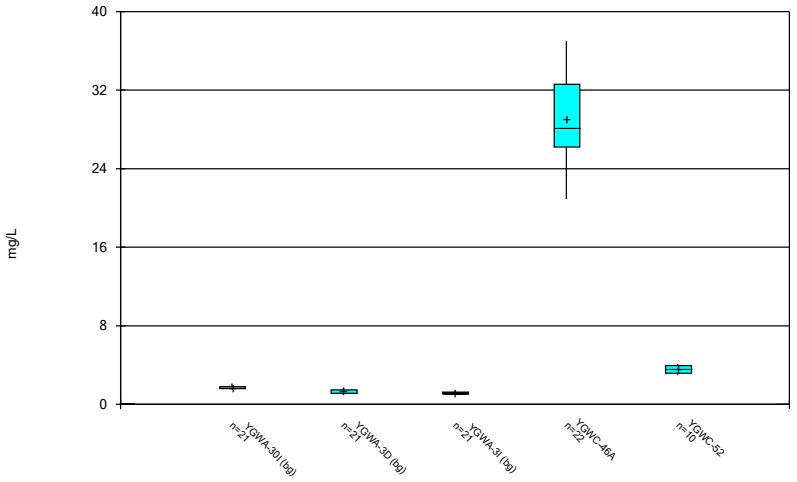
Box & Whiskers Plot



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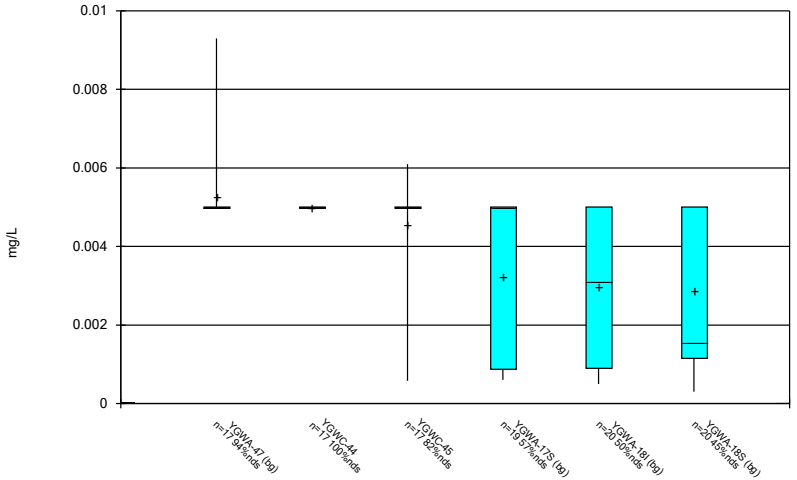
Box & Whiskers Plot



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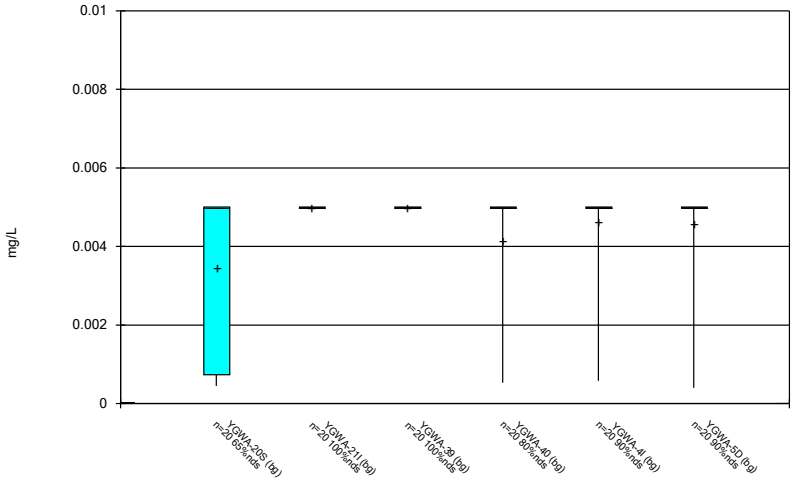
Box & Whiskers Plot



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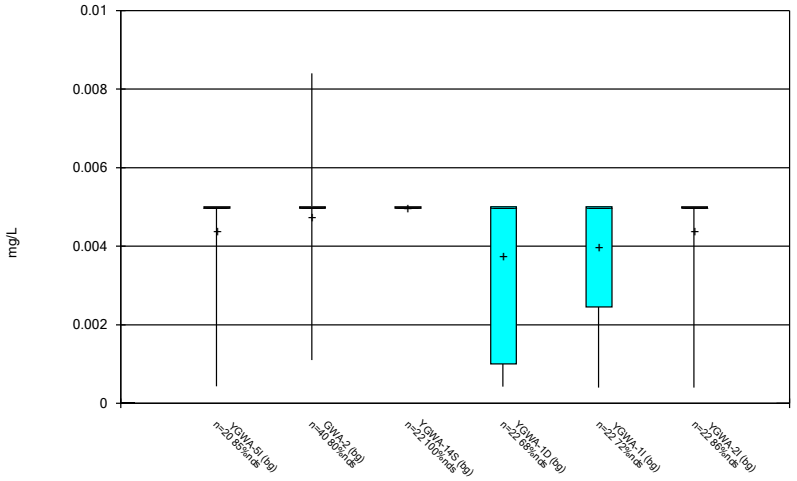
Box & Whiskers Plot



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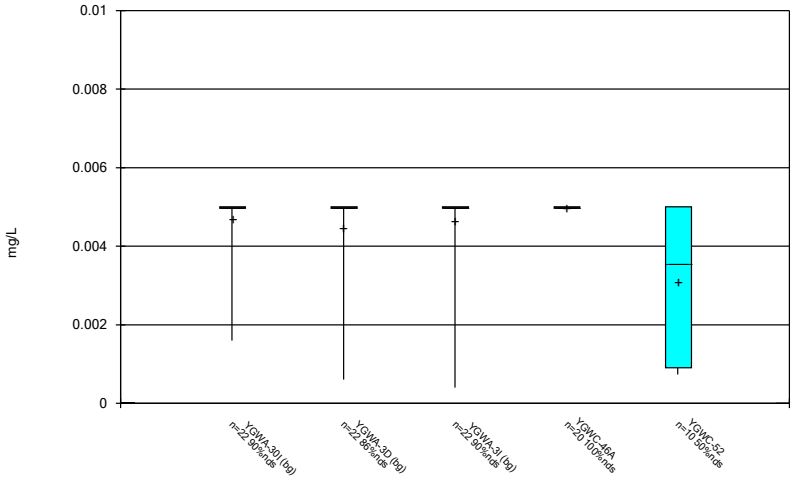
Box & Whiskers Plot



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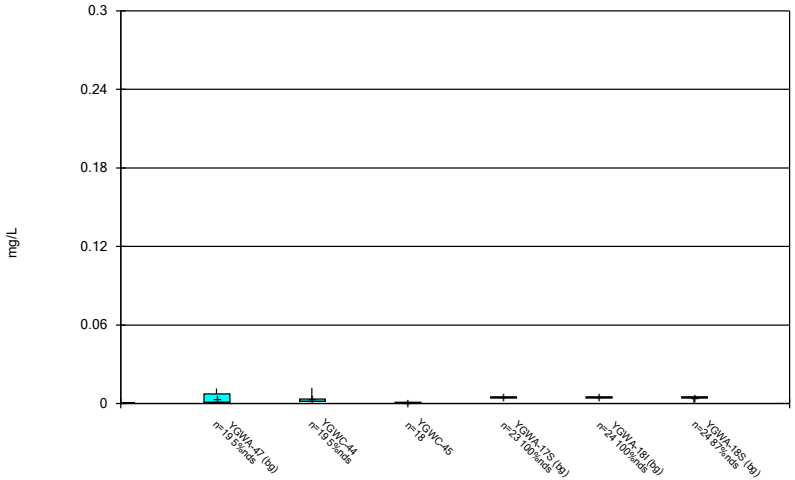
Box & Whiskers Plot



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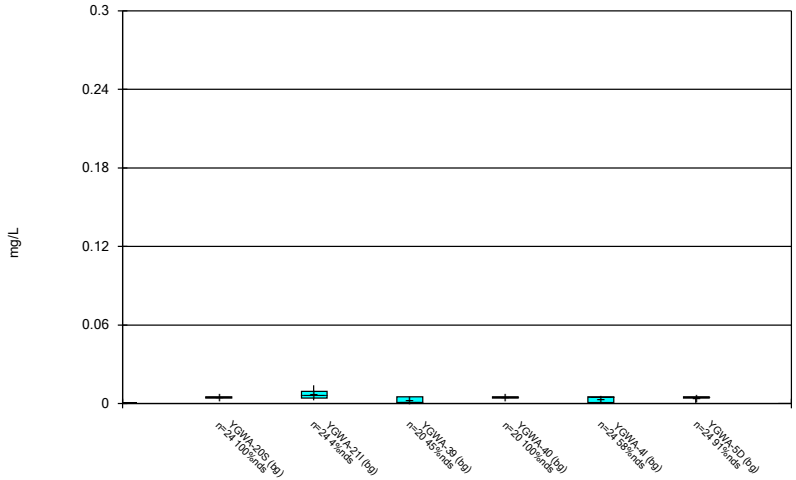
Box & Whiskers Plot



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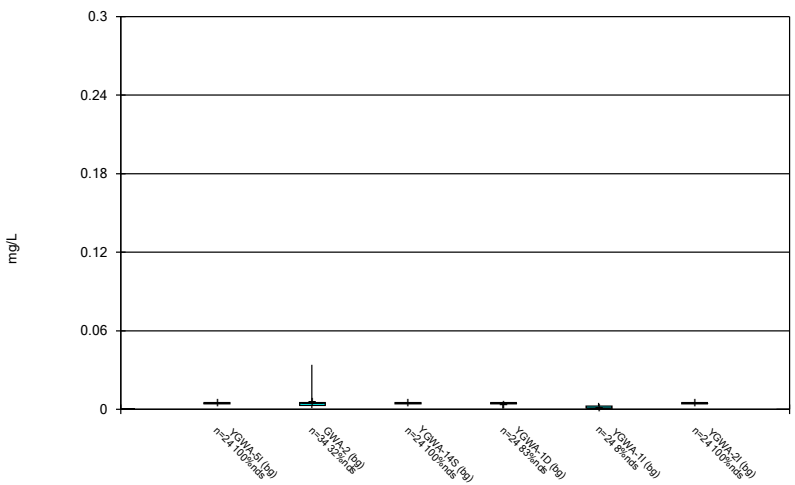
Box & Whiskers Plot



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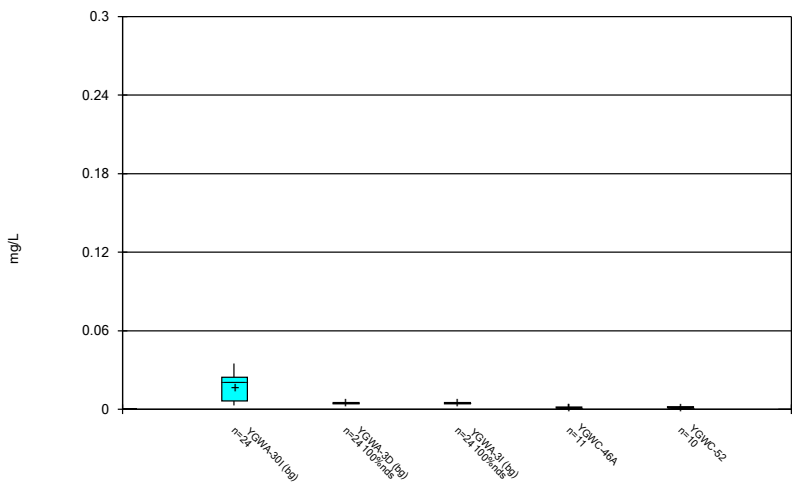
Box & Whiskers Plot



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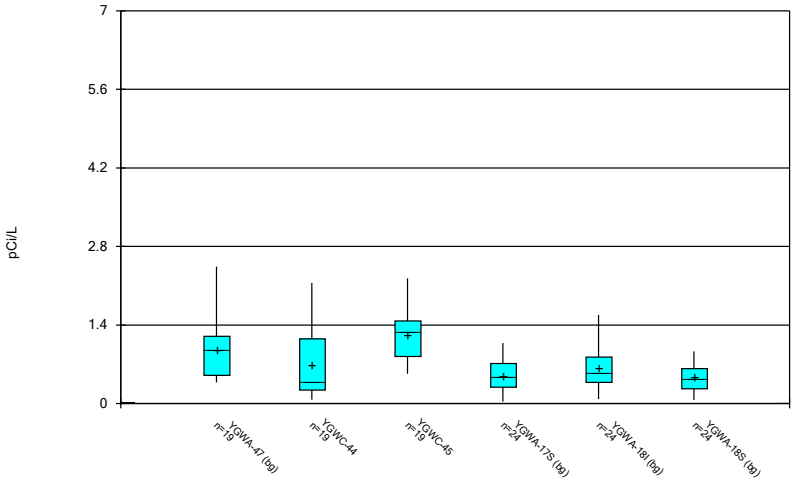
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 10/9/2023 6:05 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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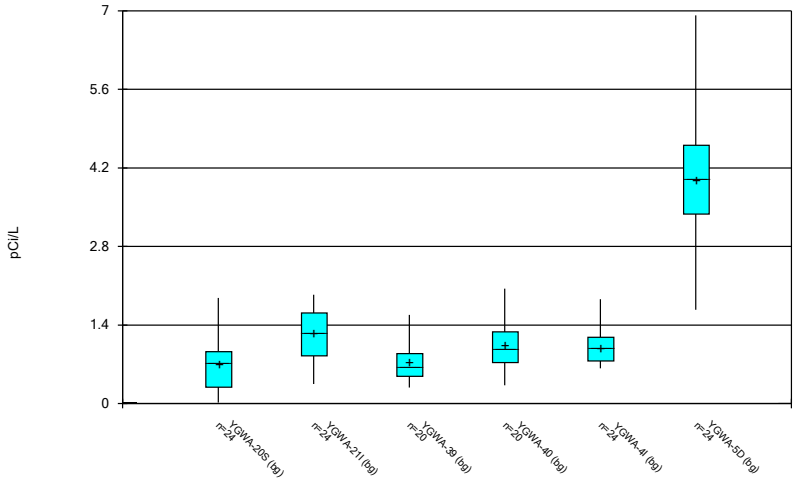
Box & Whiskers Plot



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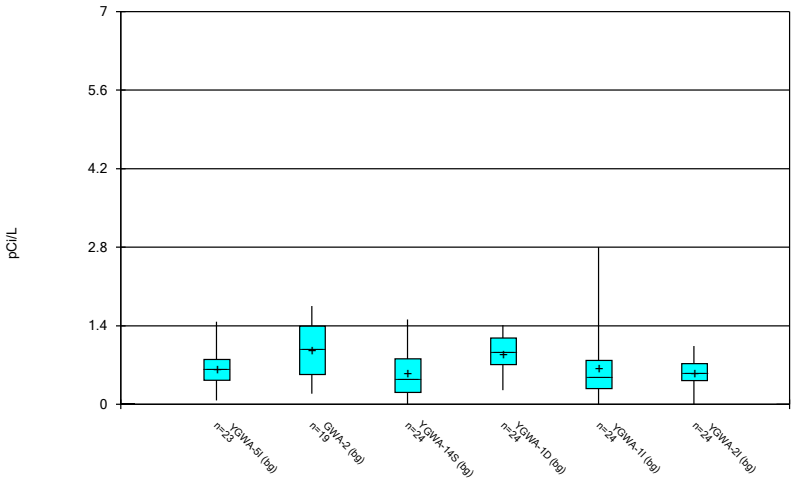

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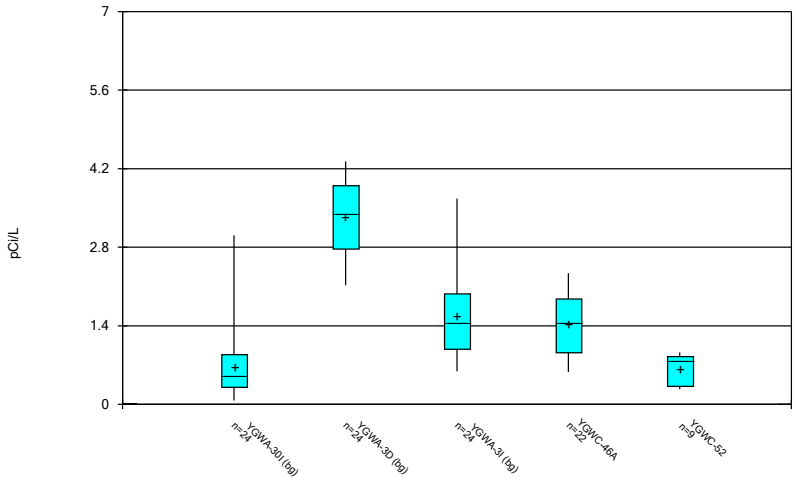
Box & Whiskers Plot



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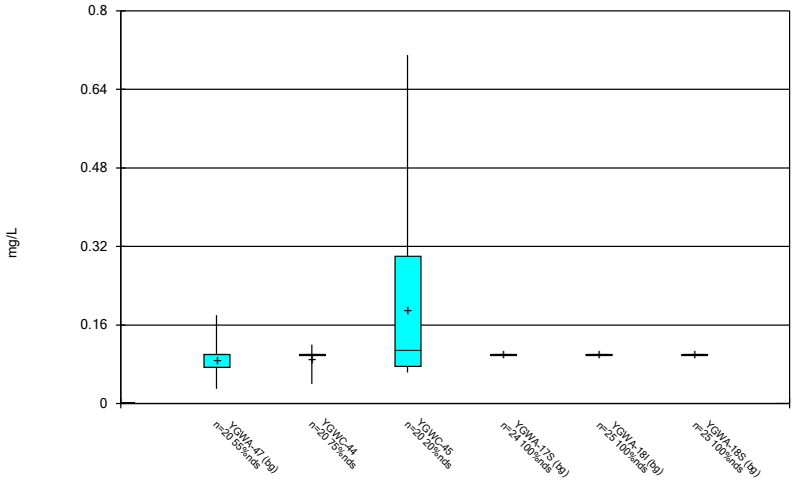

Constituent: Fluoride, total Analysis Run 10/9/2023 6:05 PM
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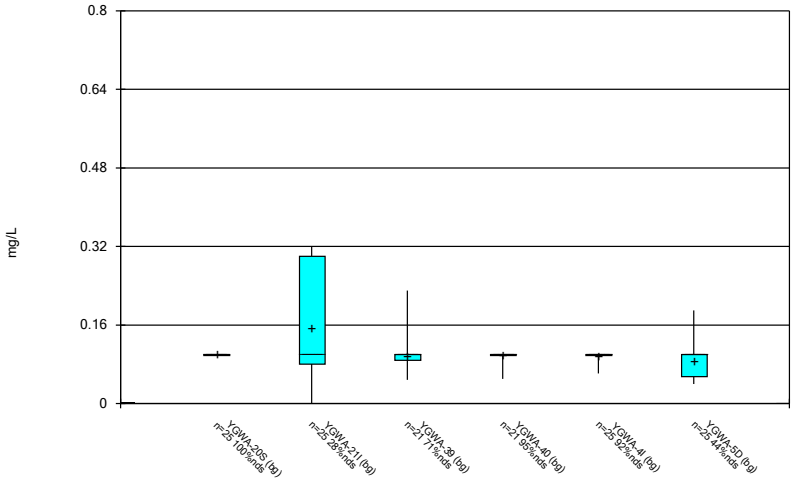
Box & Whiskers Plot



Constituent: Fluoride, total Analysis Run 10/9/2023 6:06 PM
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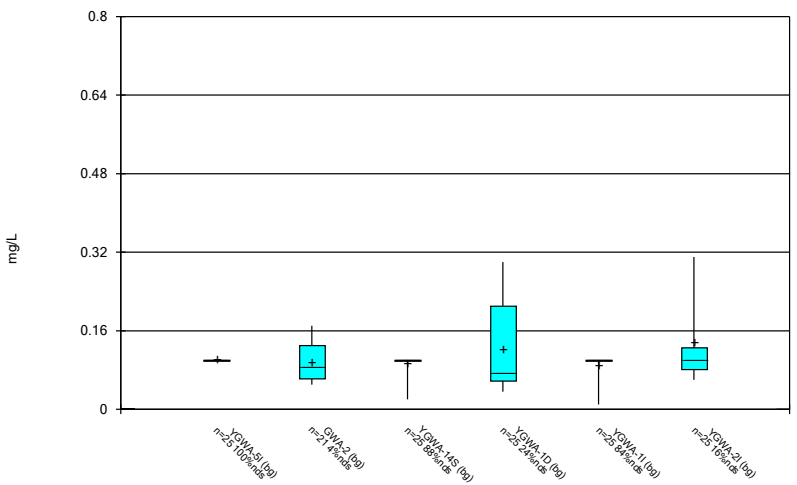

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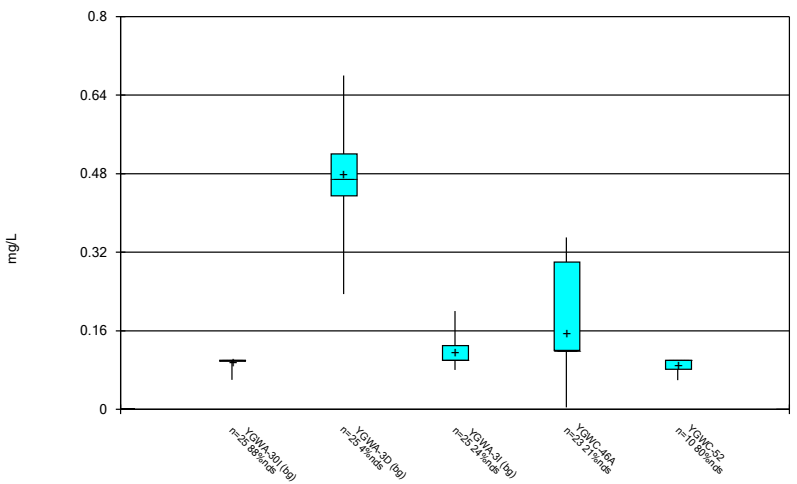
Box & Whiskers Plot



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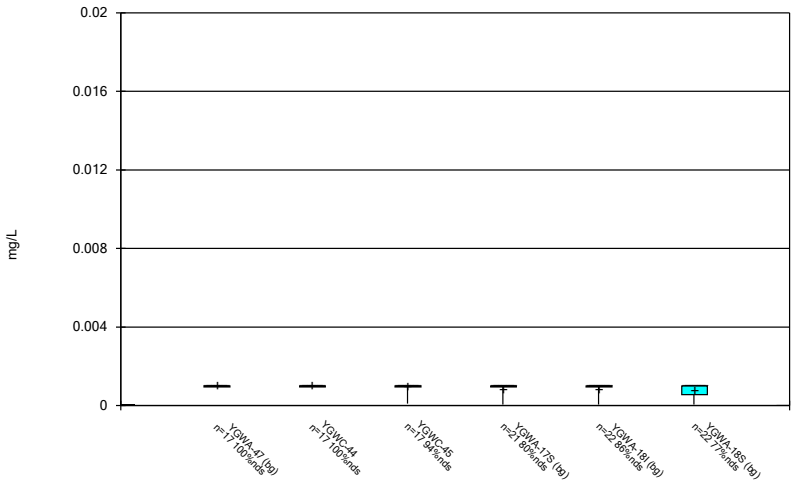

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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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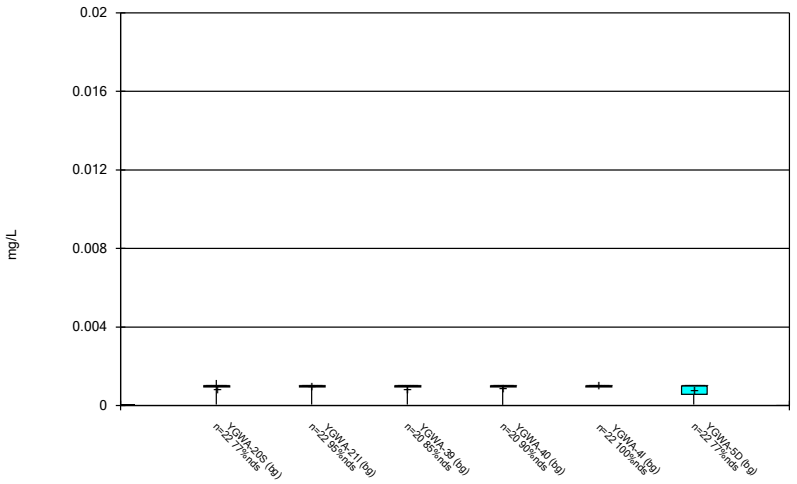
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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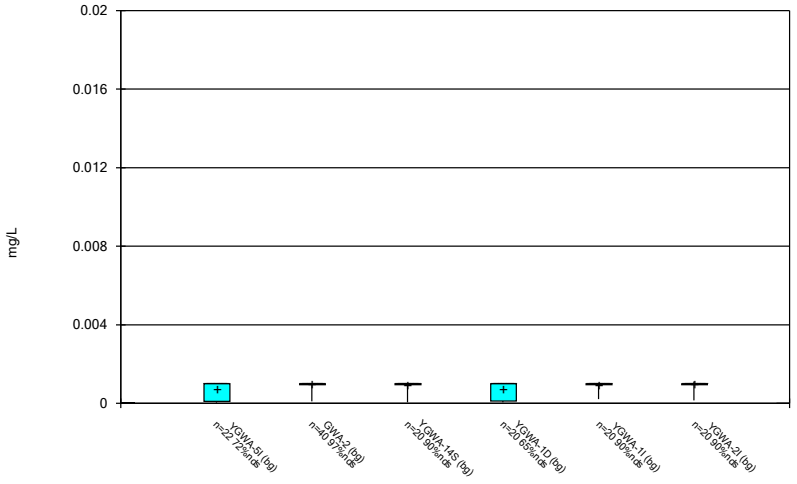

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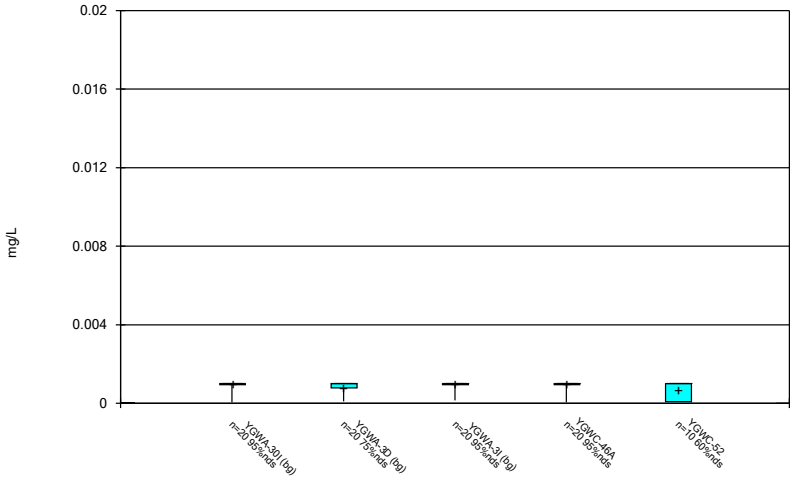

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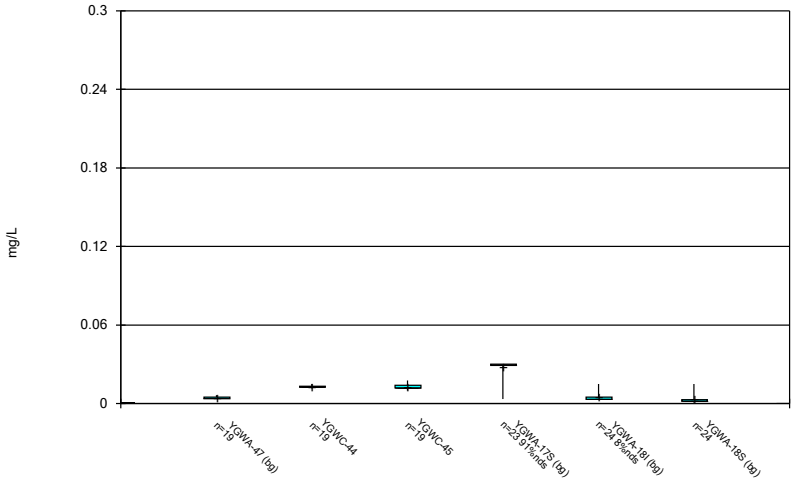
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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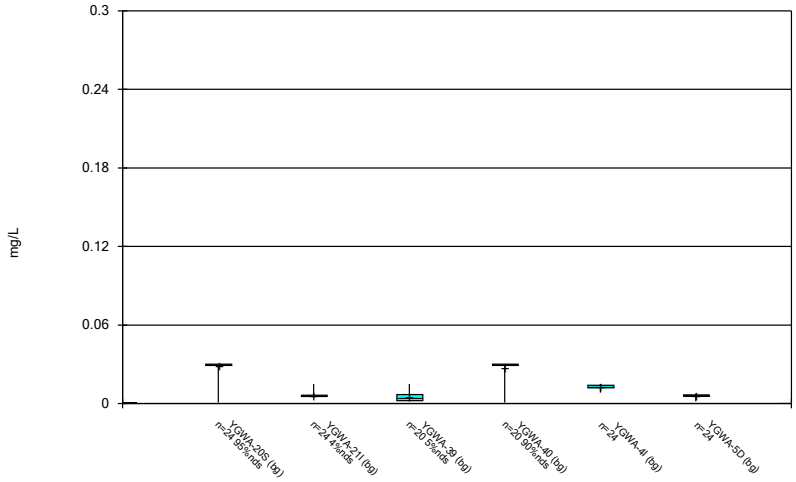
Box & Whiskers Plot



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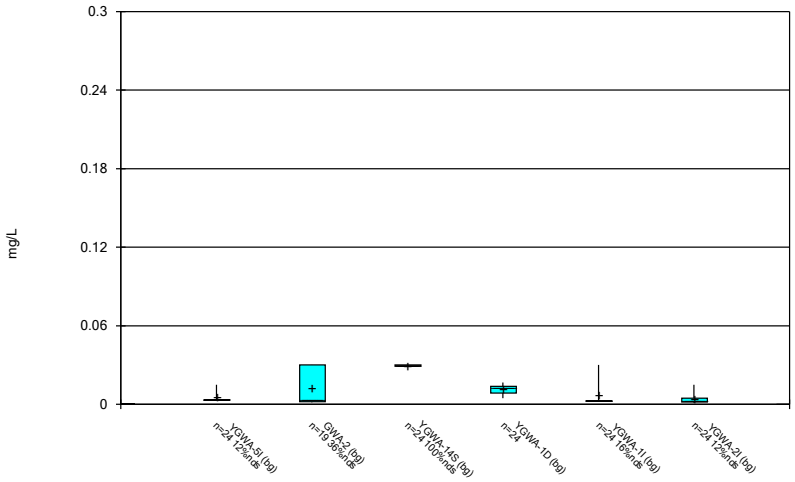

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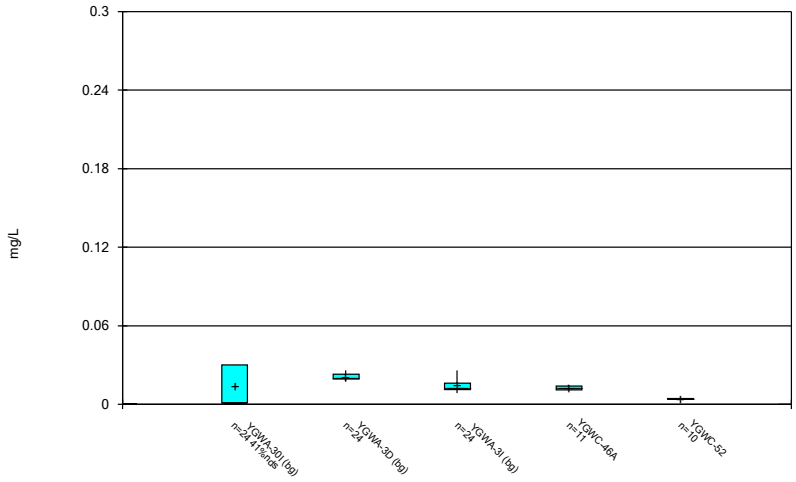

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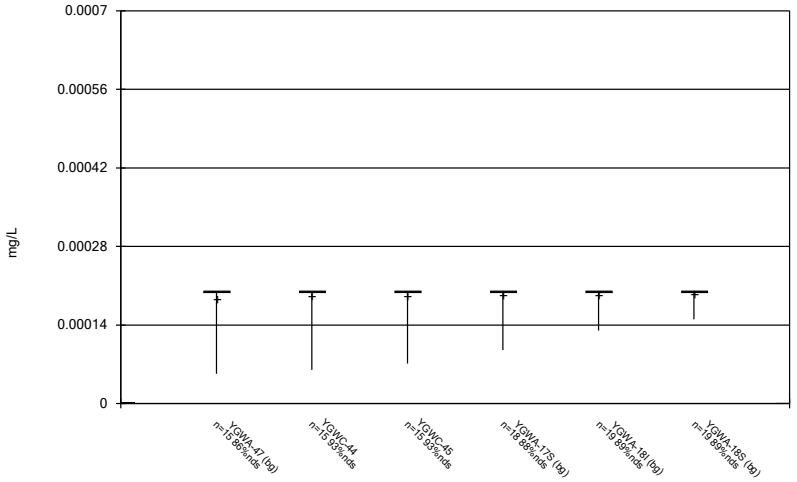
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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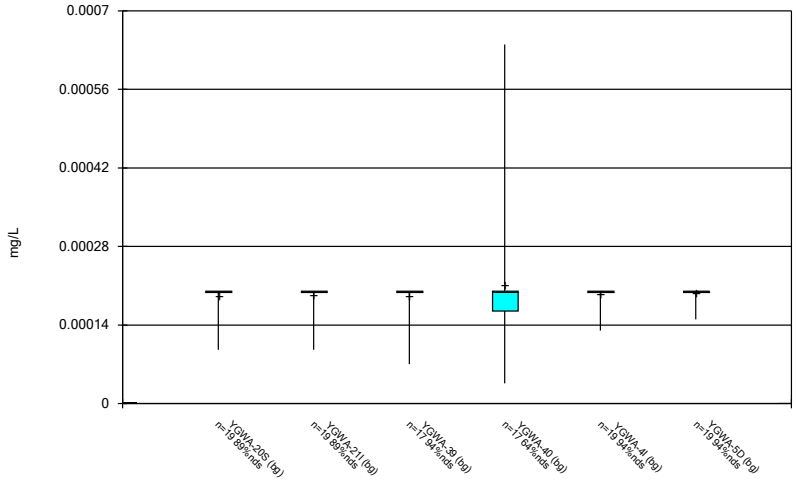
Box & Whiskers Plot



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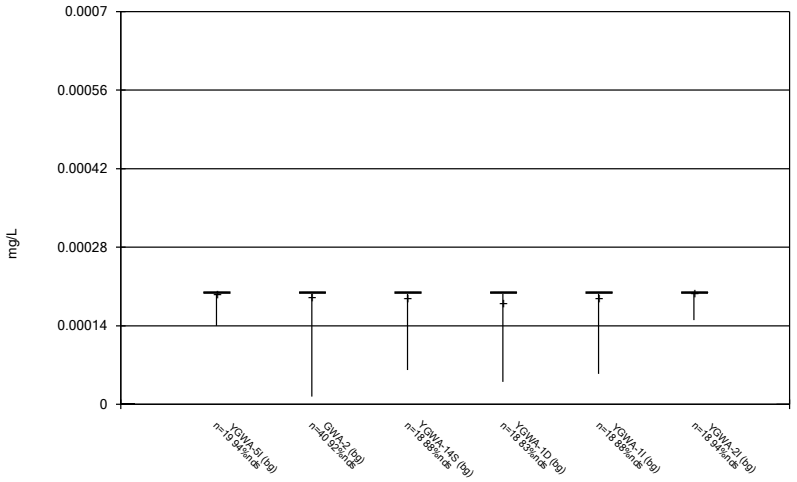

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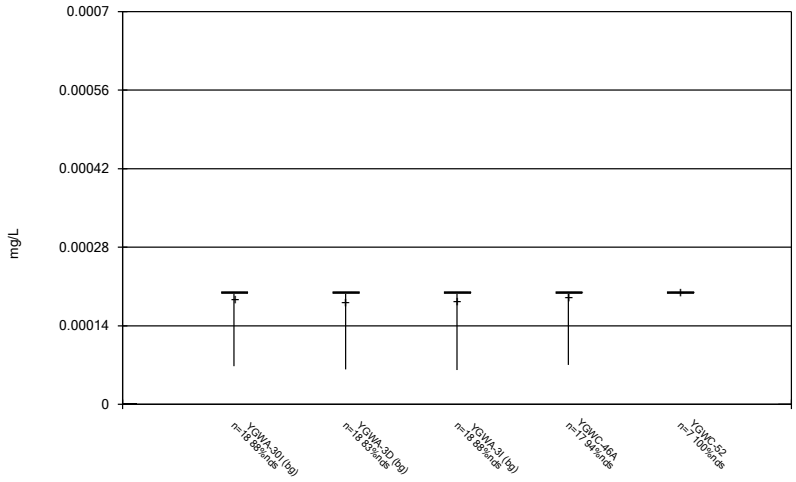
Box & Whiskers Plot



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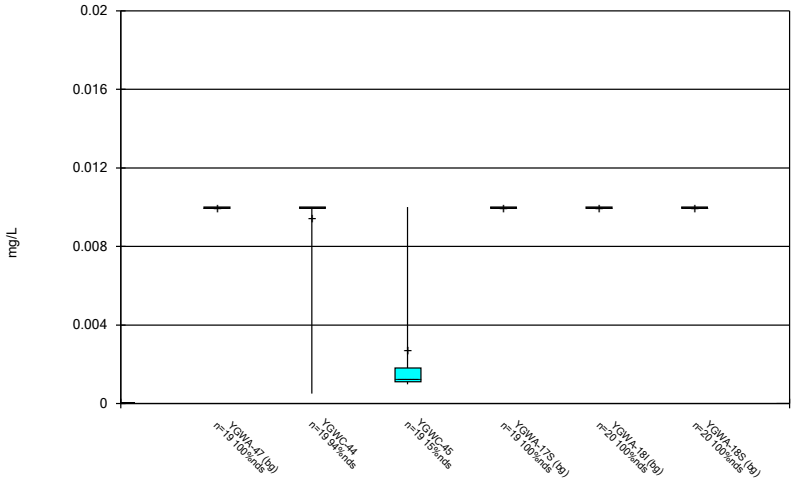

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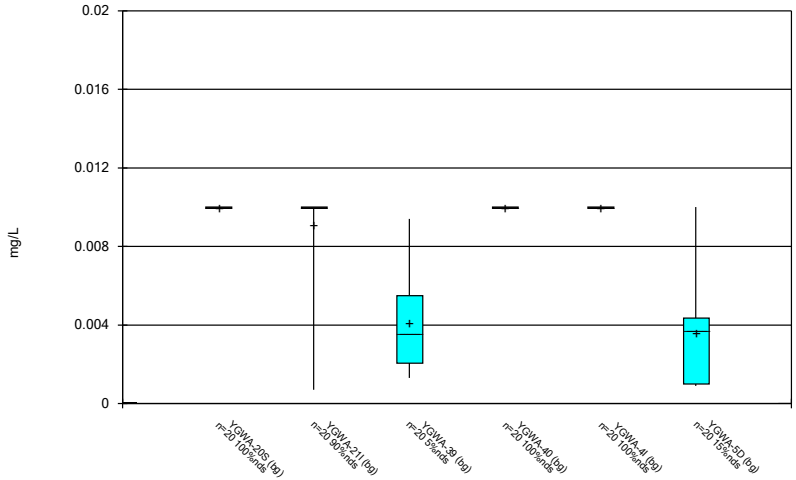

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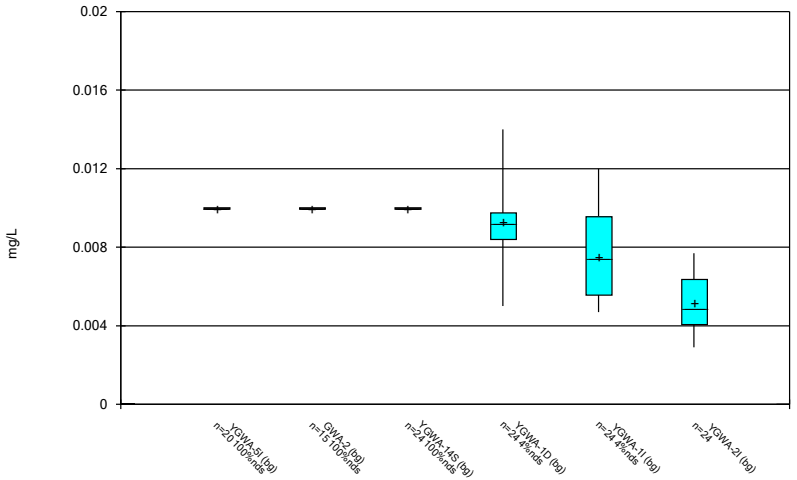

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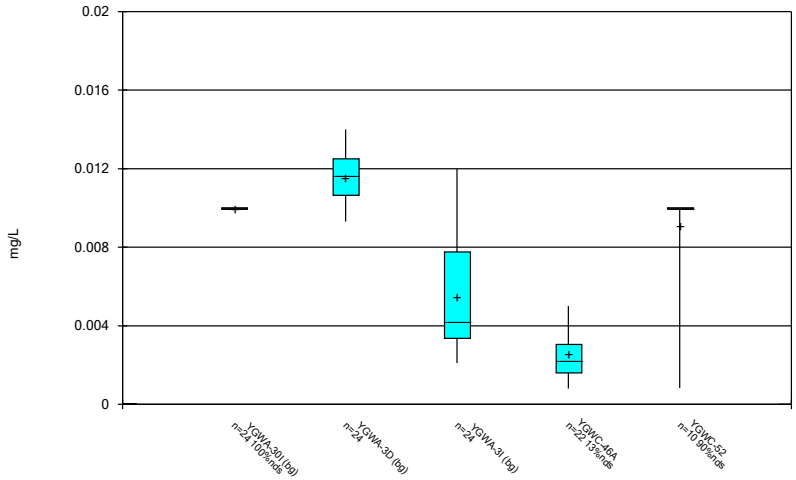

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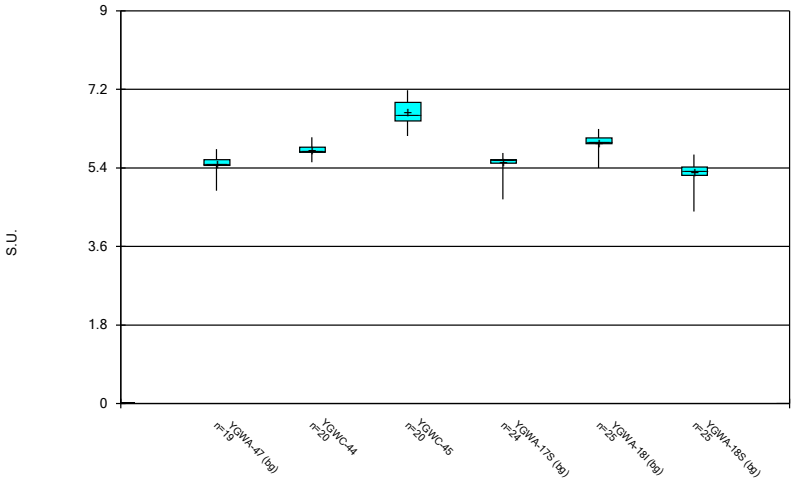
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 10/9/2023 6:06 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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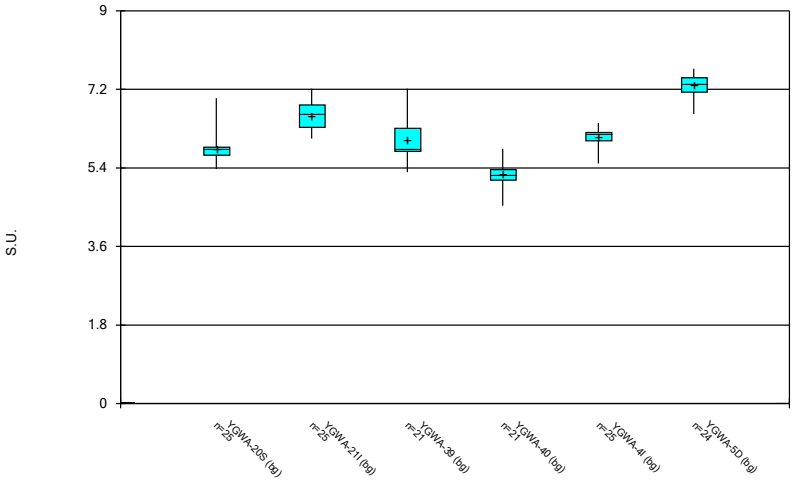

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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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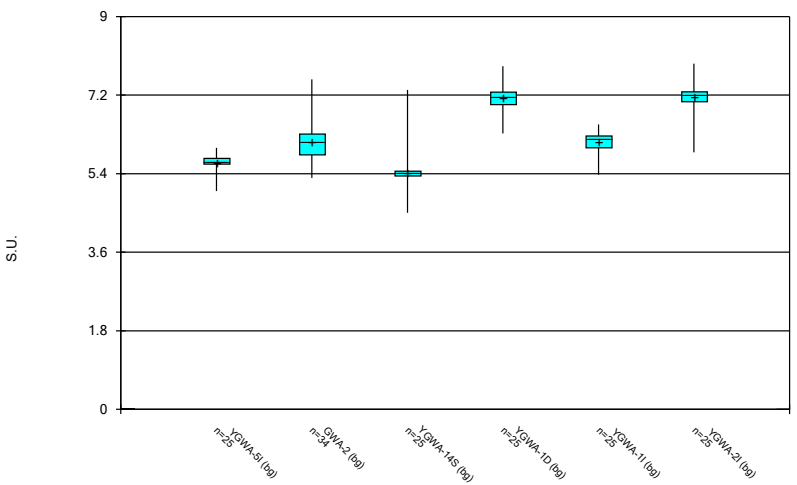
Box & Whiskers Plot



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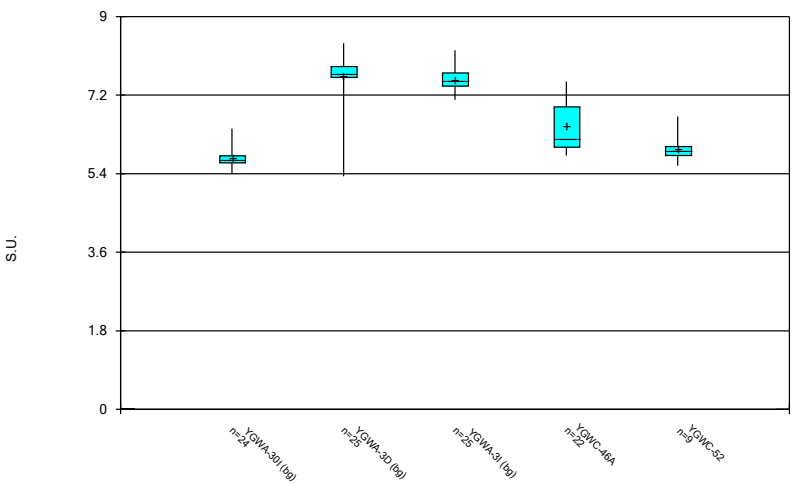

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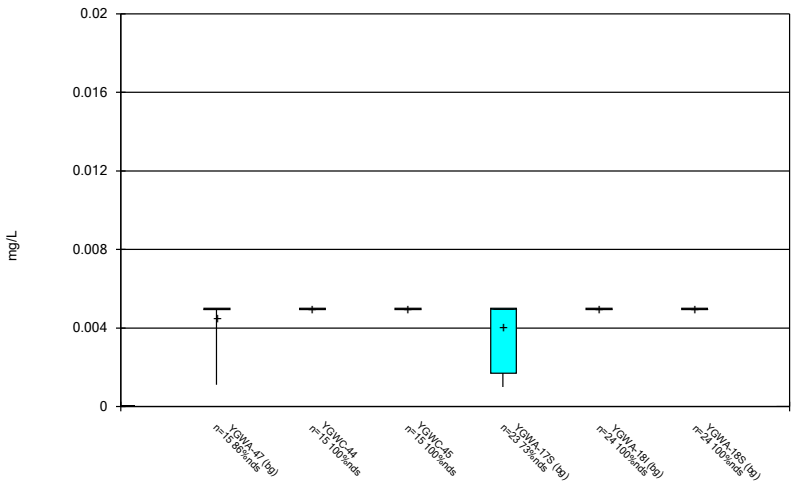

Constituent: Selenium Analysis Run 10/9/2023 6:06 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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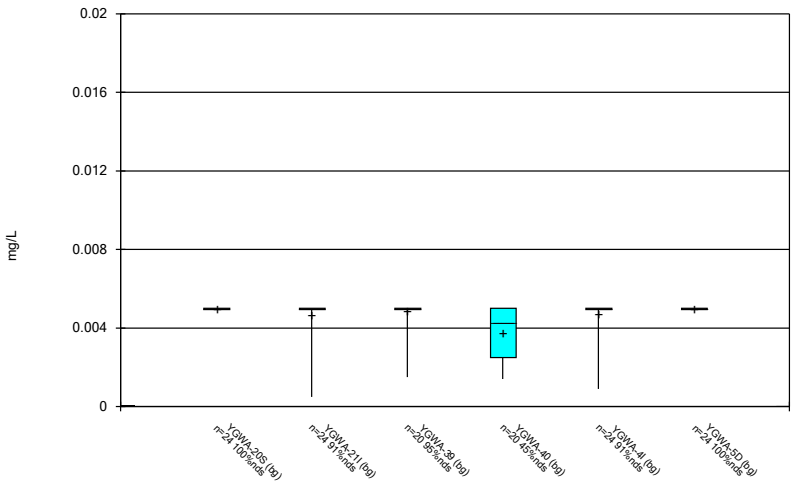
Box & Whiskers Plot



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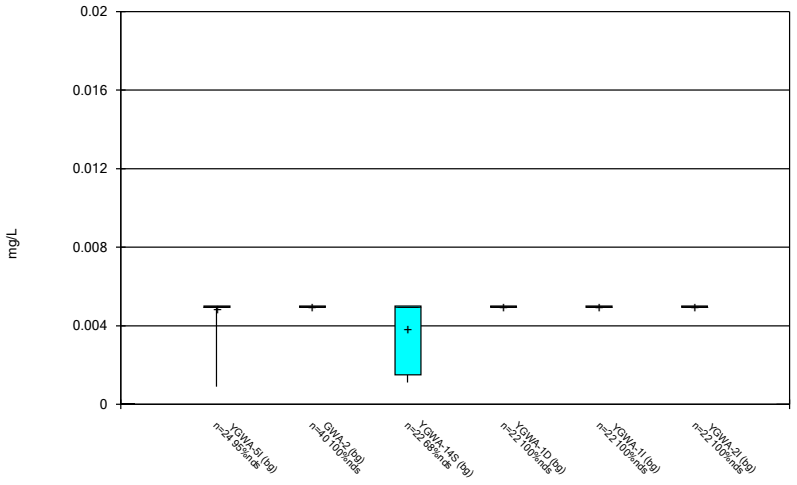
Box & Whiskers Plot



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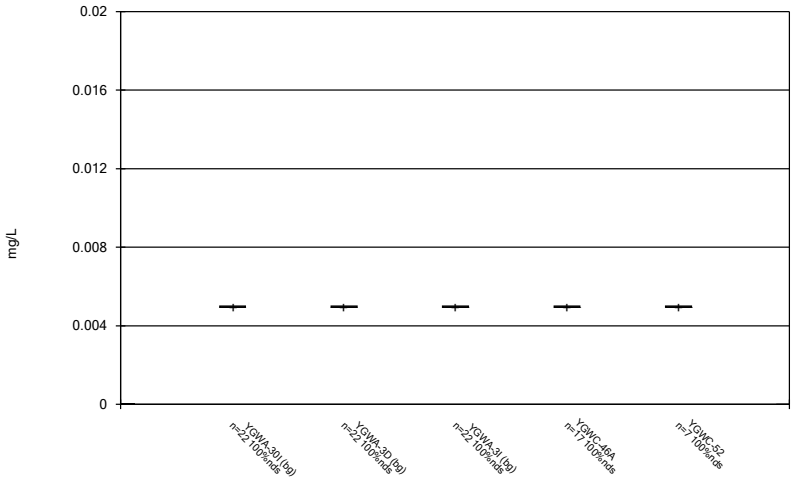

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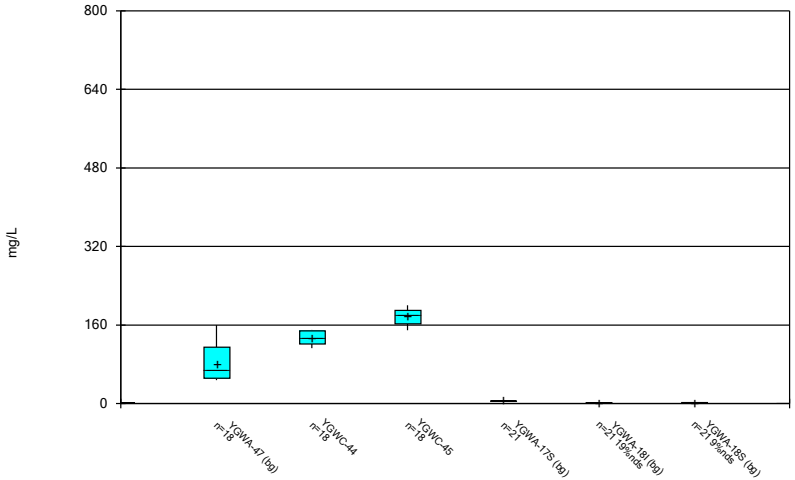

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Plant Yates Client: Southern Company Data: Yates Ash Pond1

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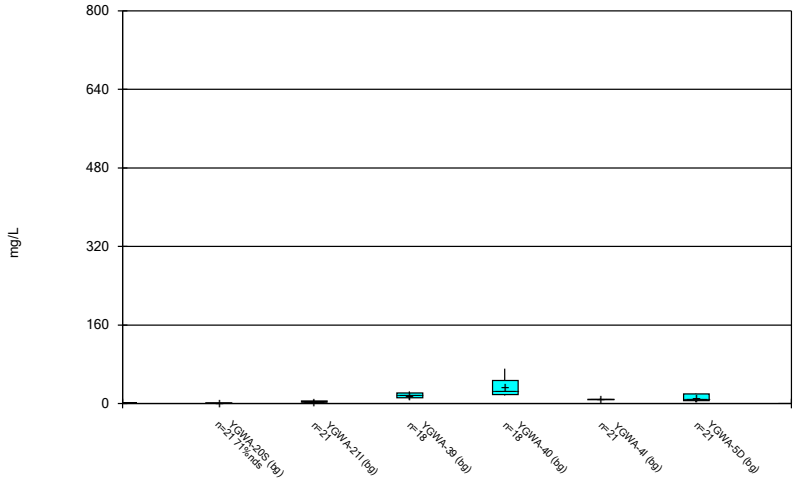

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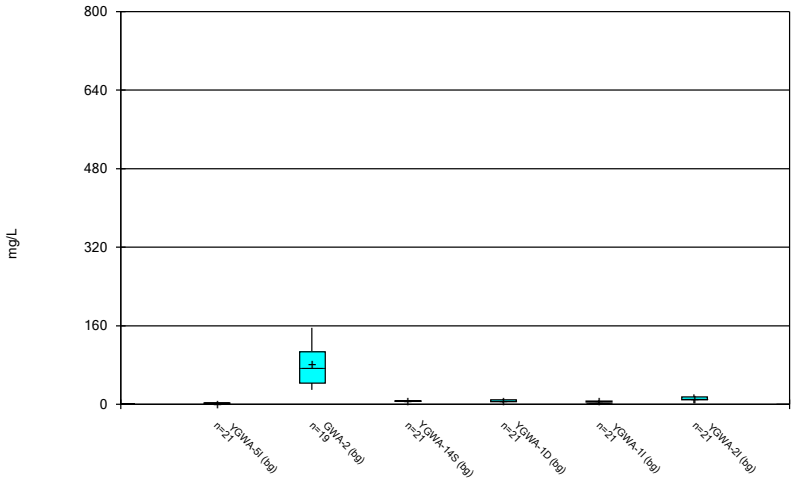

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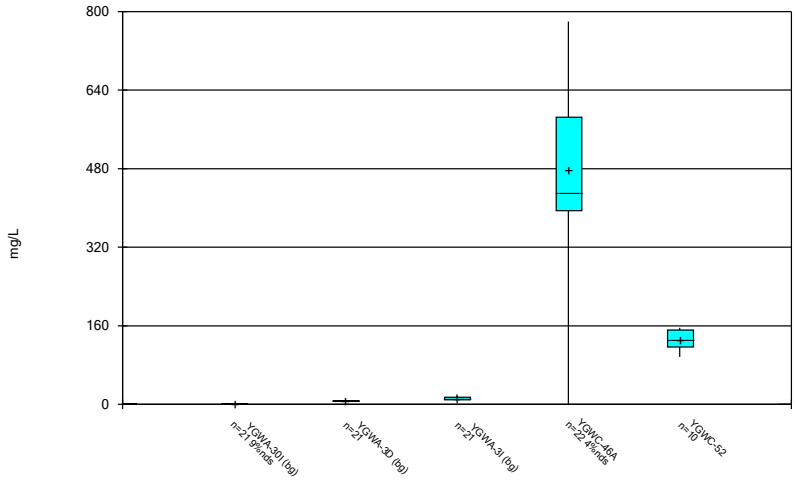

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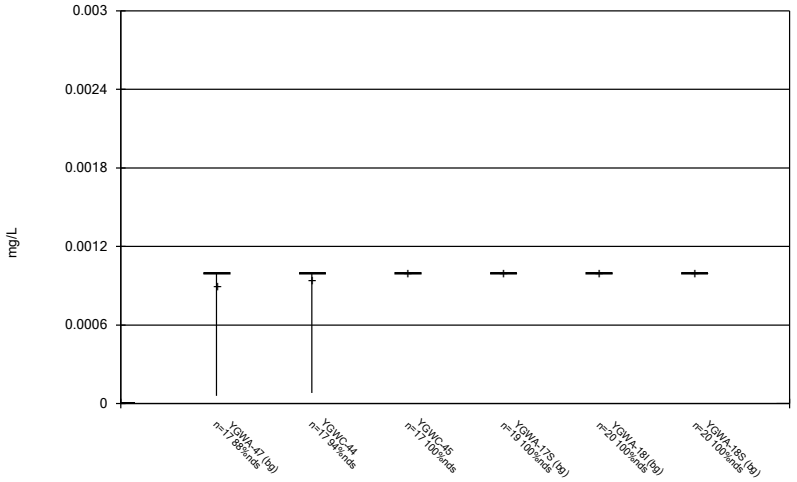

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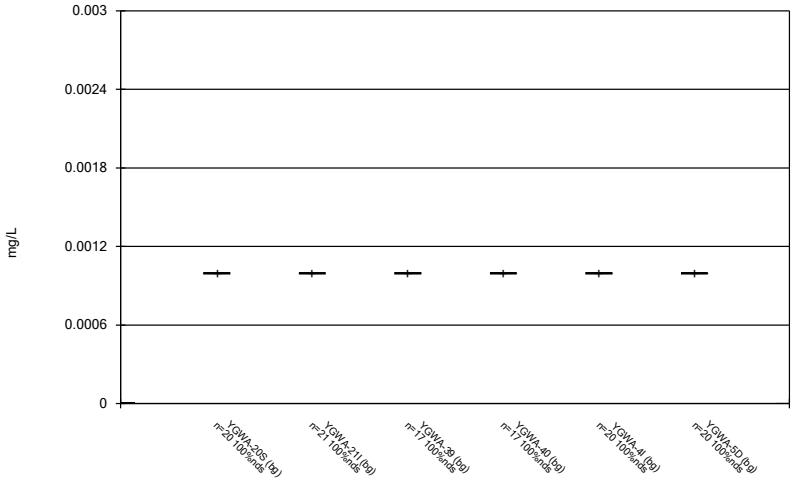

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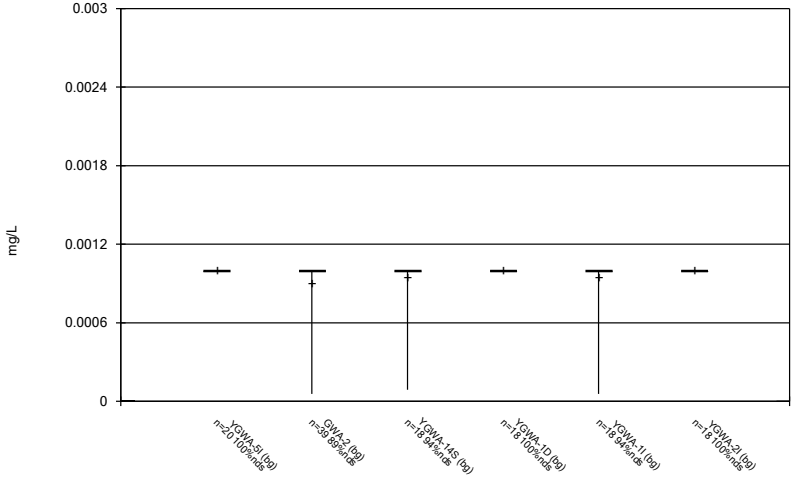

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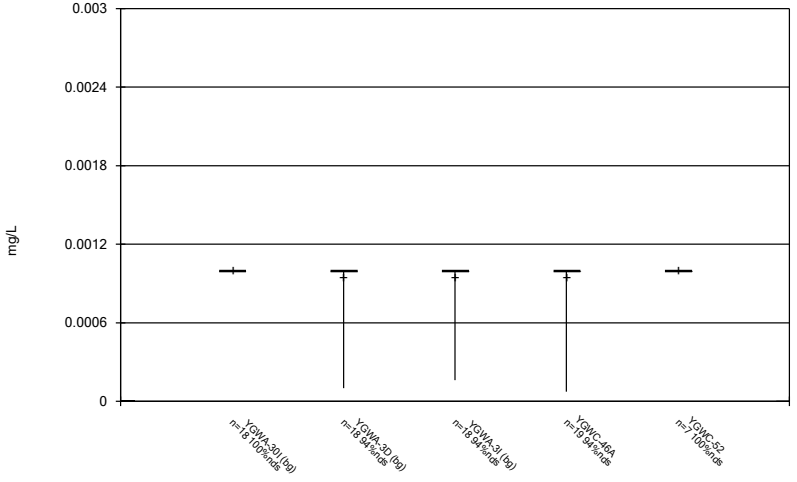
Box & Whiskers Plot



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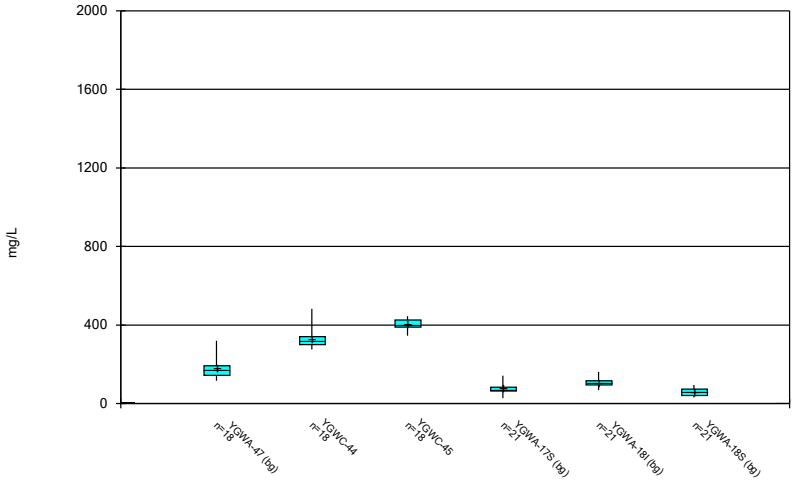
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:06 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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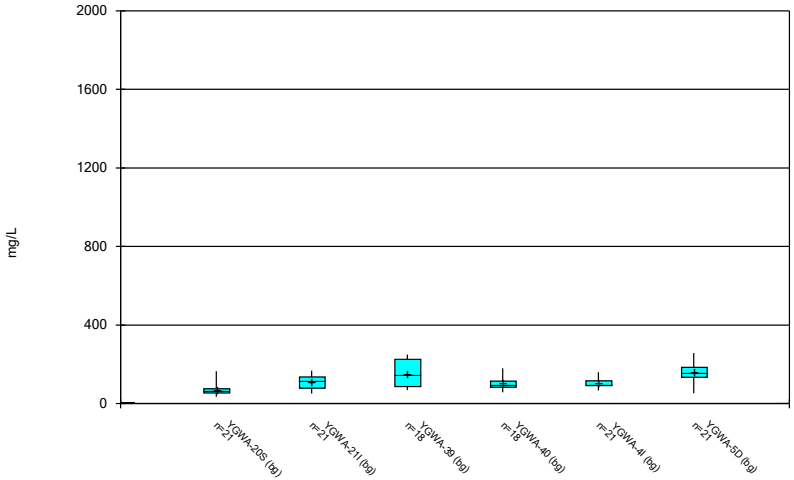
Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:06 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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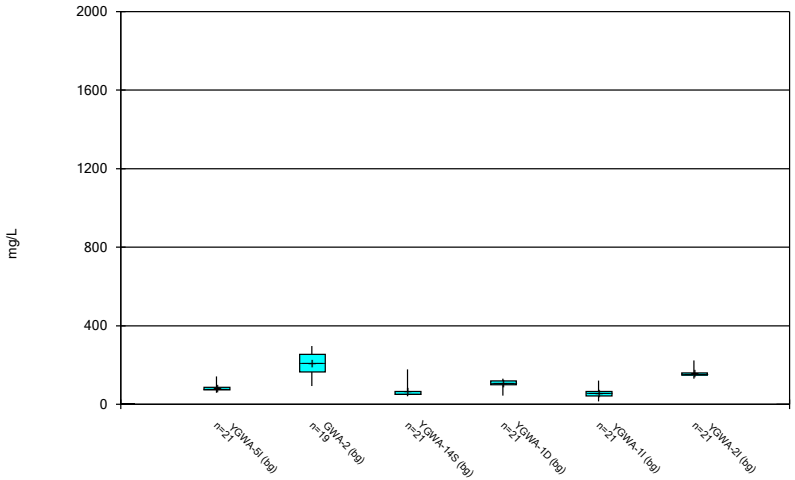
Box & Whiskers Plot



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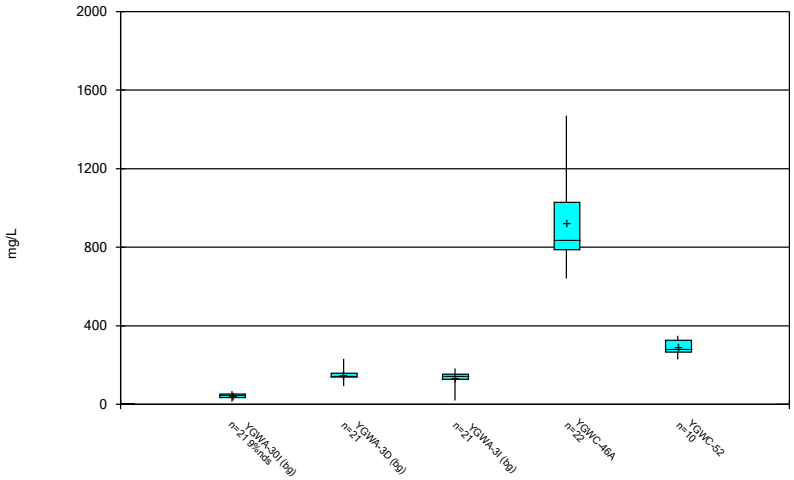

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:06 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond1

FIGURE C.

Outlier Summary

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:09 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)	
2/8/2022		0.072 (O)	
8/30/2022		0.075 (O)	

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:12 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	**YGWC-44**	**0.16**	**n/a**	**8/15/2023**	**0.6**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Boron, total (mg/L)	**YGWC-45**	**0.16**	**n/a**	**8/15/2023**	**0.36**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Boron, total (mg/L)	**YGWC-46A**	**0.16**	**n/a**	**8/15/2023**	**2.1**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Calcium, total (mg/L)	**YGWC-45**	**37**	**n/a**	**8/15/2023**	**46.3**	**Yes**	**388**	**0.7732**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**YGWC-46A**	**37**	**n/a**	**8/15/2023**	**111**	**Yes**	**388**	**0.7732**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**YGWC-44**	**12**	**n/a**	**8/15/2023**	**13.4**	**Yes**	**388**	**0**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**YGWC-46A**	**12**	**n/a**	**8/15/2023**	**32.2**	**Yes**	**388**	**0**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**YGWC-46A**	**160**	**n/a**	**8/15/2023**	**419**	**Yes**	**388**	**5.928**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-44**	**220.5**	**n/a**	**8/15/2023**	**319**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-45**	**220.5**	**n/a**	**8/15/2023**	**404**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-46A**	**220.5**	**n/a**	**8/15/2023**	**945**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-52**	**220.5**	**n/a**	**8/15/2023**	**267**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:12 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	**YGWC-44**	**0.16**	**n/a**	**8/15/2023**	**0.6**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Boron, total (mg/L)	**YGWC-45**	**0.16**	**n/a**	**8/15/2023**	**0.36**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Boron, total (mg/L)	**YGWC-46A**	**0.16**	**n/a**	**8/15/2023**	**2.1**	**Yes**	**388**	**51.03**	**n/a**	**n/a**	**0.00004922**	**NP Inter (NDs) 1 of 2**
Boron, total (mg/L)	YGWC-52	0.16	n/a	8/15/2023	0.014J	No	388	51.03	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Calcium, total (mg/L)	YGWC-44	37	n/a	8/15/2023	30	No	388	0.7732	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	**YGWC-45**	**37**	**n/a**	**8/15/2023**	**46.3**	**Yes**	**388**	**0.7732**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**YGWC-46A**	**37**	**n/a**	**8/15/2023**	**111**	**Yes**	**388**	**0.7732**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	YGWC-52	37	n/a	8/15/2023	34.6	No	388	0.7732	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	**YGWC-44**	**12**	**n/a**	**8/15/2023**	**13.4**	**Yes**	**388**	**0**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	YGWC-45	12	n/a	8/15/2023	5.6	No	388	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	**YGWC-46A**	**12**	**n/a**	**8/15/2023**	**32.2**	**Yes**	**388**	**0**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	YGWC-52	12	n/a	8/15/2023	3	No	388	0	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	YGWC-44	0.68	n/a	8/15/2023	0.1ND	No	457	64.33	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-45	0.68	n/a	8/15/2023	0.07J	No	457	64.33	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-46A	0.68	n/a	8/15/2023	0.12	No	457	64.33	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	YGWC-52	0.68	n/a	8/15/2023	0.1ND	No	457	64.33	n/a	n/a	0.00004922	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	YGWC-44	8.39	4.4	8/15/2023	5.79	No	467	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-45	8.39	4.4	8/15/2023	6.97	No	467	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-46A	8.39	4.4	8/15/2023	7.51	No	467	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
pH, Field (S.U.)	YGWC-52	8.39	4.4	8/15/2023	6.05	No	467	0	n/a	n/a	0.00009844	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-44	160	n/a	8/15/2023	113	No	388	5.928	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	YGWC-45	160	n/a	8/15/2023	154	No	388	5.928	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	**YGWC-46A**	**160**	**n/a**	**8/15/2023**	**419**	**Yes**	**388**	**5.928**	**n/a**	**n/a**	**0.00004922**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	YGWC-52	160	n/a	8/15/2023	96.5	No	388	5.928	n/a	n/a	0.00004922	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**YGWC-44**	**220.5**	**n/a**	**8/15/2023**	**319**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-45**	**220.5**	**n/a**	**8/15/2023**	**404**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-46A**	**220.5**	**n/a**	**8/15/2023**	**945**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**YGWC-52**	**220.5**	**n/a**	**8/15/2023**	**267**	**Yes**	**388**	**0.5155**	**None**	**x^(1/3)**	**0.00188**	**Param Inter 1 of 2**

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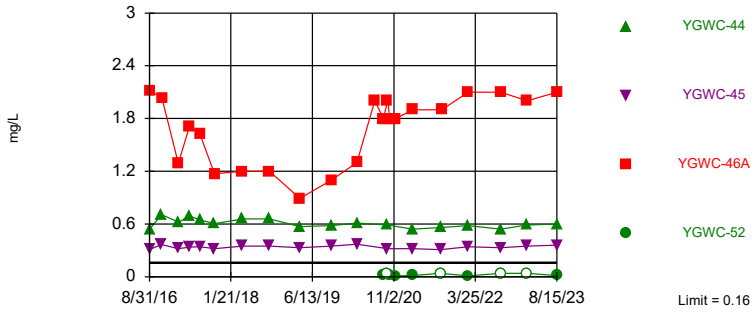
Hollow symbols indicate censored values.

Exceeds Limit: YGWC-44, YGWC-45, YGWC-46A

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 388 background values. 51.03% 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 10/9/2023 6:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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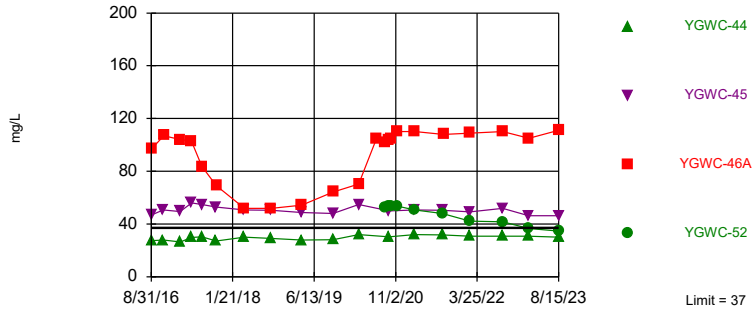
Exceeds Limit: YGWC-45, YGWC-46A

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 388 background values. 0.7732% 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 10/9/2023 6:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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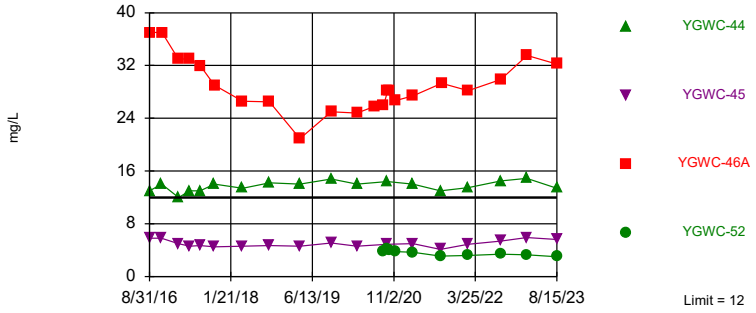
Exceeds Limit: YGWC-44, YGWC-46A

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 388 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 10/9/2023 6:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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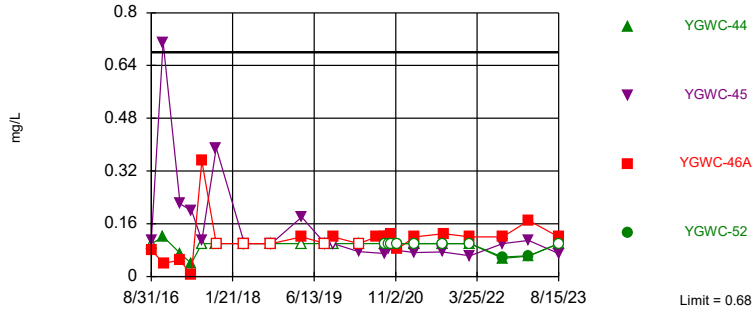
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 457 background values. 64.33% 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 10/9/2023 6:10 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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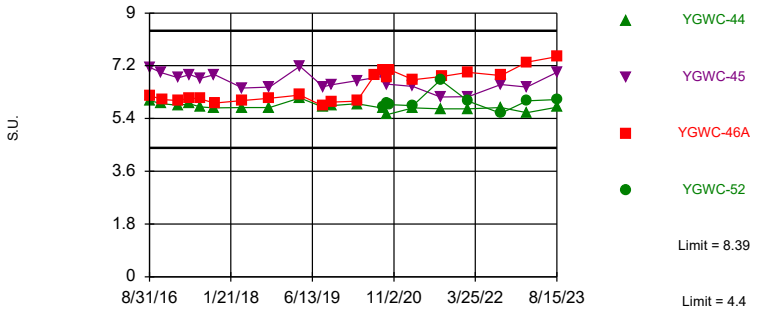
Within Limits

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 467 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 10/9/2023 6:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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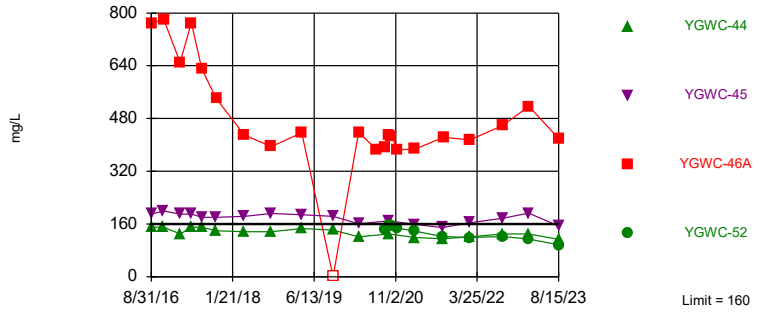
Hollow symbols indicate censored values.

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 388 background values. 5.928% 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 10/9/2023 6:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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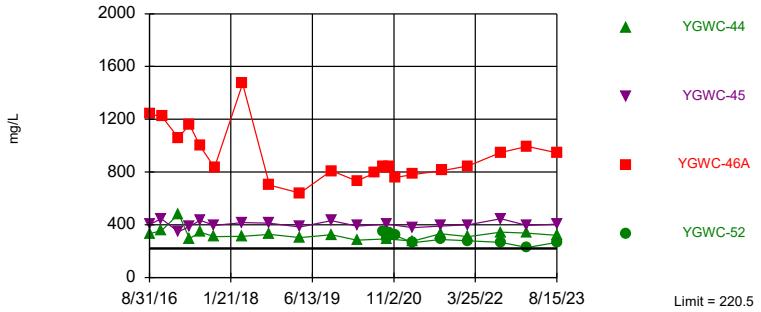
Exceeds Limit: YGWC-44, YGWC-45, YGWC-46A, YGWC-52

Prediction Limit

Interwell Parametric



Background Data Summary (based on cube root transformation): Mean=4.653, Std. Dev.=0.8034, n=388, 0.5155% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 12.05, 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 10/9/2023 6:10 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:12 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		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:12 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)		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:12 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									
2/8/2022									
2/9/2022	<0.04	<0.04	<0.04			0.01 (J)			
2/10/2022				<0.04	0.011 (J)			0.02 (J)	
2/11/2022							<0.04		<0.04
8/30/2022	<0.04			<0.04	0.0098 (J)				
8/31/2022		<0.04	<0.04			<0.04	<0.04	0.015 (J)	<0.04
2/7/2023	<0.04	<0.04			<0.04				
2/8/2023			<0.04			<0.04		0.015 (J)	<0.04
2/9/2023				<0.04			<0.04		
2/10/2023									
8/15/2023	<0.04	0.0094 (J)		<0.04	<0.04	<0.04	<0.04	0.017 (J)	
8/16/2023			<0.04						<0.04

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
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							0.541	0.0315 (J)	0.308
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				

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
6/30/2017									
7/11/2017						0.0131 (J)			
7/13/2017							0.649		0.34
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)	0.603		0.319
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)	0.66		0.35
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)	0.57		0.33
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)	0.61	0.0051 (J)	0.37
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									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
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)	0.54		0.32
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)	0.56		0.31
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									
2/8/2022						0.015 (J)		<0.04	
2/9/2022	<0.04	<0.04	0.0098 (J)	<0.04	<0.04		0.58		0.34
2/10/2022									
2/11/2022									
8/30/2022	<0.04	0.014 (J)	0.013 (J)	0.012 (J)				<0.04	
8/31/2022					<0.04	0.0091 (J)	0.54		0.33
2/7/2023	<0.04	<0.04	0.014 (J)	<0.04	<0.04			<0.04	
2/8/2023						0.011 (J)	0.59		
2/9/2023									0.35
2/10/2023									
8/15/2023	<0.04	<0.04	<0.04	0.046 (J)	<0.04	<0.04	0.6	<0.04	0.36
8/16/2023									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:12 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					

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:12 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)		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/9/2023 6:12 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	
2/8/2022			0.13	0.074	
2/9/2022	2.1	<0.04			0.0089 (J)
2/10/2022					
2/11/2022					
8/30/2022		<0.04			
8/31/2022	2.1		0.14	0.062	<0.04
2/7/2023		<0.04	0.13		
2/8/2023				0.057	
2/9/2023					
2/10/2023	2				<0.04
8/15/2023	2.1	<0.04	0.15 (J)	0.052 (J)	0.014 (J)
8/16/2023					

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:12 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 10/9/2023 6:12 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 10/9/2023 6:12 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									
2/8/2022									
2/9/2022	14.9	2.1	23.7			30.3			
2/10/2022				2.5	24.8			1.3	
2/11/2022							7.5		1.5
8/30/2022	14.9			2.5	24.8				
8/31/2022		1.9	23.5			28.7	8.9	1.3	1.3
2/7/2023	15	2.2			26.6				
2/8/2023			23.3			28.9		1.5	1.3
2/9/2023				2.8			9.6		
2/10/2023									
8/15/2023	13.5	1.8		2.6	25	27.4	7.8	1.3	
8/16/2023			24.9						1.4

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
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							27.3	9.31	46.7
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 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
6/30/2017									
7/11/2017						14.3			
7/13/2017							30.2		54.8
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	27.2		52.8
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)	29.2		50.5
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)	27.9		48.8
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	31.9	24.3	54.8
3/18/2020									
3/19/2020									
3/24/2020	5.3	1	2.7	6	2.6				
3/25/2020									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
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	31.9		50.7
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	31.7		50.4
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									
2/8/2022						9.4		25.6	
2/9/2022	5.1	0.87 (J)	2.8	9.8	2.3		30.8		49.3
2/10/2022									
2/11/2022									
8/30/2022	5.7	0.77 (J)	3	7.3				23.5	
8/31/2022					2.4	9.6	30.8		51.8
2/7/2023	5.5	0.79 (J)	2.9	7.5	2.4			22.3	
2/8/2023						9.2	30.9		
2/9/2023									46.2
2/10/2023									
8/15/2023	5.1	0.8 (J)	2.9	6.1	2.2	9.6	30	20.3	46.3
8/16/2023									

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/9/2023 6:12 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 10/9/2023 6:12 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 10/9/2023 6:12 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	
2/8/2022			15.2	6	
2/9/2022	109	23.4			42.2
2/10/2022					
2/11/2022					
8/30/2022		25.4			
8/31/2022	110		16.3	6.2	41.8
2/7/2023		25.6	16.1		
2/8/2023				5.9	
2/9/2023					
2/10/2023	105				36.7
8/15/2023	111	23.2	17.2	5.3	34.6
8/16/2023					

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 10/9/2023 6:12 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 10/9/2023 6:12 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 10/9/2023 6:12 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									
2/8/2022									
2/9/2022	1	1.3	1.1			1.1			
2/10/2022				4.4	3.2			4.7	
2/11/2022							4.1		2.1
8/30/2022	1.3			4.4	3.5				
8/31/2022		1.5	1.3			1.3	4.4	4.6	1.8
2/7/2023	1.3	1.5			3.3				
2/8/2023			1.1			1.2		4.9	1.6
2/9/2023				5			4.5		
2/10/2023									
8/15/2023	1.1	1.4		4.1	3.1	1.1	4.4	4.1	
8/16/2023			1.1						1.5

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
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							13	4	5.8
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 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
6/30/2017									
7/11/2017						5.8			
7/13/2017							13		4.7
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	14		4.5
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	14.2		4.7
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	14		4.6
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	14	4.8	4.6
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 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
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	14		5
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	13		4.1
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									
2/8/2022						3.2		5.7	
2/9/2022	7.5	7	10.9	1.7	2.8		13.5		4.9
2/10/2022									
2/11/2022									
8/30/2022	7.9	7	12	2.4				6.3	
8/31/2022					2.9	3.5	14.5		5.4
2/7/2023	7.4	6.4	11.4	2.4	2.9			6.1	
2/8/2023						3.5	14.9		
2/9/2023									5.9
2/10/2023									
8/15/2023	7.3	6.7	11.6	2.3	2.8	3.5	13.4	5.6	5.6
8/16/2023									

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 10/9/2023 6:12 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 10/9/2023 6:12 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 10/9/2023 6:12 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	
2/8/2022			7.4	6.2	
2/9/2022	28.2	1 (J)			3.2
2/10/2022					
2/11/2022					
8/30/2022		1.2			
8/31/2022	29.9		6.7	6.3	3.4
2/7/2023		1.1	5.6		
2/8/2023				6.9	
2/9/2023					
2/10/2023	33.5				3.3
8/15/2023	32.2	0.93 (J)	4.5	5.6	3
8/16/2023					

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:12 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		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:12 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									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:12 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									
2/8/2022									
2/9/2022	0.057 (J)	<0.1	0.097 (J)			0.43			
2/10/2022				<0.1	0.055 (J)			<0.1	
2/11/2022							<0.1		<0.1
8/30/2022	0.093 (J)			<0.1	0.085 (J)				
8/31/2022		0.065 (J)	0.13			0.42	0.061 (J)	0.053 (J)	0.06 (J)
2/7/2023	0.093 (J)	0.071 (J)			0.082 (J)				
2/8/2023			0.16			0.56		0.059 (J)	0.064 (J)
2/9/2023				<0.1			0.067 (J)		
2/10/2023									
8/15/2023	0.057 (J)	<0.1		<0.1	<0.1	0.42	<0.1	<0.1	
8/16/2023			0.11						<0.1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:12 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)	GWA-2 (bg)	YGWC-44	YGWC-45
6/1/2016									
6/2/2016									
6/6/2016	<0.1	<0.1							
6/7/2016			<0.1	<0.1	<0.1				
7/25/2016									
7/26/2016									
7/27/2016	<0.1	<0.1	<0.1		<0.1				
7/28/2016				0.02 (J)					
8/30/2016						0.09 (J)			
8/31/2016							0.14 (J)	<0.1	0.11 (J)
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		<0.1	<0.1						
9/19/2016	<0.1			0.02 (J)	<0.1				
11/1/2016									
11/2/2016					<0.1				
11/3/2016	<0.1	<0.1	<0.1	<0.1					
11/4/2016									
11/14/2016						0.18 (J)			0.71
11/15/2016								0.12 (J)	
11/16/2016									
11/28/2016							0.12 (J)		
12/15/2016									
1/10/2017									
1/11/2017	<0.1	<0.1	<0.1						
1/12/2017									
1/13/2017				<0.1	<0.1				
1/16/2017									
2/21/2017									
2/22/2017							0.09 (J)		
2/24/2017						0.05 (J)			
2/27/2017									0.22 (J)
2/28/2017								0.07 (J)	
3/1/2017	<0.1	<0.1							
3/2/2017			<0.1						
3/3/2017									
3/6/2017				<0.1	<0.1				
3/7/2017									
3/8/2017									
4/26/2017	<0.1	<0.1		0.04 (J)	<0.1				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			<0.1						
5/8/2017						0.03 (J)	0.05 (J)	0.04 (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				

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:12 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)	GWA-2 (bg)	YGWC-44	YGWC-45
6/30/2017									
7/11/2017						0.07 (J)			
7/13/2017								<0.1	0.11 (J)
7/17/2017							0.14 (J)		
10/3/2017				<0.1					
10/4/2017		<0.1	<0.1		<0.1				
10/5/2017	<0.1								
10/10/2017						<0.1		<0.1	0.39
10/11/2017									
10/12/2017									
10/16/2017							0.12 (J)		
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018							0.17		
2/20/2018									
3/27/2018									
3/28/2018	<0.1	<0.1	<0.1						
3/29/2018				<0.1	<0.1				
4/2/2018						<0.1			
4/3/2018									<0.1
4/4/2018								<0.1	
6/5/2018				0.13 (J)					
6/6/2018					<0.1				
6/7/2018	<0.1								
6/8/2018									
6/11/2018		<0.1	<0.1						
6/28/2018									
8/6/2018							0.087 (J)		
8/7/2018									
9/19/2018						<0.1		<0.1	<0.1
9/24/2018									
9/25/2018	<0.1	<0.1	<0.1	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

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:12 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)	GWA-2 (bg)	YGWC-44	YGWC-45
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)	0.052 (J)	<0.1	
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	0.053 (J)	<0.1	0.076 (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	0.058 (J)	<0.1	
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									
2/8/2022						<0.1	0.064 (J)		
2/9/2022	<0.1	<0.1	<0.1	0.1	<0.1			<0.1	0.063 (J)
2/10/2022									
2/11/2022									
8/30/2022	<0.1	<0.1	<0.1	0.1			0.086 (J)		
8/31/2022					<0.1	0.065 (J)		0.055 (J)	0.1
2/7/2023	<0.1	<0.1	<0.1	0.1	<0.1		0.095 (J)		
2/8/2023						0.077 (J)		0.062 (J)	
2/9/2023									0.11
2/10/2023									
8/15/2023	<0.1	<0.1	<0.1	0.061 (J)	<0.1	<0.1	0.065 (J)	<0.1	0.07 (J)
8/16/2023									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:12 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					

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:12 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					

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 6:12 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	
2/8/2022			0.052 (J)	<0.1	
2/9/2022	0.12	0.094 (J)			<0.1
2/10/2022					
2/11/2022					
8/30/2022		0.12			
8/31/2022	0.12		0.065 (J)	0.05 (J)	0.059 (J)
2/7/2023		0.12	0.076 (J)		
2/8/2023				<0.1	
2/9/2023					
2/10/2023	0.17				0.063 (J)
8/15/2023	0.12	0.081 (J)	<0.1	<0.1	<0.1
8/16/2023					

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:12 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (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		7.72	7.46	6.33					
6/2/2016					6.36	5.75	5.46	7.84	7.67
6/6/2016									
6/7/2016									
7/25/2016		7.74		6.21		5.82			
7/26/2016			7.43		6.22		5.45	7.88	7.66
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016			7.44	6.16					
9/14/2016		7.65			6.23				7.6
9/15/2016							5.45	7.74	
9/16/2016									
9/19/2016						5.78 (D)			
11/1/2016		7.7	7.24			5.62		7.75	
11/2/2016					6.08		5.41		7.35
11/3/2016									
11/4/2016				6.29					
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
1/13/2017					6.19				
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			7.23	6.28				7.68	
3/3/2017									
3/6/2017					6.2				

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:12 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)
3/7/2017									7.43
3/8/2017							5.41		
4/26/2017		7.4				5.56	5.02	7.45	
4/27/2017			6.99	6.09					
4/28/2017									
5/1/2017					6.21				7.22
5/2/2017									
5/8/2017	6.12								
5/9/2017									
5/26/2017									
6/27/2017			6.87	6.21					7.32
6/28/2017		7.5						7.65	
6/29/2017					6.21				
6/30/2017						5.72	5.39		
7/11/2017									
7/13/2017									
7/17/2017	6.03								
10/3/2017			6.81	5.98					7.48
10/4/2017		7.45				5.87		7.49	
10/5/2017					6.16		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		5.83	5.47		
3/28/2018		7.74						7.91	
3/29/2018			7.38		6.09				7.02
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018			7.16						
6/6/2018				6.17					7.43
6/7/2018					6.12			7.69	
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					5.84				7.13
10/1/2018		7.47	6.8	5.9			5.39	7.39	
10/2/2018						5.39			
2/25/2019	6.51								
2/26/2019						5.77	5.46		
2/27/2019		7.54	6.84	5.8				7.55	

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:12 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)
3/4/2019					6.18				7.46
3/5/2019									
3/6/2019									
3/26/2019									
3/27/2019									
3/28/2019			6.99	6.15					
3/29/2019							5.34		
4/1/2019		7.74				5.62		7.87	
4/2/2019									
4/3/2019					6.43				7.11
6/12/2019	6.3								
8/19/2019	6.23								
8/20/2019									
8/21/2019									
9/24/2019			7.07	6.23					6.93
9/25/2019		7.47			6.2	5.69	5.19	7.64	
9/26/2019									
10/8/2019	6.28								
10/9/2019									
2/10/2020			7.2	6.1					
2/11/2020		7.09							
2/12/2020					6.15	5.8	5.48	7.83	7.52
3/17/2020	6.14								
3/18/2020				6.19			5.38		
3/19/2020		7.31	7.03			6		7.65	
3/24/2020									7.34
3/25/2020					6.26				
5/6/2020	6.24								
7/6/2020									
8/26/2020	5.67								
8/27/2020									
8/28/2020									
9/22/2020	5.78				5.8				7.19
9/23/2020		7.37	7.15	6.01				7.57	
9/24/2020						5.67			
9/25/2020							5.44		
10/7/2020									
2/8/2021									
2/9/2021					6.06				
2/10/2021		7.58					5.35	7.81	
2/11/2021						5.73			
2/12/2021			7.14	6.21					
3/1/2021						5.78			
3/2/2021	5.42						5.49		7.15
3/3/2021		8.23	7.2	5.38	6.21			8.39	
3/4/2021									
8/19/2021			6.32	6.38			7.32	5.34	
8/20/2021	5.86								
8/26/2021					5.82				7.16
8/27/2021		7.39							
9/1/2021									
9/3/2021									

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:12 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)
2/8/2022	5.83								
2/9/2022		7.66	7.12	6.24				7.97	
2/10/2022							4.5		6.99
2/11/2022					5.95	5.59			
8/30/2022	5.39		7.2						7.4
8/31/2022		7.49		5.64	5.5	5.87	5.15	7.65	
2/7/2023	5.94		7.86	6.53					6.64
2/8/2023		7.73				6.43	5.39	7.88	
2/9/2023					6.23				
2/10/2023									
8/15/2023	5.3		6.98	5.88	5.99		5.03	7.69	7.34
8/16/2023		7.39				5.55			

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:12 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-44	YGWC-45
8/27/2008									
3/3/2009									
11/18/2009									
3/3/2010									
3/10/2011									
9/8/2011									
3/5/2012									
9/10/2012									
2/6/2013									
8/12/2013									
2/5/2014									
8/3/2015									
2/16/2016									
6/1/2016									
6/2/2016	5.75								
6/6/2016		5.71	6.17						
6/7/2016				6.1	5.77	5.62			
7/25/2016									
7/26/2016	5.72								
7/27/2016		5.46	6.14		5.79	5.59			
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	5.74								
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					5.67				
11/3/2016		5.39	5.97	6.07		5.59			
11/4/2016	5.61								
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	5.71								
1/13/2017				6.41	5.79				
1/16/2017									
2/21/2017									
2/22/2017									
2/24/2017							5.49		
2/27/2017									6.79
2/28/2017								5.85	
3/1/2017		5.41	5.94						
3/2/2017						5.54			
3/3/2017									
3/6/2017				6.34	5.63				

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:12 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-44	YGWC-45
3/7/2017	5.66								
3/8/2017									
4/26/2017		5.4	5.99	6.32	5.66				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017	5.65					5.47			
5/8/2017							5.58	5.91	
5/9/2017									6.9
5/26/2017									
6/27/2017	5.7								
6/28/2017		5.36	6						
6/29/2017				6.47	5.85	5.56			
6/30/2017									
7/11/2017							5.58		
7/13/2017								5.8	6.77
7/17/2017									
10/3/2017	5.79			6.56					
10/4/2017		5.32			5.83	5.57			
10/5/2017			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	5.63			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	5.63		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	6.67	5.84	5.59			
9/26/2018	5.63								
10/1/2018									
10/2/2018									
2/25/2019									
2/26/2019									
2/27/2019									

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:12 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-44	YGWC-45
3/4/2019	5.75								
3/5/2019		5.26		7.22	6.07	5.48			
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				6.94		5.74			
4/3/2019	5.63	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	5.6			6.87					
9/25/2019					5.86	5.49			
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	5.83			7.13	6				
3/17/2020							5.57	5.9	6.69
3/18/2020									
3/19/2020									
3/24/2020	5.81	5.33	5.98	6.35	5.86	5.57			
3/25/2020									
5/6/2020									
7/6/2020									
8/26/2020									
8/27/2020							4.88	5.75	
8/28/2020									6.84
9/22/2020	5.99						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	5.67								
2/9/2021		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	5.63								
3/3/2021		5.31	5.89		5.89	5.52			
3/4/2021				6.8					
8/19/2021							5.5	5.73	6.13
8/20/2021									
8/26/2021	5.51	4.4							
8/27/2021			5.4		5.57	5.27			
9/1/2021				6.65					
9/3/2021									

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:12 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWA-5I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	YGWC-44	YGWC-45
2/8/2022							5.4		
2/9/2022		5.28	5.98	6.84	5.91	5.53		5.73	6.15
2/10/2022	5.14								
2/11/2022									
8/30/2022	5	5.18	5.82	6.58		4.68			
8/31/2022					5.38		5.32	5.77	6.56
2/7/2023		5.03	6	6.82	5.63	5.47			
2/8/2023							5.22	5.6	
2/9/2023	5.9								6.47
2/10/2023									
8/15/2023	5.58	5.2	5.82	6.84	7	5.54	5.69	5.79	6.97
8/16/2023									

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 10/9/2023 6:12 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 10/9/2023 6:12 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 10/9/2023 6:12 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: pH, Field (S.U.) Analysis Run 10/9/2023 6:12 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
2/8/2022			5.78	5.26	
2/9/2022	6.98	5.89			5.99
2/10/2022					
2/11/2022					
8/30/2022		7.04			
8/31/2022	6.87		5.3	4.53	5.58
2/7/2023		6.94	5.49		
2/8/2023				5.71	
2/9/2023					
2/10/2023	7.32				6
8/15/2023	7.51	6.96	5.78	5	6.05
8/16/2023					

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:12 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		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:12 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		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:12 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									
2/8/2022									
2/9/2022	9.3	5.1	16			7.2			
2/10/2022				2.4	4.9			6.2	
2/11/2022							7.7		2.8
8/30/2022	10.2			2.4	5.7				
8/31/2022		4.8	13.9			6.9	8	5.8	1.1
2/7/2023	10.6	6.6			5.2				
2/8/2023			14.7			7.5		6.1	0.96 (J)
2/9/2023				2.9			8.9		
2/10/2023									
8/15/2023	9.6	4.6		2.2	4.8	6.8	7.5	6	
8/16/2023			20.3						0.9 (J)

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
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							150	29	190
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				

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
6/30/2017									
7/11/2017						110			
7/13/2017							150		180
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	140		180
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	137		192
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	146		188
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	121	98.6	161
3/18/2020									
3/19/2020									
3/24/2020	<1	0.99 (J)	5.4	3	<1				
3/25/2020									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
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	119		159
3/2/2021								156	
3/3/2021	<1	1	5.2		<1				
3/4/2021				4.5					
8/19/2021						52.6	115		149
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									
2/8/2022						50.9		107	
2/9/2022	0.51 (J)	1.1	4.8	3.9	<1		121		164
2/10/2022									
2/11/2022									
8/30/2022	0.78 (J)	1.3	4.7	3.2				101	
8/31/2022					<1	48	130		177
2/7/2023	0.78 (J)	1.2	4.9	3.8	<1			82.4	
2/8/2023						50.5	130		
2/9/2023									193
2/10/2023									
8/15/2023	0.51 (J)	0.88 (J)	4.6	4.1	<1	47.7	113	74.2	154
8/16/2023									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:12 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 10/9/2023 6:12 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		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/9/2023 6:12 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	
2/8/2022			14.6	17.9	
2/9/2022	415	18			119
2/10/2022					
2/11/2022					
8/30/2022		20.1			
8/31/2022	459		10.9	17.9	122
2/7/2023		17.8	9.7		
2/8/2023				17.5	
2/9/2023					
2/10/2023	517				114
8/15/2023	419	17.2	7.6	16.4	96.5
8/16/2023					

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/9/2023 6:12 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		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/9/2023 6:12 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 10/9/2023 6:12 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									
2/8/2022									
2/9/2022	105	57	145			154			
2/10/2022				77	127			56	
2/11/2022							102		66
8/30/2022	116			86	148				
8/31/2022		46	137			141	92	51	33
2/7/2023	131	121			180				
2/8/2023			145			144		56	43
2/9/2023				59			124		
2/10/2023									
8/15/2023	121	65		76	219	231	99	69	
8/16/2023			148						48

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
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							332	209	402
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 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
6/30/2017									
7/11/2017						193			
7/13/2017							345		433
7/17/2017								185	
10/3/2017				149					
10/4/2017		45	61		54				
10/5/2017	104								
10/10/2017						175	311		396
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	326		413
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	302		383
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	283	185	391
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 10/9/2023 6:12 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	GWA-2 (bg)	YGWC-45
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	276		379
3/2/2021								296	
3/3/2021	95	37	57		53				
3/4/2021				110					
8/19/2021						134	333		391
8/20/2021								254	
8/26/2021		31							
8/27/2021	112		93		67				
9/1/2021				137					
9/3/2021									
2/8/2022						151		283	
2/9/2022	103	60	81	131	72		311		400
2/10/2022									
2/11/2022									
8/30/2022	100	52	81	122				244	
8/31/2022					62	116	343		445
2/7/2023	96	55	78	163	89			207	
2/8/2023						141	337		
2/9/2023									394
2/10/2023									
8/15/2023	96	81	74	126	62	186	319	230	404
8/16/2023									

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/9/2023 6:12 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 10/9/2023 6:12 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 10/9/2023 6:12 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	
2/8/2022			248	93	
2/9/2022	846	156			278
2/10/2022					
2/11/2022					
8/30/2022		153			
8/31/2022	948		242	92	266
2/7/2023		159	224		
2/8/2023				115	
2/9/2023					
2/10/2023	995				228
8/15/2023	945	157	225	83	267
8/16/2023					

FIGURE E.

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron, total (mg/L)	YGWA-39 (bg)	0.02058	92	68	Yes	18	5.556	n/a	0.01	NP
Boron, total (mg/L)	YGWA-40 (bg)	-0.01353	-106	-68	Yes	18	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-47 (bg)	-1.099	-122	-68	Yes	18	5.556	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-17S (bg)	0.134	143	87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-18S (bg)	-0.0757	-147	-87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-21I (bg)	0.6806	92	87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-39 (bg)	2.124	86	68	Yes	18	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-5D (bg)	-1.349	-113	-87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-5I (bg)	0.06491	106	87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	GWA-2 (bg)	2.437	87	74	Yes	19	5.263	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-1D (bg)	0.4931	94	87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-1I (bg)	-0.08927	-112	-87	Yes	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWC-46A	2.352	105	92	Yes	22	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-47 (bg)	-0.3827	-108	-68	Yes	18	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-17S (bg)	0.6794	162	87	Yes	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-18I (bg)	0.08671	96	87	Yes	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-20S (bg)	0.1049	130	87	Yes	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-40 (bg)	0.3111	91	68	Yes	18	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-5D (bg)	-0.6409	-159	-87	Yes	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	GWA-2 (bg)	0.2897	101	74	Yes	19	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-3D (bg)	-0.03797	-98	-87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-47 (bg)	-13.93	-138	-68	Yes	18	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-18I (bg)	-0.1191	-112	-87	Yes	21	19.05	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-39 (bg)	-2.62	-107	-68	Yes	18	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-40 (bg)	-7.156	-120	-68	Yes	18	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5D (bg)	-2.402	-162	-87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-5I (bg)	0.08787	138	87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	GWA-2 (bg)	12.89	88	74	Yes	19	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-1D (bg)	0.8971	154	87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-2I (bg)	1.209	91	87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-3D (bg)	0.2566	105	87	Yes	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-3I (bg)	1.155	119	87	Yes	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-47 (bg)	-12.84	-95	-68	Yes	18	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-21I (bg)	9.895	91	87	Yes	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-39 (bg)	27.52	85	68	Yes	18	0	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron, total (mg/L)	YGWA-47 (bg)	-0.0005874	-51	-68	No	18	5.556	n/a	0.01	NP
Boron, total (mg/L)	YGWC-44	-0.01408	-55	-68	No	18	0	n/a	0.01	NP
Boron, total (mg/L)	YGWC-45	0.001634	20	68	No	18	0	n/a	0.01	NP
Boron, total (mg/L)	YGWA-17S (bg)	0.0004386	55	87	No	21	14.29	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18I (bg)	0	-14	-87	No	21	80.95	n/a	0.01	NP
Boron, total (mg/L)	YGWA-18S (bg)	0.0006414	54	87	No	21	28.57	n/a	0.01	NP
Boron, total (mg/L)	YGWA-20S (bg)	0	-5	-87	No	21	90.48	n/a	0.01	NP
Boron, total (mg/L)	YGWA-21I (bg)	0	-28	-87	No	21	57.14	n/a	0.01	NP
Boron, total (mg/L)	**YGWA-39 (bg)**	**0.02058**	**92**	**68**	**Yes**	**18**	**5.556**	**n/a**	**0.01**	**NP**
Boron, total (mg/L)	**YGWA-40 (bg)**	**-0.01353**	**-106**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Boron, total (mg/L)	YGWA-4I (bg)	0	13	87	No	21	71.43	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5D (bg)	0.0006284	65	87	No	21	19.05	n/a	0.01	NP
Boron, total (mg/L)	YGWA-5I (bg)	0	-11	-87	No	21	66.67	n/a	0.01	NP
Boron, total (mg/L)	GWA-2 (bg)	0	35	74	No	19	68.42	n/a	0.01	NP
Boron, total (mg/L)	YGWA-14S (bg)	-0.0004045	-54	-87	No	21	9.524	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1D (bg)	0.001652	58	87	No	21	42.86	n/a	0.01	NP
Boron, total (mg/L)	YGWA-1I (bg)	0	-13	-87	No	21	71.43	n/a	0.01	NP
Boron, total (mg/L)	YGWA-2I (bg)	0	2	87	No	21	80.95	n/a	0.01	NP
Boron, total (mg/L)	YGWA-30I (bg)	0	-13	-87	No	21	85.71	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3D (bg)	0	16	87	No	21	61.9	n/a	0.01	NP
Boron, total (mg/L)	YGWA-3I (bg)	0	-13	-87	No	21	90.48	n/a	0.01	NP
Boron, total (mg/L)	YGWC-46A	0.07878	74	92	No	22	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-47 (bg)**	**-1.099**	**-122**	**-68**	**Yes**	**18**	**5.556**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWC-45	-0.4199	-37	-68	No	18	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-17S (bg)**	**0.134**	**143**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWA-18I (bg)	0.05034	39	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-18S (bg)**	**-0.0757**	**-147**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWA-20S (bg)	0.02165	43	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-21I (bg)**	**0.6806**	**92**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	**YGWA-39 (bg)**	**2.124**	**86**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWA-40 (bg)	-0.3452	-49	-68	No	18	5.556	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-4I (bg)	0.02012	12	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-5D (bg)**	**-1.349**	**-113**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	**YGWA-5I (bg)**	**0.06491**	**106**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	**GWA-2 (bg)**	**2.437**	**87**	**74**	**Yes**	**19**	**5.263**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWA-14S (bg)	0	18	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWA-1D (bg)**	**0.4931**	**94**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	**YGWA-1I (bg)**	**-0.08927**	**-112**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	YGWA-2I (bg)	0	1	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-30I (bg)	0.02343	63	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3D (bg)	0.2668	48	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	YGWA-3I (bg)	0.5543	85	87	No	21	0	n/a	0.01	NP
Calcium, total (mg/L)	**YGWC-46A**	**2.352**	**105**	**92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**YGWA-47 (bg)**	**-0.3827**	**-108**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWC-44	0.1457	52	68	No	18	0	n/a	0.01	NP
Chloride, Total (mg/L)	**YGWA-17S (bg)**	**0.6794**	**162**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**YGWA-18I (bg)**	**0.08671**	**96**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-18S (bg)	0.1048	63	87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	**YGWA-20S (bg)**	**0.1049**	**130**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-21I (bg)	-0.07755	-57	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-39 (bg)	0.699	68	68	No	18	0	n/a	0.01	NP
Chloride, Total (mg/L)	**YGWA-40 (bg)**	**0.3111**	**91**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-4I (bg)	0.05782	58	87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	**YGWA-5D (bg)**	**-0.6409**	**-159**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-5I (bg)	0	6	87	No	21	0	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

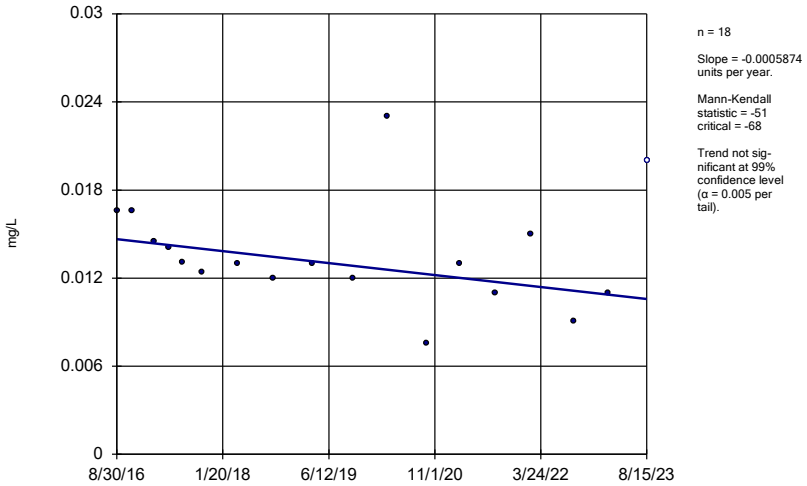
Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Chloride, Total (mg/L)	**GWA-2 (bg)**	**0.2897**	**101**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-14S (bg)	0.102	55	87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-1D (bg)	0	-24	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-1I (bg)	0	-25	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-2I (bg)	-0.01766	-41	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWA-30I (bg)	-0.01564	-40	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	**YGWA-3D (bg)**	**-0.03797**	**-98**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	YGWA-3I (bg)	-0.02296	-79	-87	No	21	0	n/a	0.01	NP
Chloride, Total (mg/L)	YGWC-46A	-0.2173	-10	-92	No	22	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-47 (bg)**	**-13.93**	**-138**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-17S (bg)	0	5	87	No	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-18I (bg)**	**-0.1191**	**-112**	**-87**	**Yes**	**21**	**19.05**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-18S (bg)	-0.112	-71	-87	No	21	9.524	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-20S (bg)	0	54	87	No	21	71.43	n/a	0.01	NP
Sulfate as SO4 (mg/L)	YGWA-21I (bg)	-0.1972	-61	-87	No	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-39 (bg)**	**-2.62**	**-107**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**YGWA-40 (bg)**	**-7.156**	**-120**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-4I (bg)	0.0251	16	87	No	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-5D (bg)**	**-2.402**	**-162**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**YGWA-5I (bg)**	**0.08787**	**138**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**GWA-2 (bg)**	**12.89**	**88**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-14S (bg)	-0.04669	-29	-87	No	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-1D (bg)**	**0.8971**	**154**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-1I (bg)	-0.06392	-13	-87	No	21	0	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-2I (bg)**	**1.209**	**91**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWA-30I (bg)	-0.03548	-33	-87	No	21	9.524	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**YGWA-3D (bg)**	**0.2566**	**105**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**YGWA-3I (bg)**	**1.155**	**119**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	YGWC-46A	-34.63	-90	-92	No	22	4.545	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**YGWA-47 (bg)**	**-12.84**	**-95**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	YGWC-44	-2.924	-24	-68	No	18	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-45	0	-2	-68	No	18	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-17S (bg)	2.283	46	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18I (bg)	-1.363	-33	-87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-18S (bg)	1.344	26	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-20S (bg)	2.575	48	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**YGWA-21I (bg)**	**9.895**	**91**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**YGWA-39 (bg)**	**27.52**	**85**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	YGWA-40 (bg)	-6.016	-59	-68	No	18	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-4I (bg)	0.6864	14	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-5D (bg)	-9.186	-72	-87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-5I (bg)	-0.77	-20	-87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	GWA-2 (bg)	14.49	72	74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-14S (bg)	0.8282	30	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-1D (bg)	2.147	46	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-1I (bg)	-0.3083	-7	-87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-2I (bg)	-0.5892	-11	-87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-30I (bg)	1.322	26	87	No	21	9.524	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3D (bg)	1.819	27	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWA-3I (bg)	1.056	15	87	No	21	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-46A	-24.27	-33	-92	No	22	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	YGWC-52	-28.5	-29	-30	No	10	0	n/a	0.01	NP

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 18

Slope = -0.0005874 units per year.

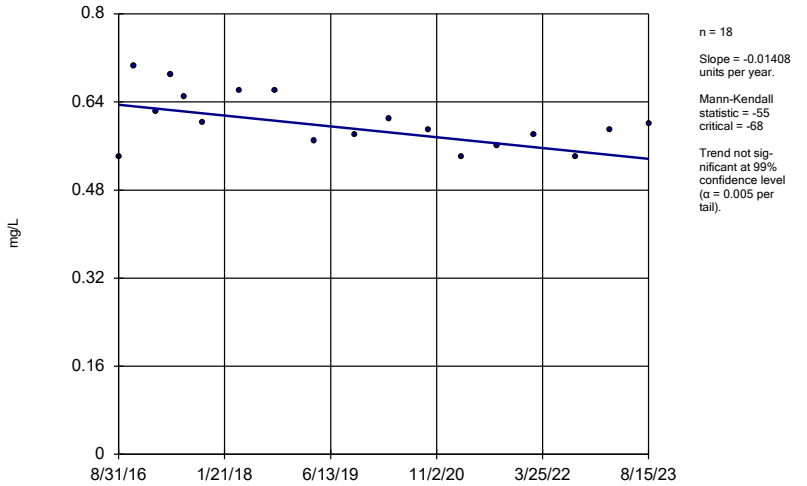
Mann-Kendall statistic = -51 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:13 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWC-44



n = 18

Slope = -0.01408 units per year.

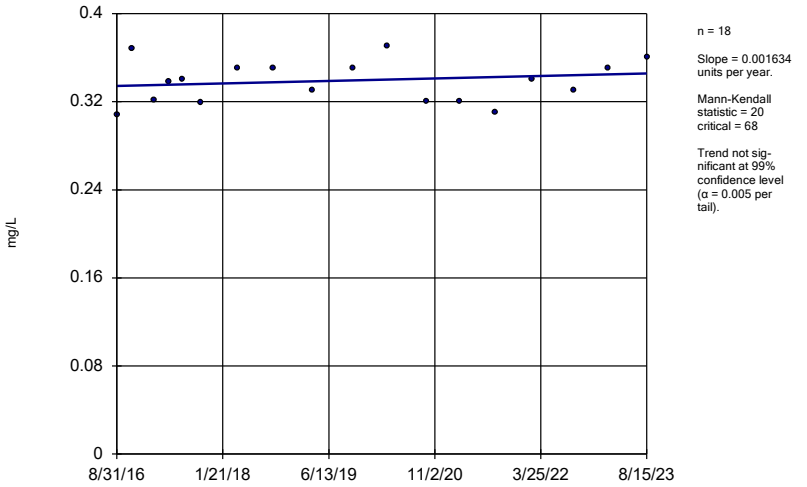
Mann-Kendall statistic = -55 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:13 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWC-45



n = 18

Slope = 0.001634 units per year.

Mann-Kendall statistic = 20 critical = 68

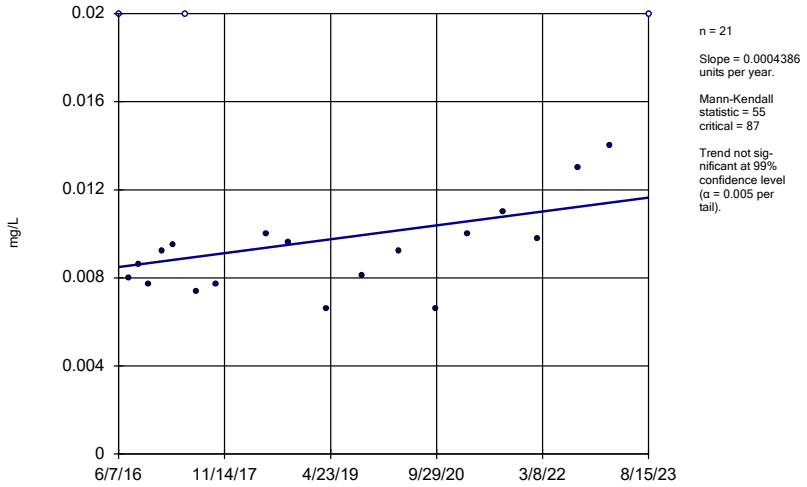
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:13 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-17S (bg)



n = 21

Slope = 0.0004386 units per year.

Mann-Kendall statistic = 55 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:13 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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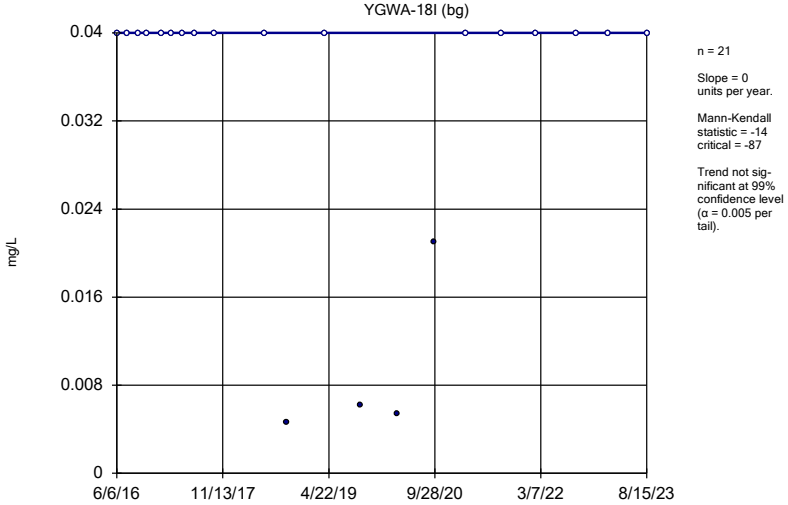
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -14
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:13 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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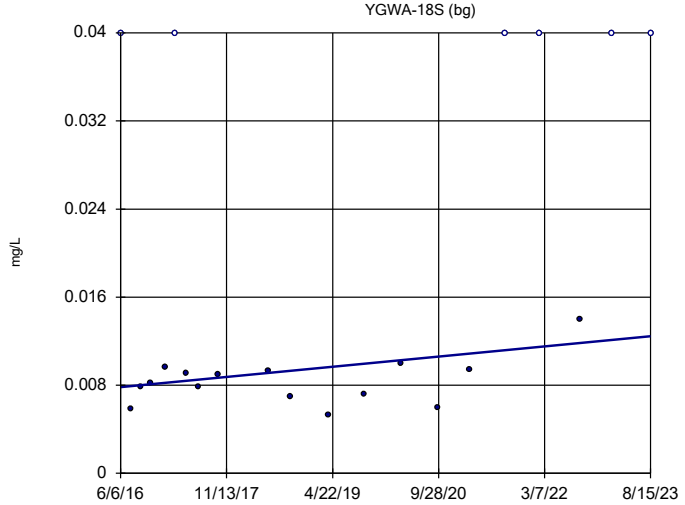
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 21

Slope = 0.0006414 units per year.

Mann-Kendall statistic = 54
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:13 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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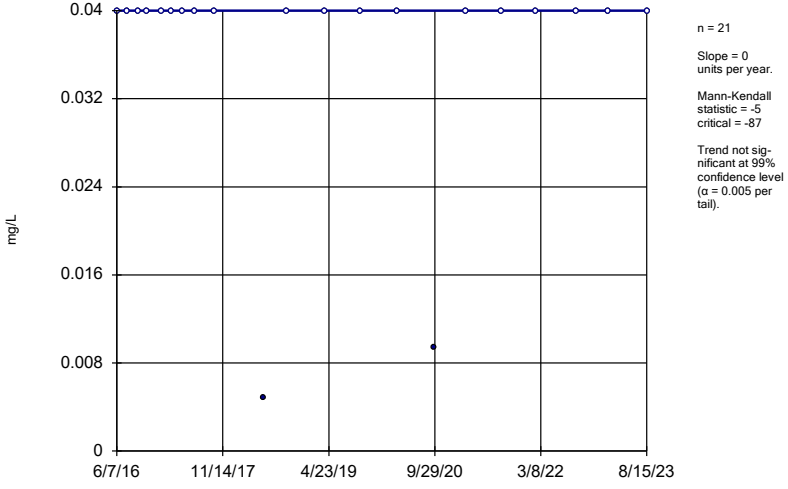
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -5
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:13 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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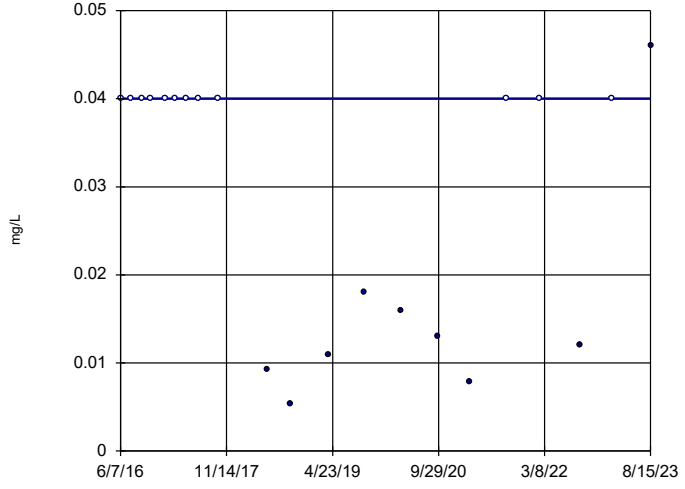
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -28
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:13 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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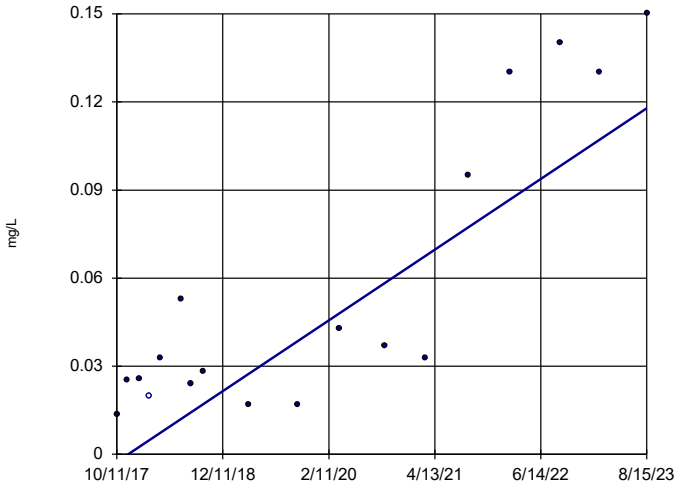
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 18

Slope = 0.02058 units per year.

Mann-Kendall statistic = 92
critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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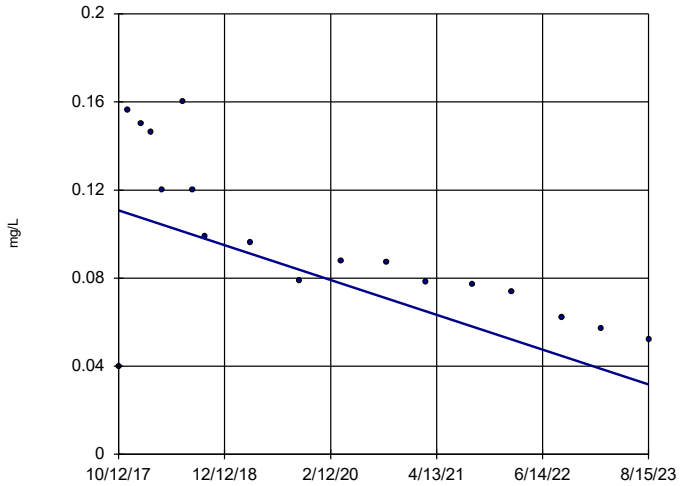
Sen's Slope Estimator

YGWA-40 (bg)



n = 18

Slope = -0.01353 units per year.

Mann-Kendall statistic = -106
critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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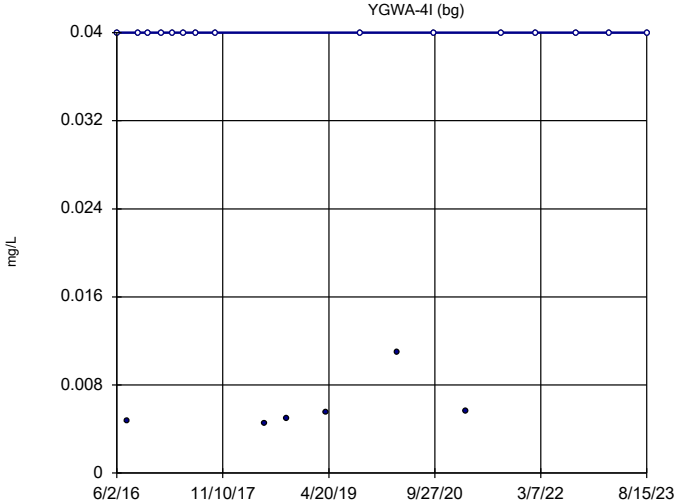
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 13
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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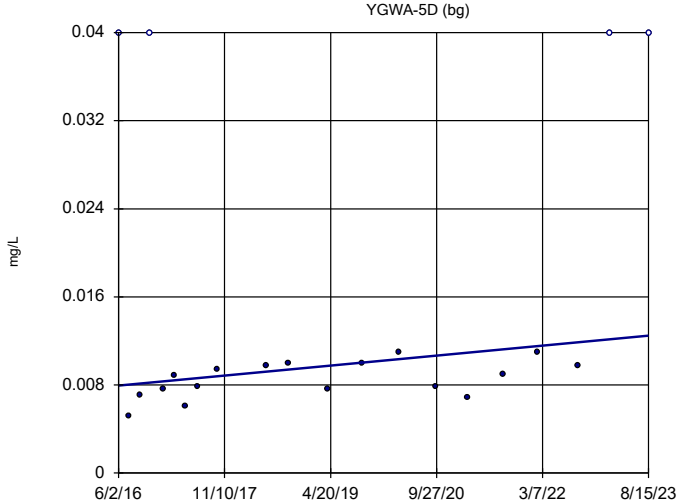
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 21

Slope = 0.0006284 units per year.

Mann-Kendall statistic = 65
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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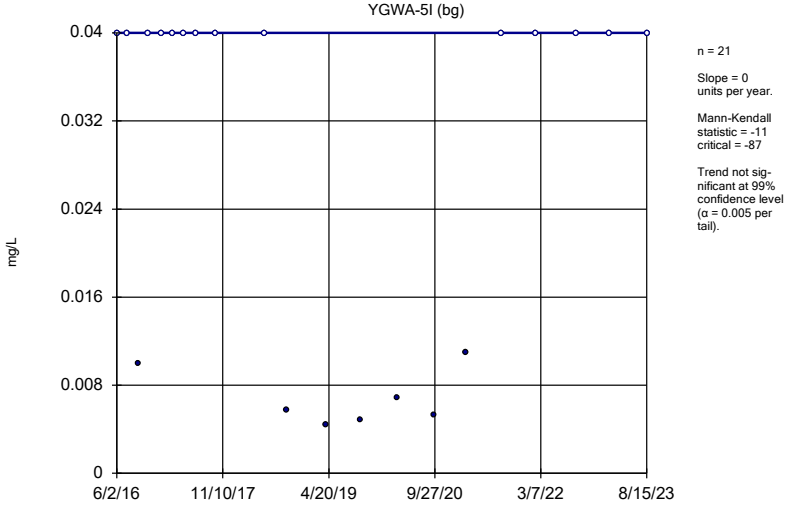
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -11
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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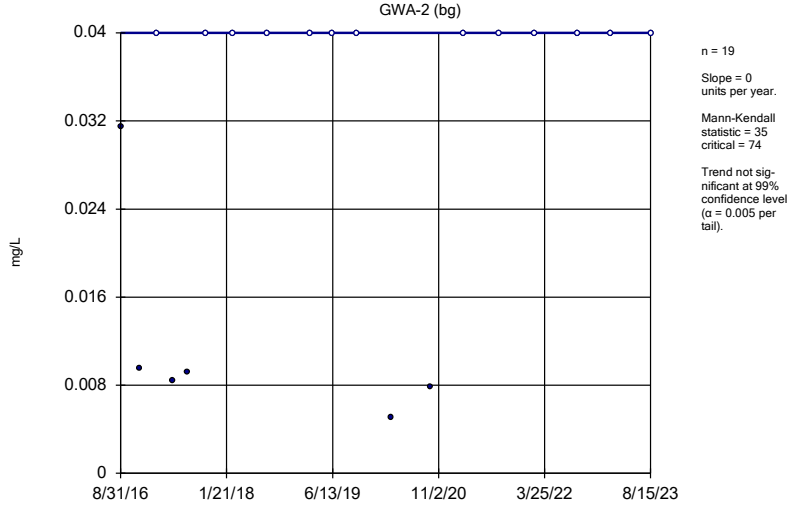
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = 35
critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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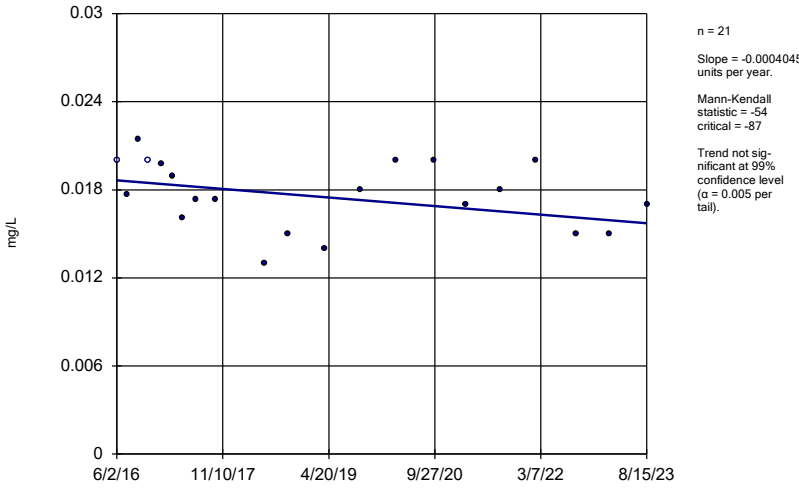
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 21

Slope = -0.0004045 units per year.

Mann-Kendall statistic = -54
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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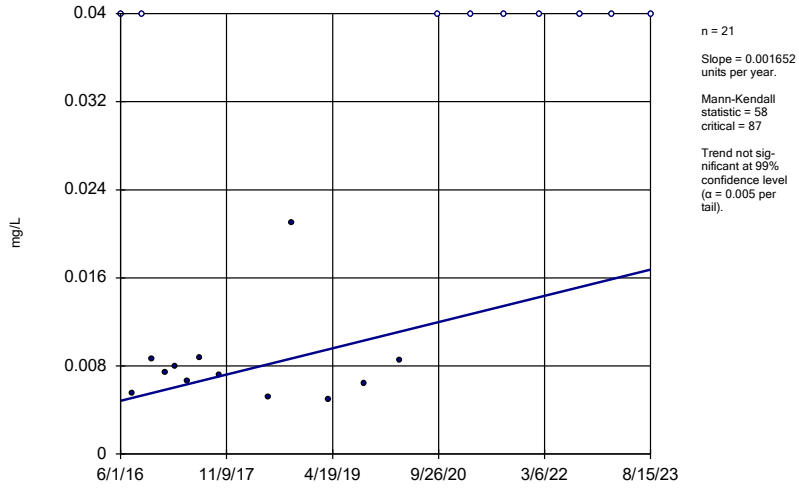
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1D (bg)



n = 21

Slope = 0.001652 units per year.

Mann-Kendall statistic = 58
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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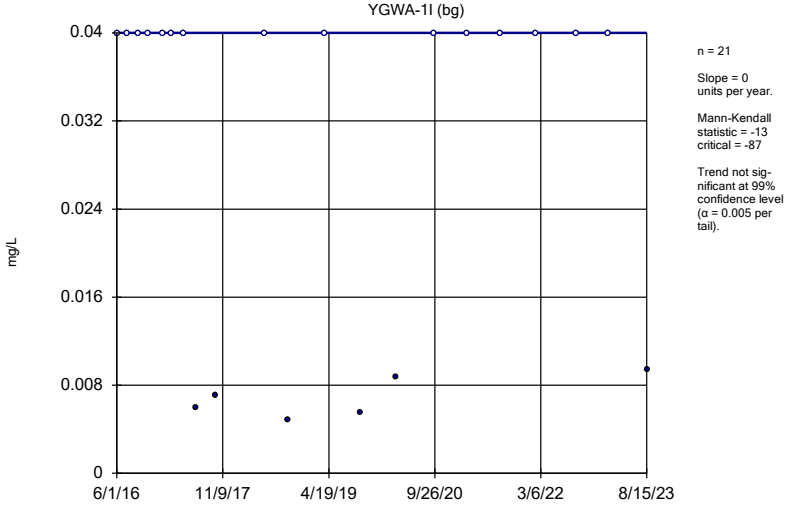
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -13
critical = -87

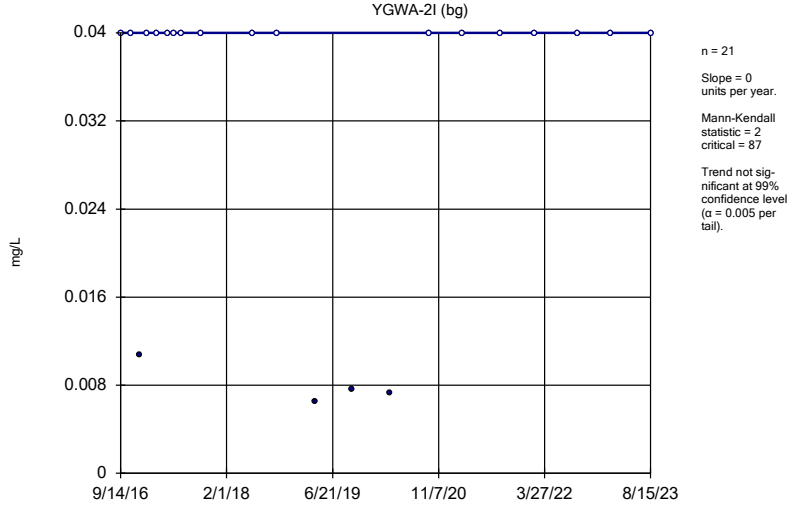
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 2
critical = 87

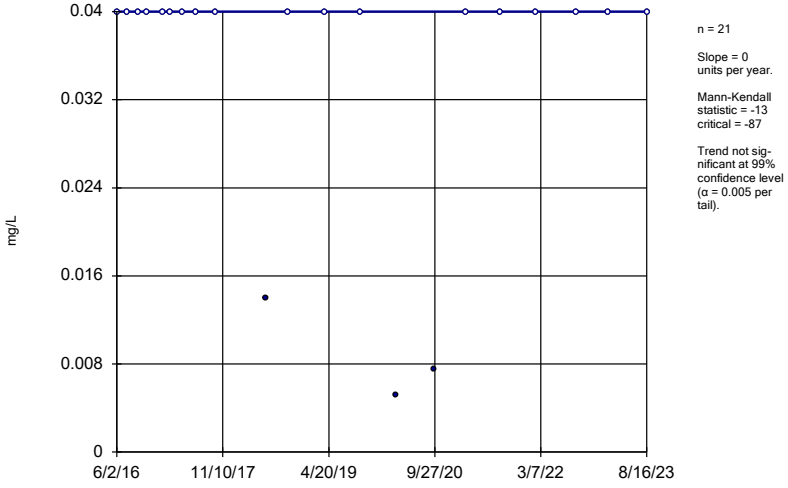
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -13
critical = -87

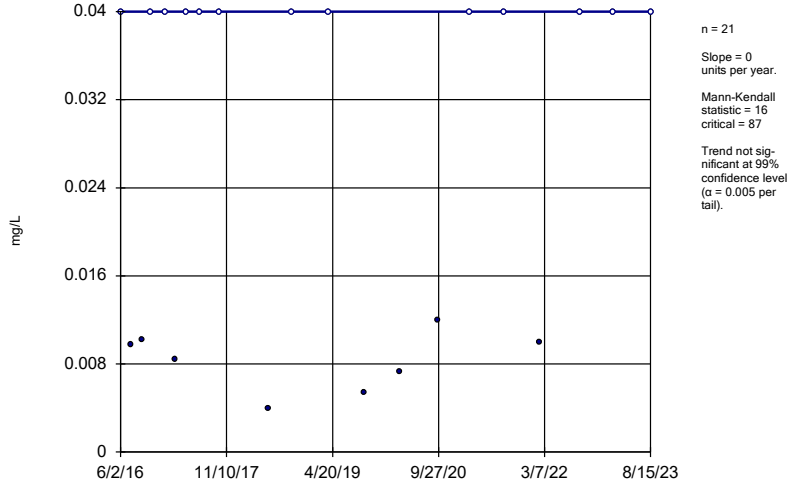
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3D (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 16
critical = 87

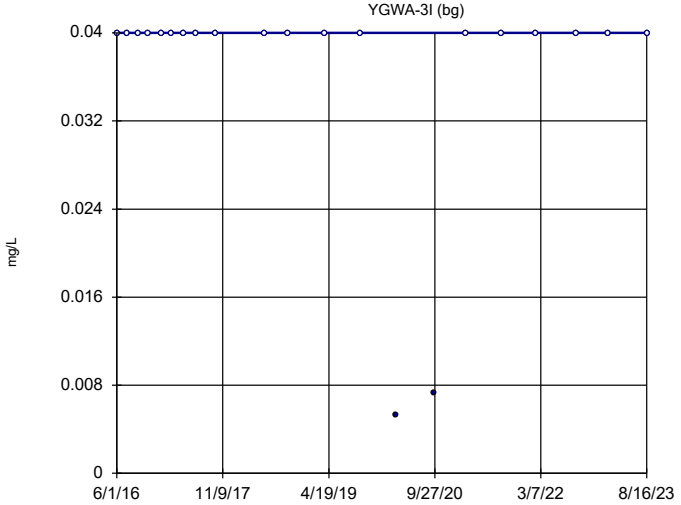
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -13
critical = -87

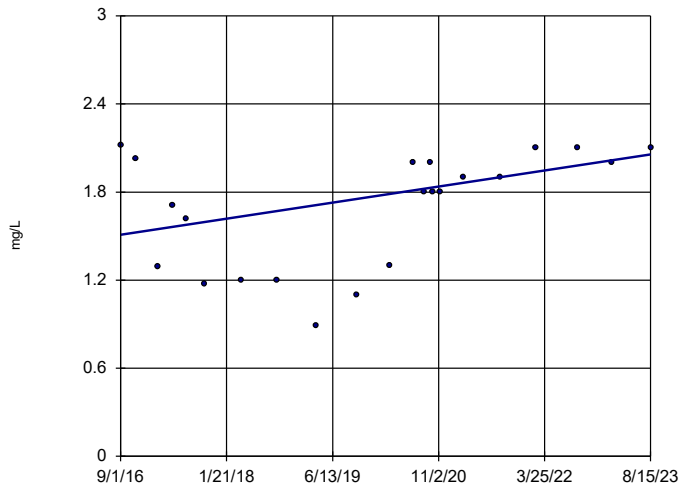
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG

Sen's Slope Estimator

YGWC-46A



n = 22

Slope = 0.07878 units per year.

Mann-Kendall statistic = 74
critical = 92

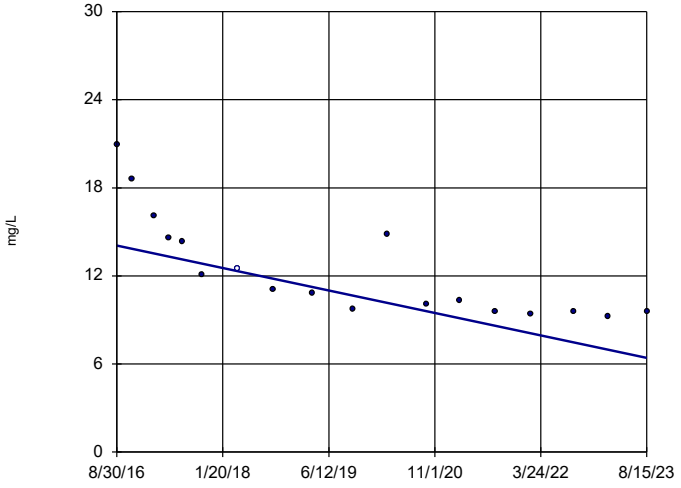
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 18

Slope = -1.099 units per year.

Mann-Kendall statistic = -122
critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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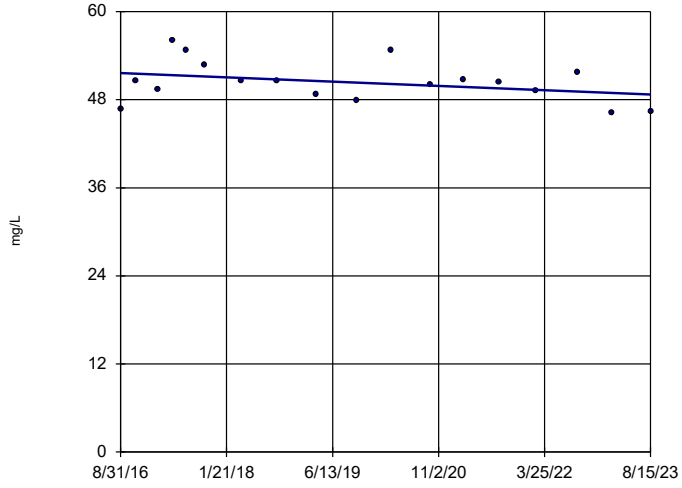
Sen's Slope Estimator

YGWC-45



n = 18

Slope = -0.4199 units per year.

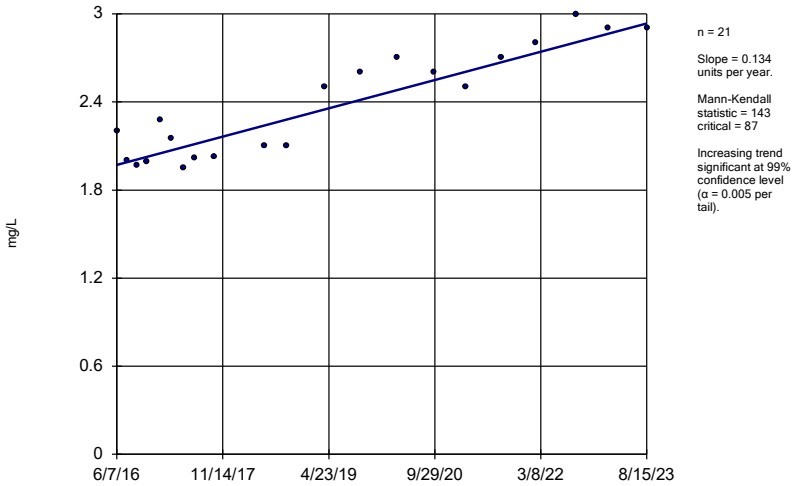
Mann-Kendall statistic = -37
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-17S (bg)



n = 21

Slope = 0.134 units per year.

Mann-Kendall statistic = 143 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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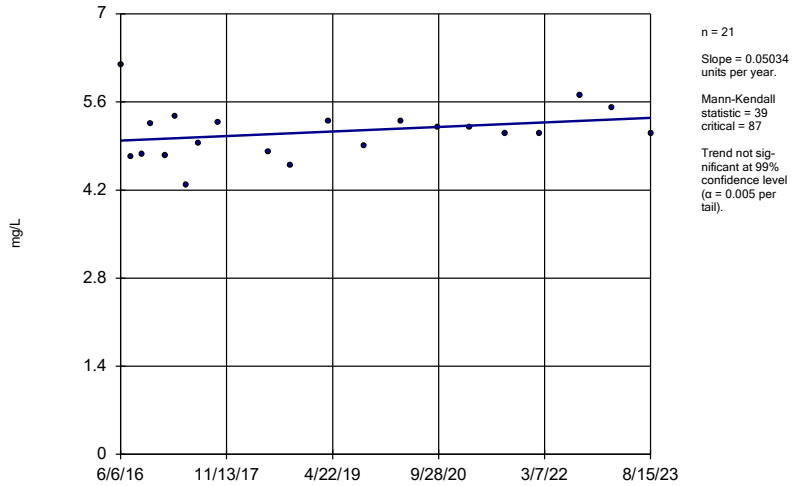
Sen's Slope Estimator

YGWA-18I (bg)



n = 21

Slope = 0.05034 units per year.

Mann-Kendall statistic = 39 critical = 87

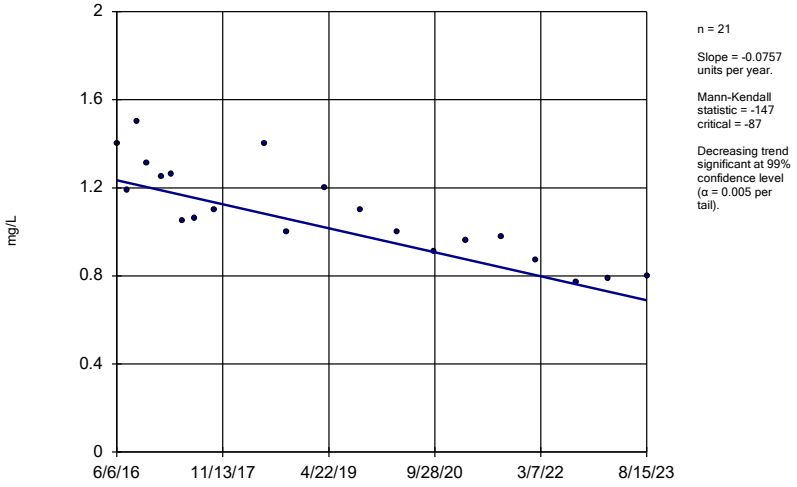
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sanitas™ v.10.0.12 Software licensed to . UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 21

Slope = -0.0757 units per year.

Mann-Kendall statistic = -147 critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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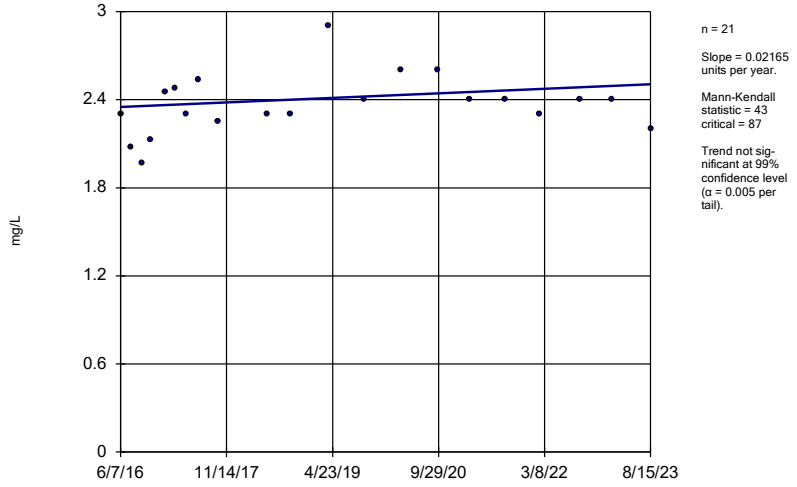
Sen's Slope Estimator

YGWA-20S (bg)



n = 21

Slope = 0.02165 units per year.

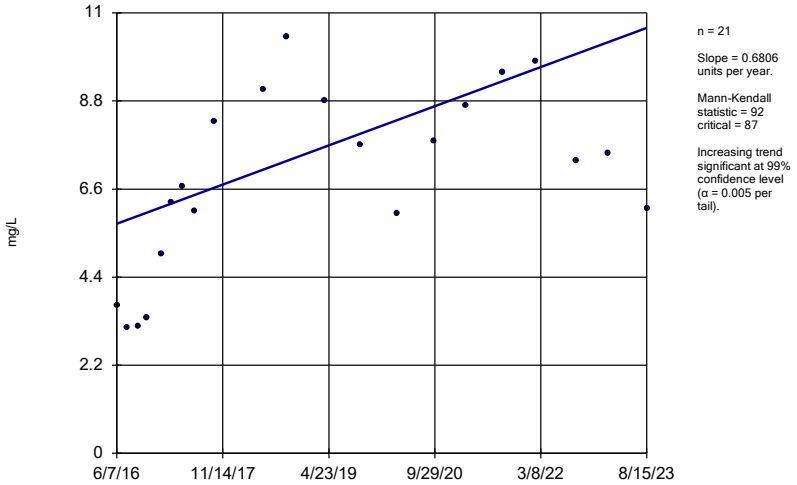
Mann-Kendall statistic = 43 critical = 87

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-21I (bg)



n = 21

Slope = 0.6806 units per year.

Mann-Kendall statistic = 92
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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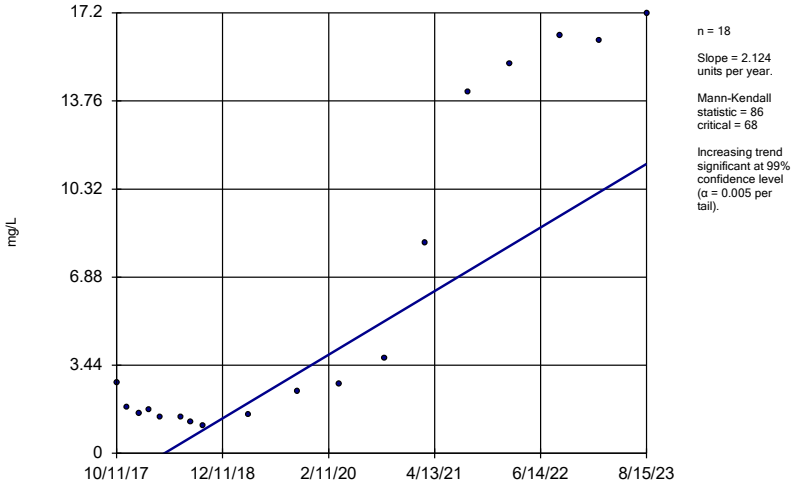
Sen's Slope Estimator

YGWA-39 (bg)



n = 18

Slope = 2.124 units per year.

Mann-Kendall statistic = 86
critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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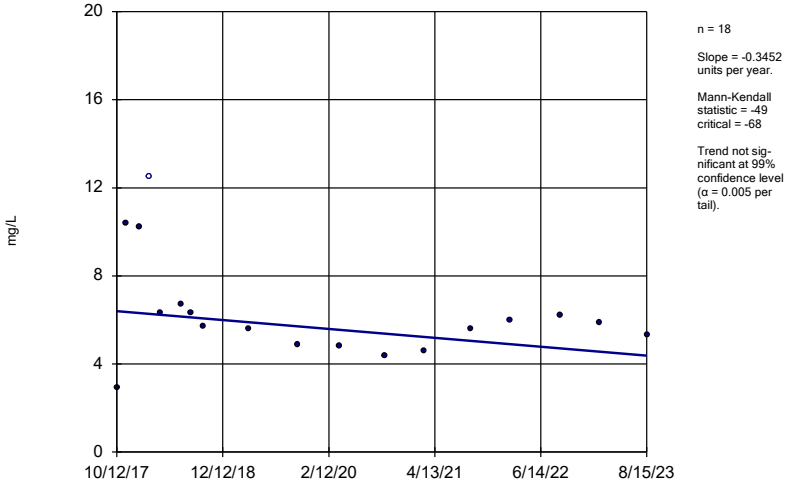
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 18

Slope = -0.3452 units per year.

Mann-Kendall statistic = -49
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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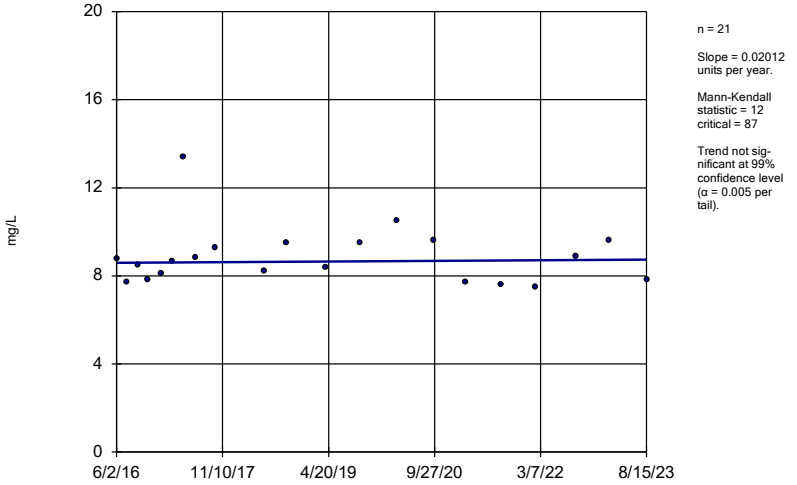
Sen's Slope Estimator

YGWA-4I (bg)



n = 21

Slope = 0.02012 units per year.

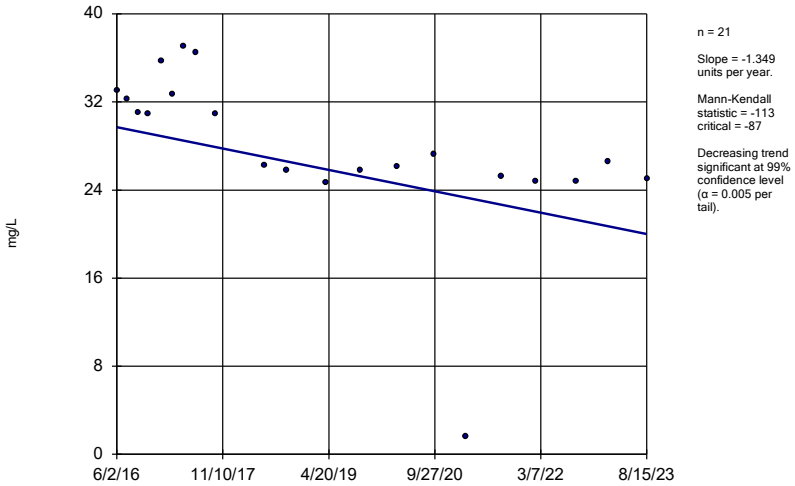
Mann-Kendall statistic = 12
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-5D (bg)



n = 21

Slope = -1.349 units per year.

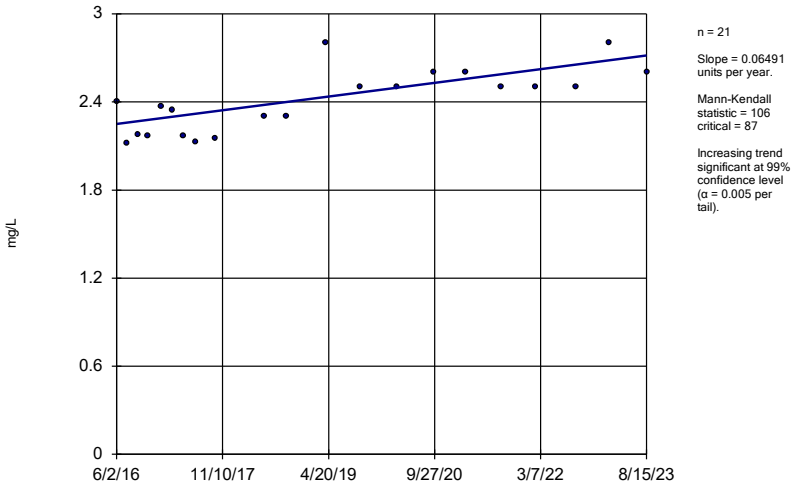
Mann-Kendall statistic = -113
critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-5I (bg)



n = 21

Slope = 0.06491 units per year.

Mann-Kendall statistic = 106
critical = 87

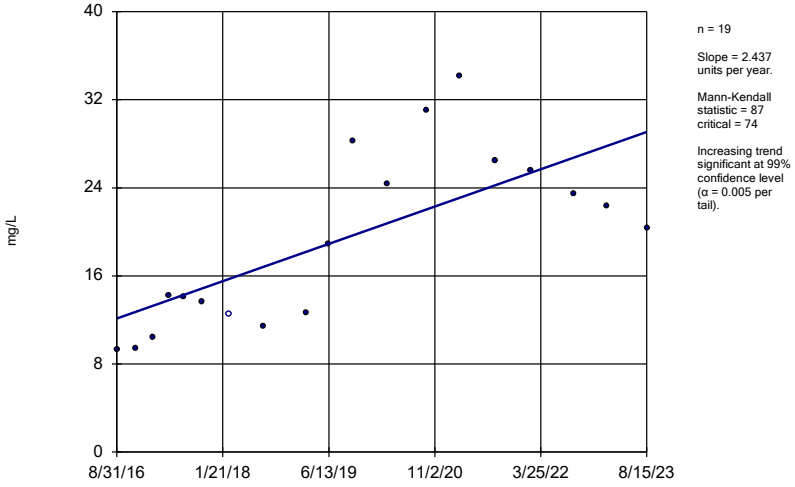
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 19

Slope = 2.437 units per year.

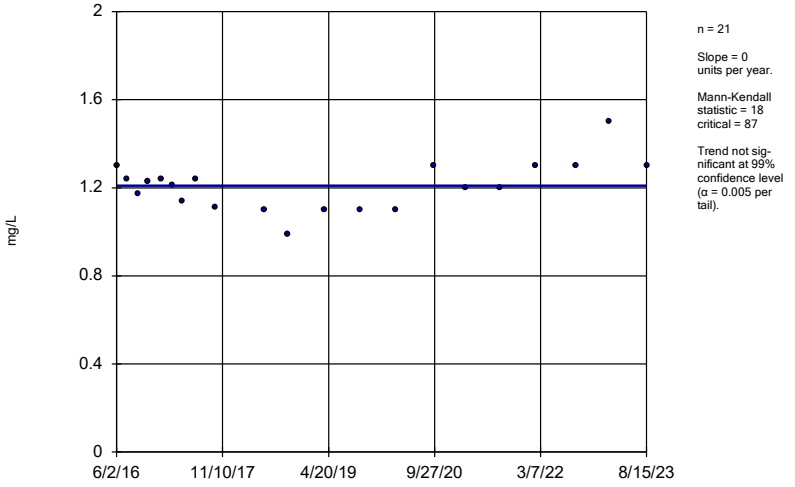
Mann-Kendall statistic = 87
critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-14S (bg)



n = 21

Slope = 0 units per year.

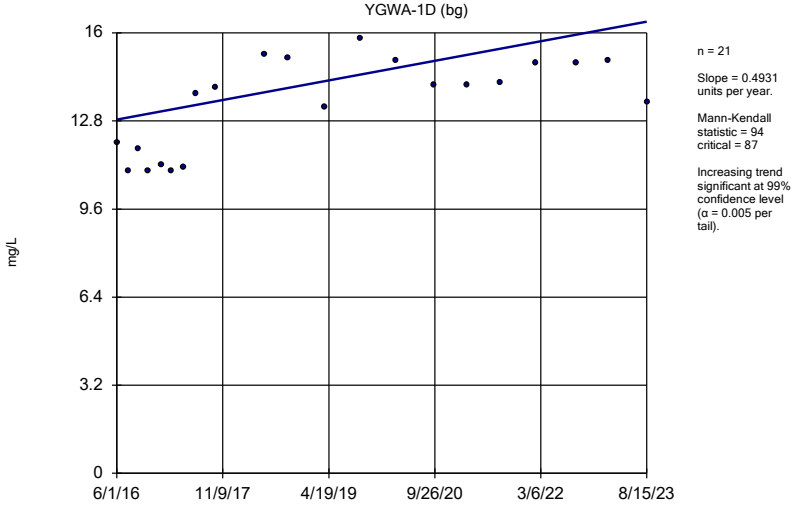
Mann-Kendall statistic = 18
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-1D (bg)



n = 21

Slope = 0.4931 units per year.

Mann-Kendall statistic = 94
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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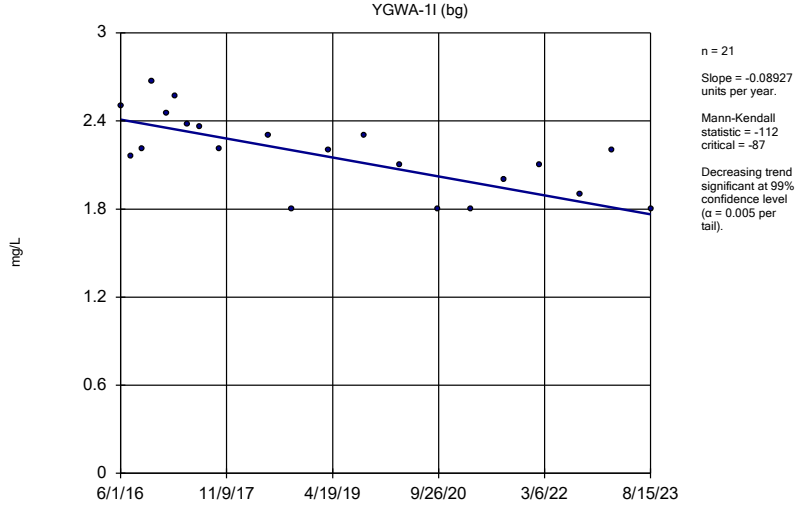
Sen's Slope Estimator

YGWA-1I (bg)



n = 21

Slope = -0.08927 units per year.

Mann-Kendall statistic = -112
critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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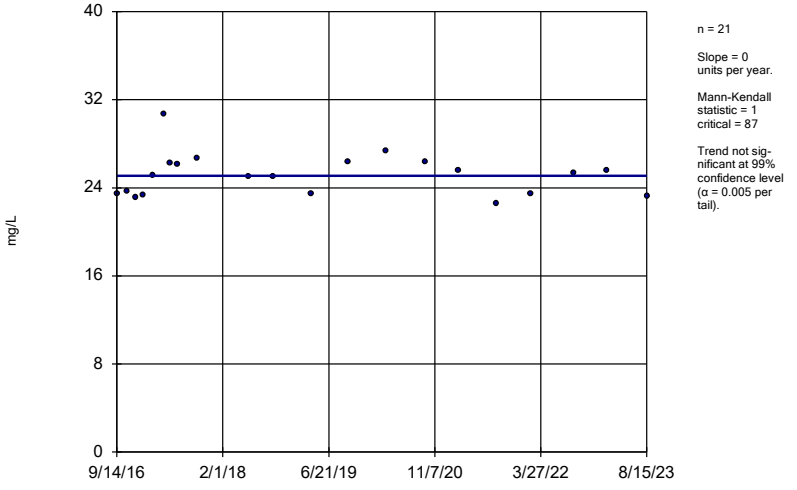
Sen's Slope Estimator

YGWA-2I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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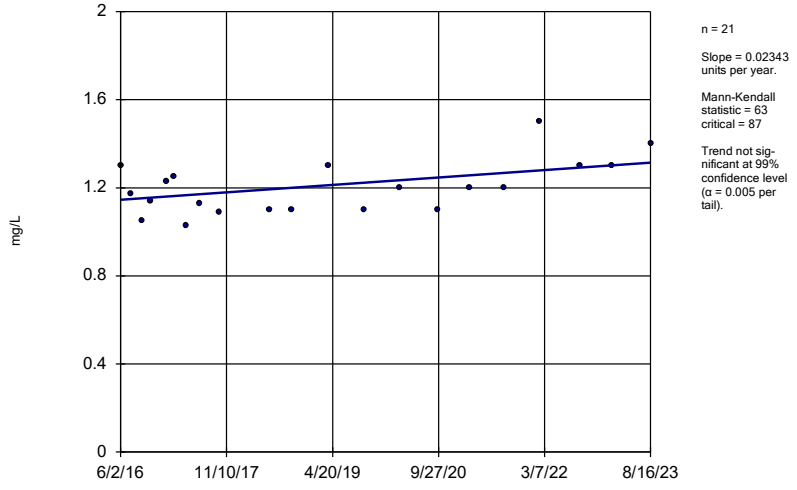
Sen's Slope Estimator

YGWA-30I (bg)



n = 21

Slope = 0.02343 units per year.

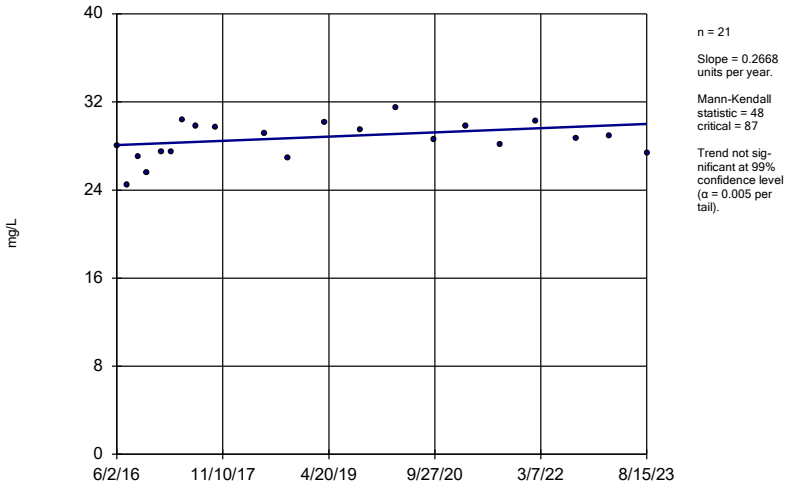
Mann-Kendall statistic = 63
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-3D (bg)



n = 21

Slope = 0.2668 units per year.

Mann-Kendall statistic = 48
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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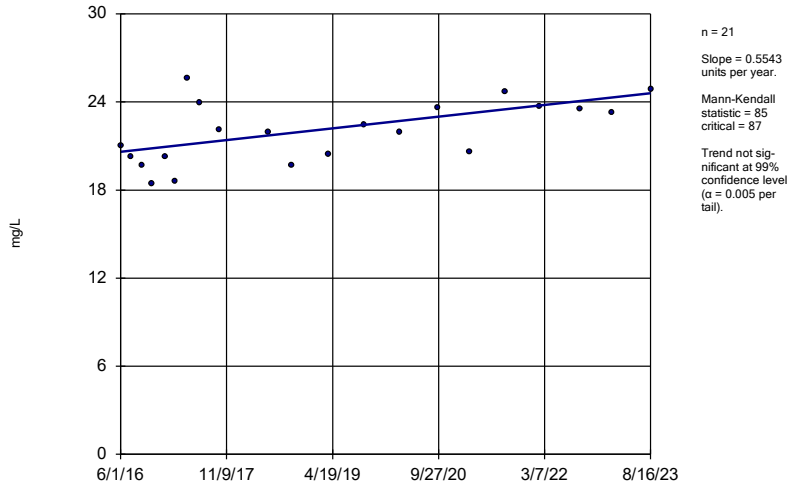
Sen's Slope Estimator

YGWA-3I (bg)



n = 21

Slope = 0.5543 units per year.

Mann-Kendall statistic = 85
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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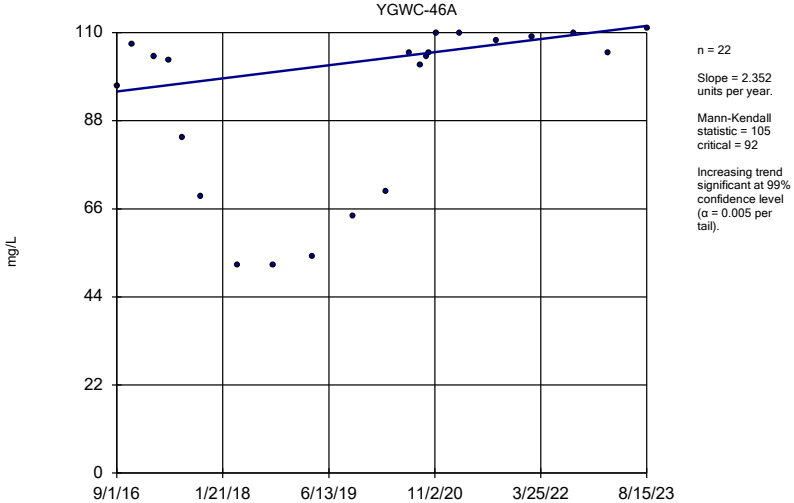
Sen's Slope Estimator

YGWC-46A



n = 22

Slope = 2.352 units per year.

Mann-Kendall statistic = 105
critical = 92

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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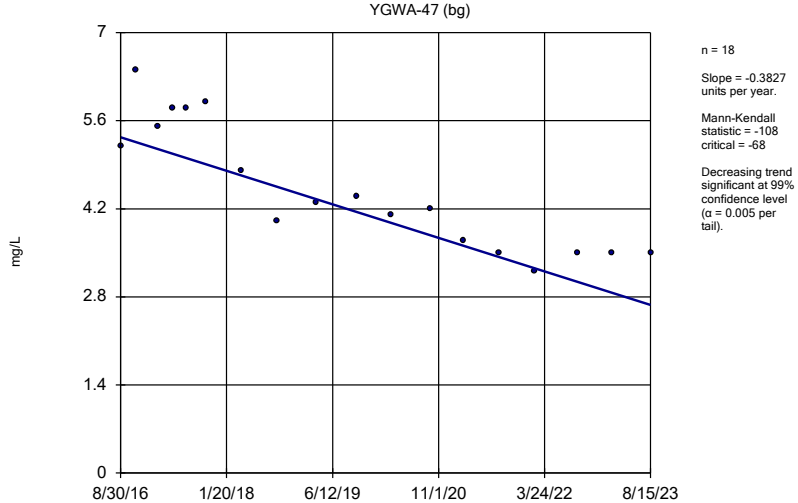
Sen's Slope Estimator

YGWA-47 (bg)



n = 18

Slope = -0.3827 units per year.

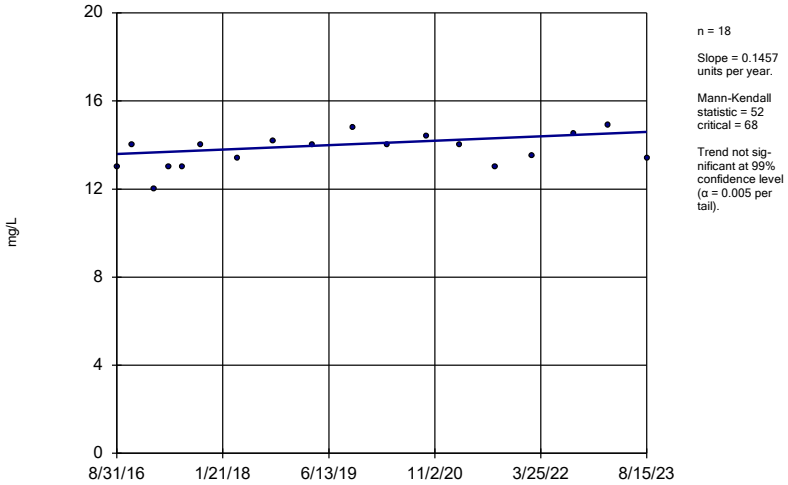
Mann-Kendall statistic = -108
critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWC-44



n = 18

Slope = 0.1457 units per year.

Mann-Kendall statistic = 52 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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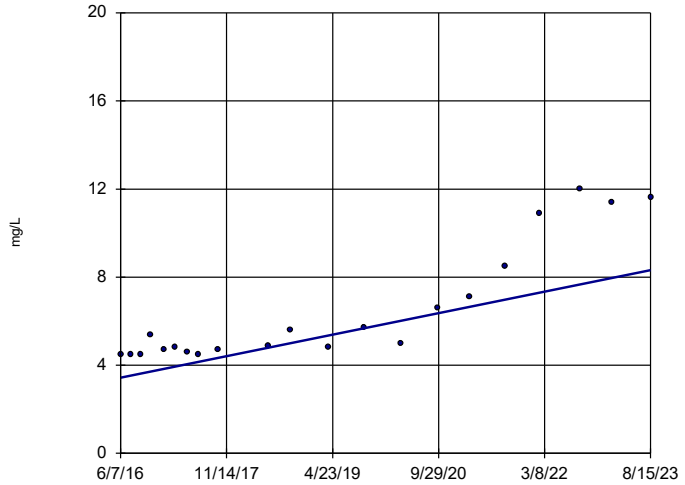
Sen's Slope Estimator

YGWA-17S (bg)



n = 21

Slope = 0.6794 units per year.

Mann-Kendall statistic = 162 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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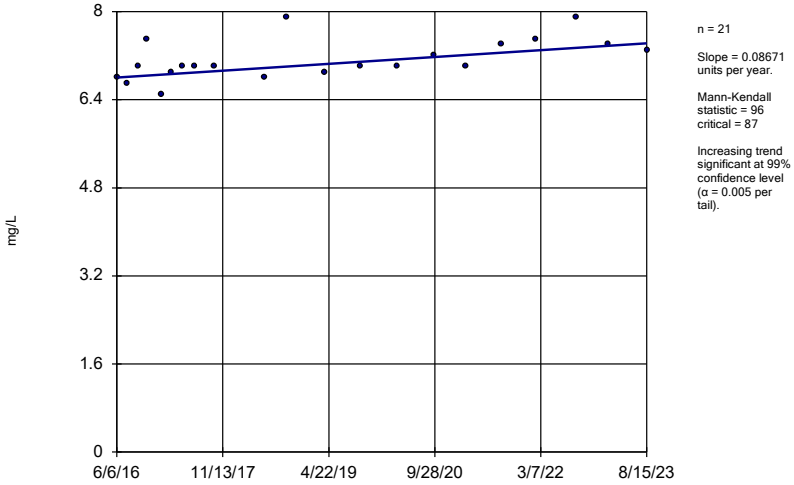
Sen's Slope Estimator

YGWA-18I (bg)



n = 21

Slope = 0.08671 units per year.

Mann-Kendall statistic = 96 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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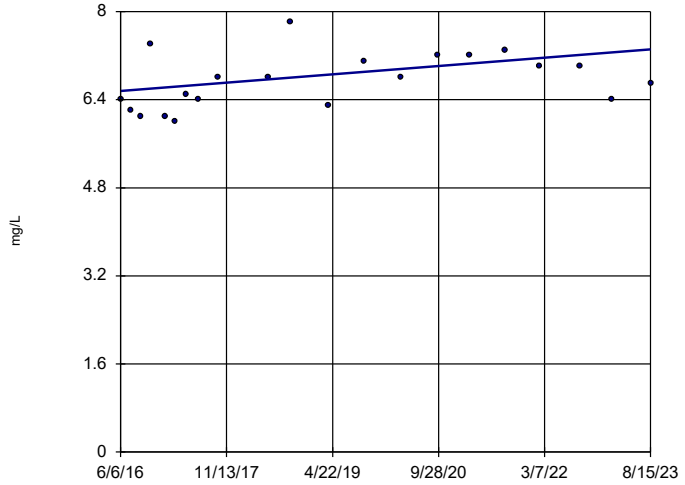
Sen's Slope Estimator

YGWA-18S (bg)



n = 21

Slope = 0.1048 units per year.

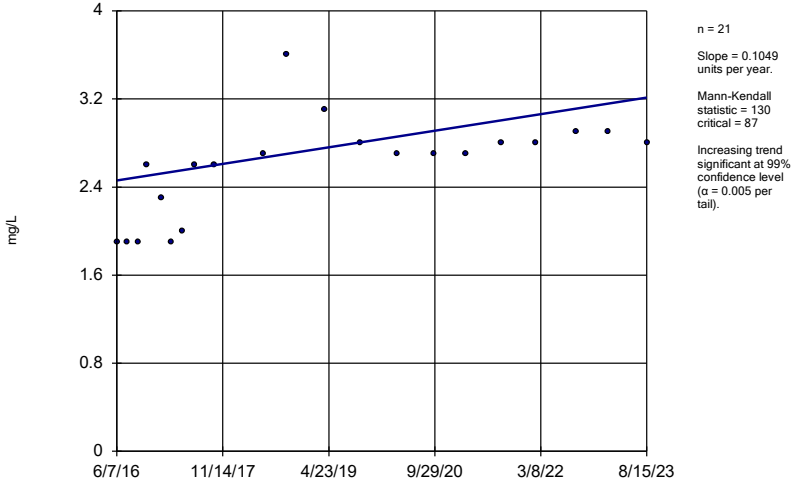
Mann-Kendall statistic = 63 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-20S (bg)



n = 21

Slope = 0.1049 units per year.

Mann-Kendall statistic = 130 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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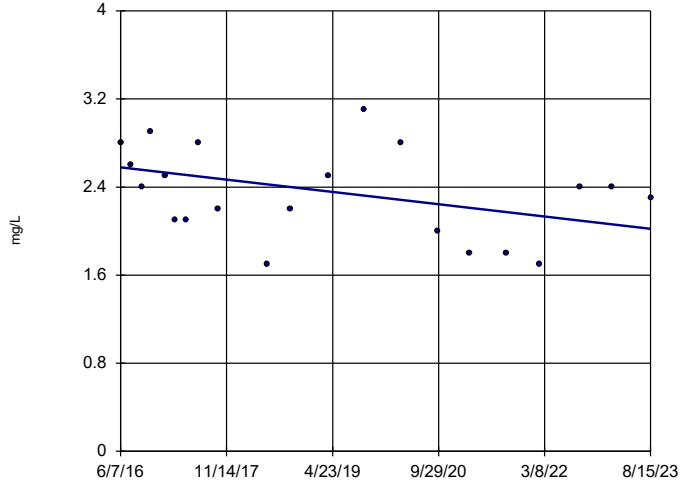
Sen's Slope Estimator

YGWA-21I (bg)



n = 21

Slope = -0.07755 units per year.

Mann-Kendall statistic = -57 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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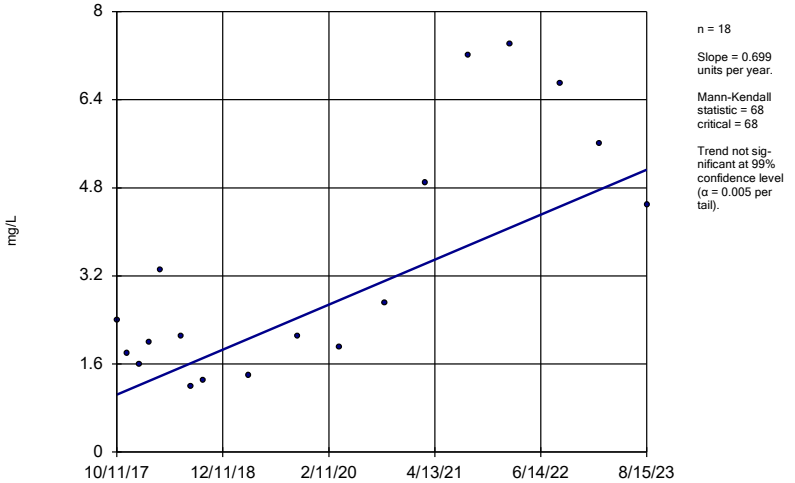
Sen's Slope Estimator

YGWA-39 (bg)



n = 18

Slope = 0.699 units per year.

Mann-Kendall statistic = 68 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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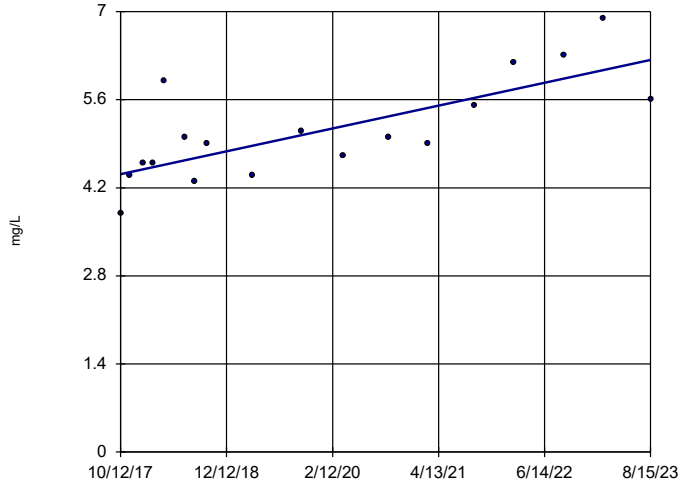
Sen's Slope Estimator

YGWA-40 (bg)



n = 18

Slope = 0.3111 units per year.

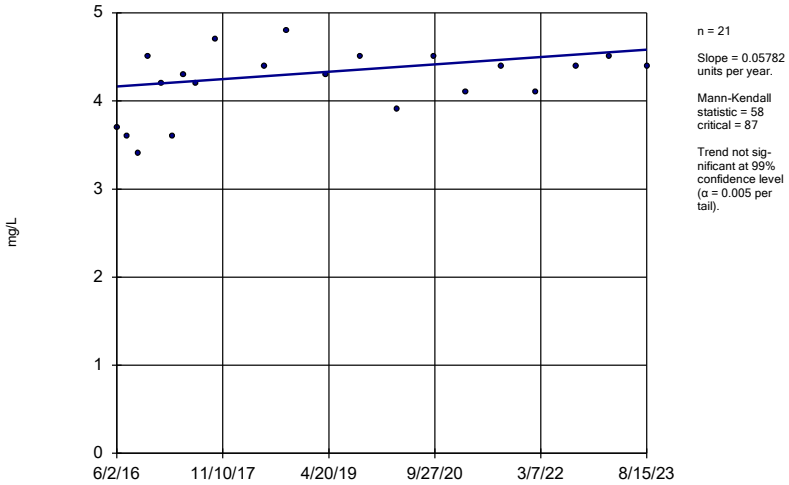
Mann-Kendall statistic = 91 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-4I (bg)



n = 21

Slope = 0.05782 units per year.

Mann-Kendall statistic = 58
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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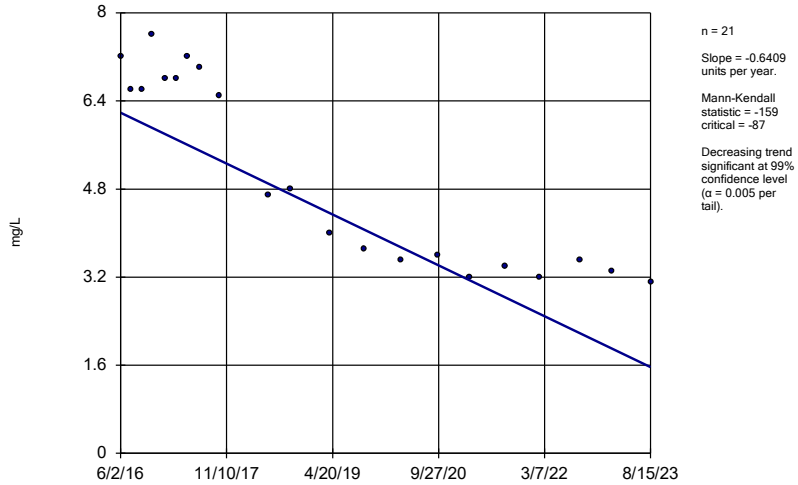
Sen's Slope Estimator

YGWA-5D (bg)



n = 21

Slope = -0.6409 units per year.

Mann-Kendall statistic = -159
critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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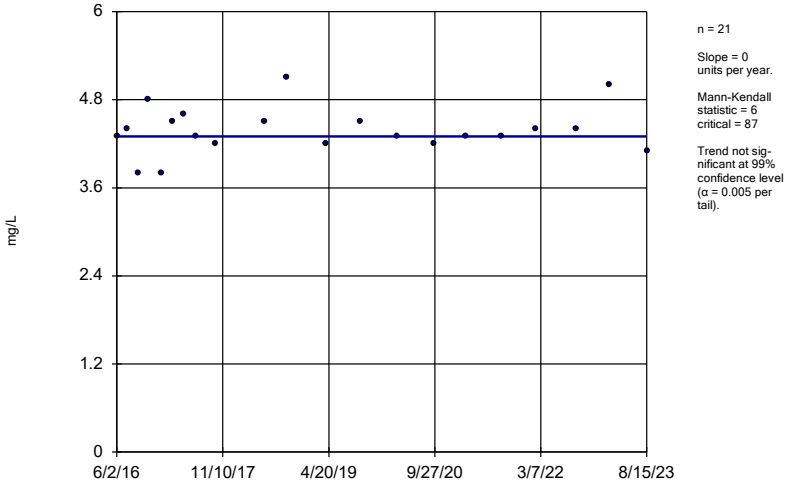
Sen's Slope Estimator

YGWA-5I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 6
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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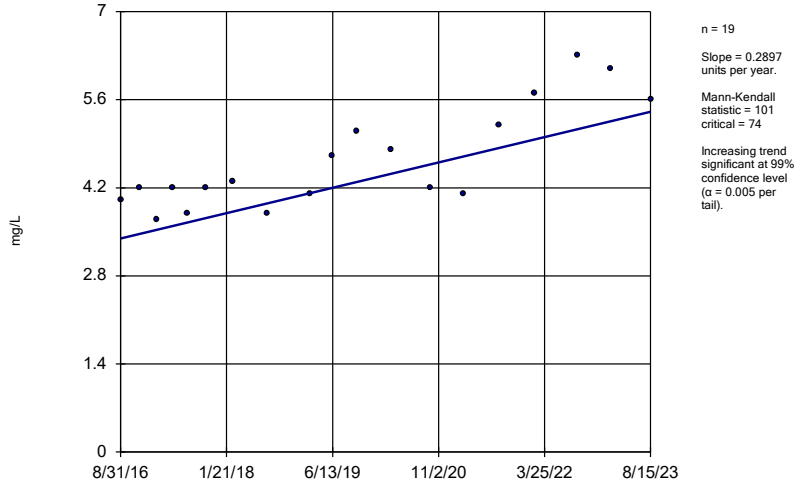
Sen's Slope Estimator

GWA-2 (bg)



n = 19

Slope = 0.2897 units per year.

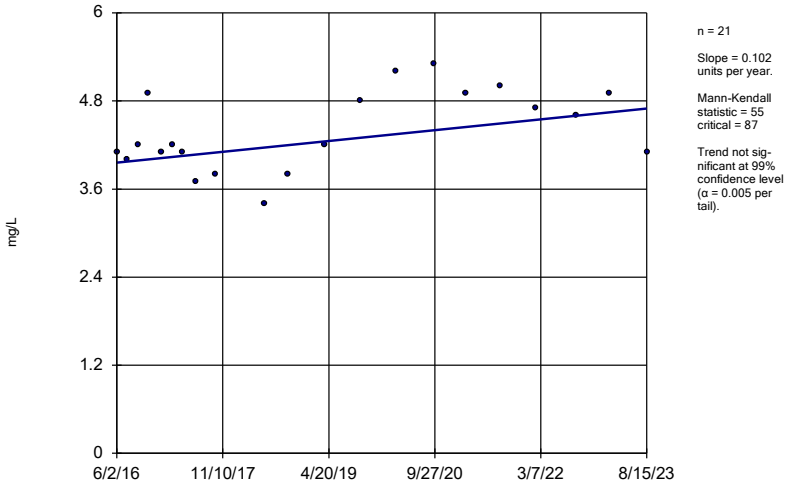
Mann-Kendall statistic = 101
critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-14S (bg)



n = 21

Slope = 0.102 units per year.

Mann-Kendall statistic = 55 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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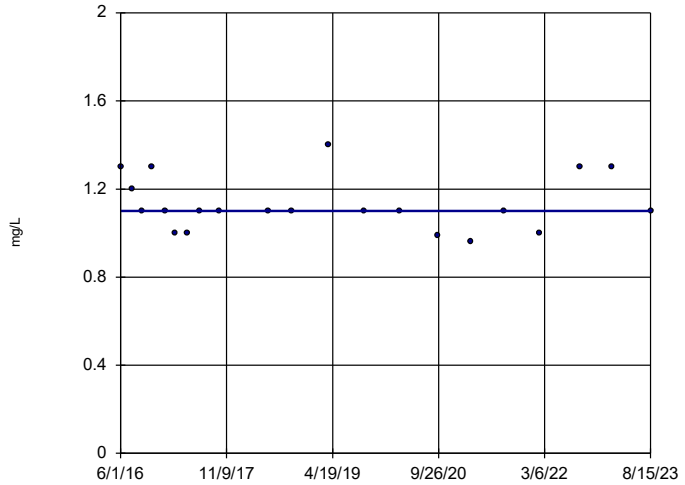
Sen's Slope Estimator

YGWA-1D (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -24 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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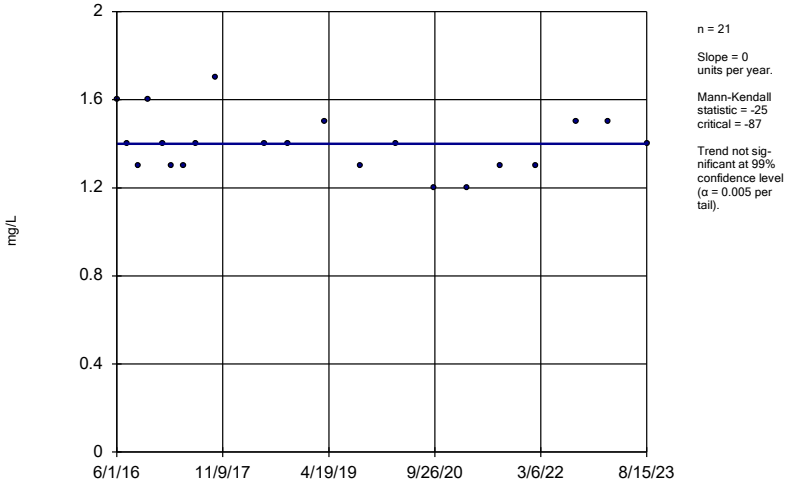
Sen's Slope Estimator

YGWA-1I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -25 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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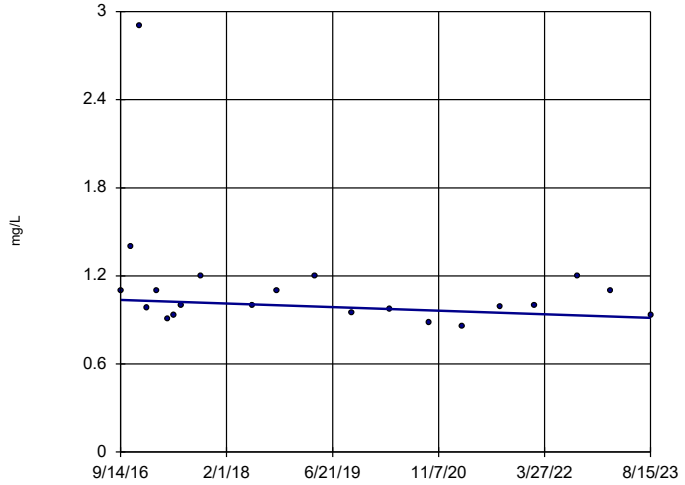
Sen's Slope Estimator

YGWA-2I (bg)



n = 21

Slope = -0.01766 units per year.

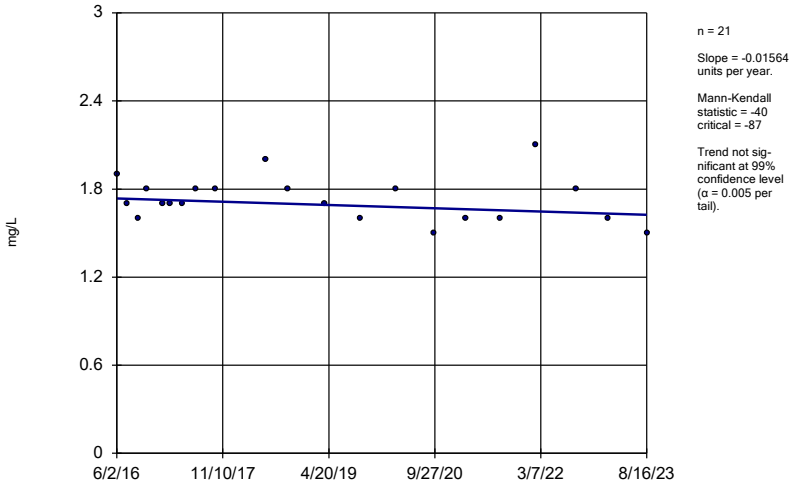
Mann-Kendall statistic = -41 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-30I (bg)



n = 21

Slope = -0.01564 units per year.

Mann-Kendall statistic = -40
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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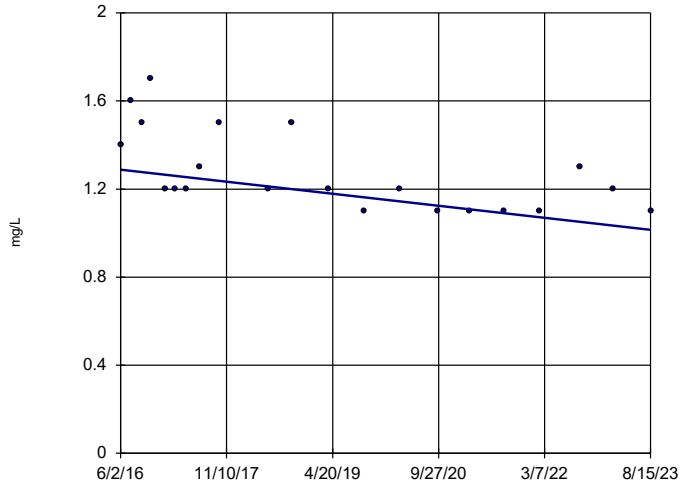
Sen's Slope Estimator

YGWA-3D (bg)



n = 21

Slope = -0.03797 units per year.

Mann-Kendall statistic = -98
critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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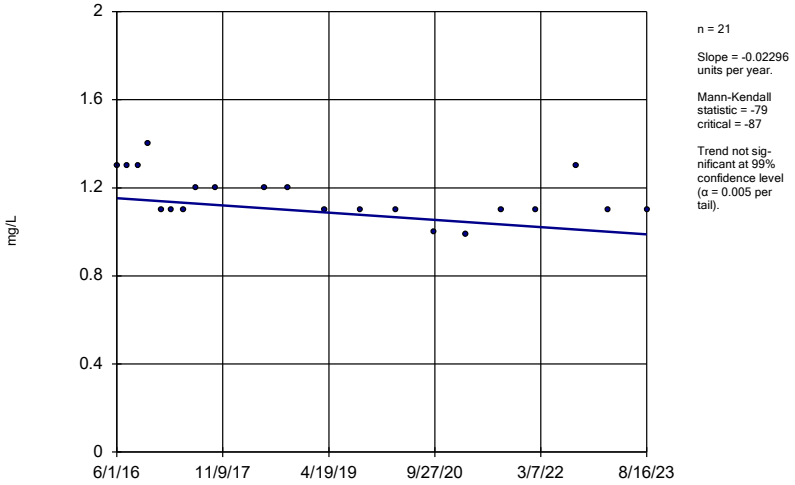
Sen's Slope Estimator

YGWA-3I (bg)



n = 21

Slope = -0.02296 units per year.

Mann-Kendall statistic = -79
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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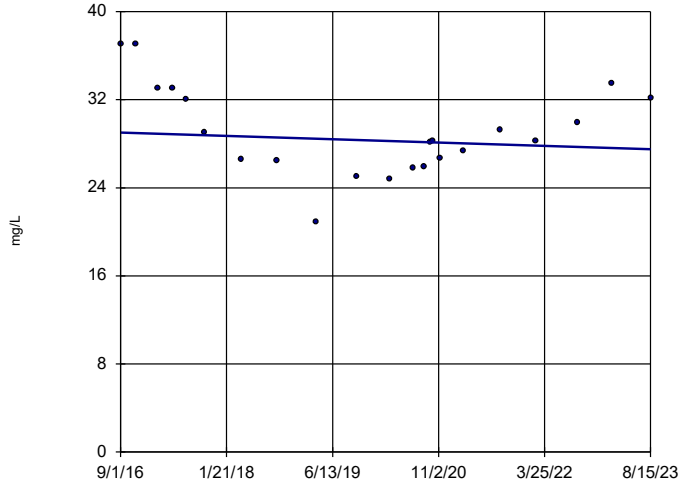
Sen's Slope Estimator

YGWC-46A



n = 22

Slope = -0.2173 units per year.

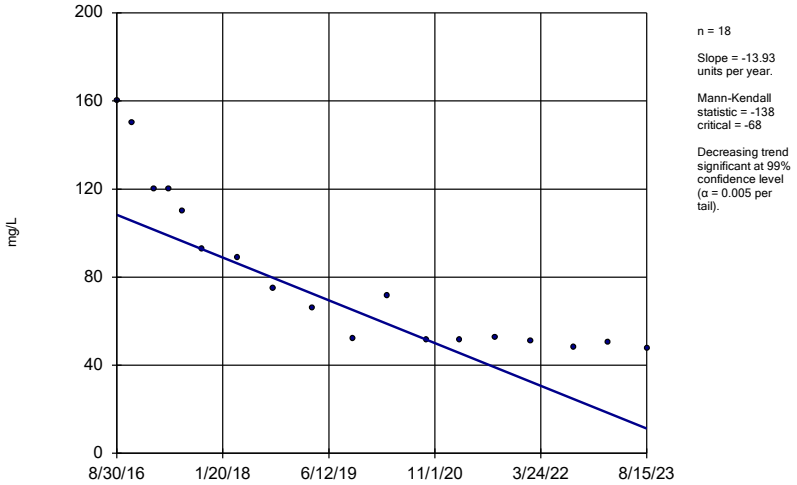
Mann-Kendall statistic = -10
critical = -92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-47 (bg)



n = 18

Slope = -13.93 units per year.

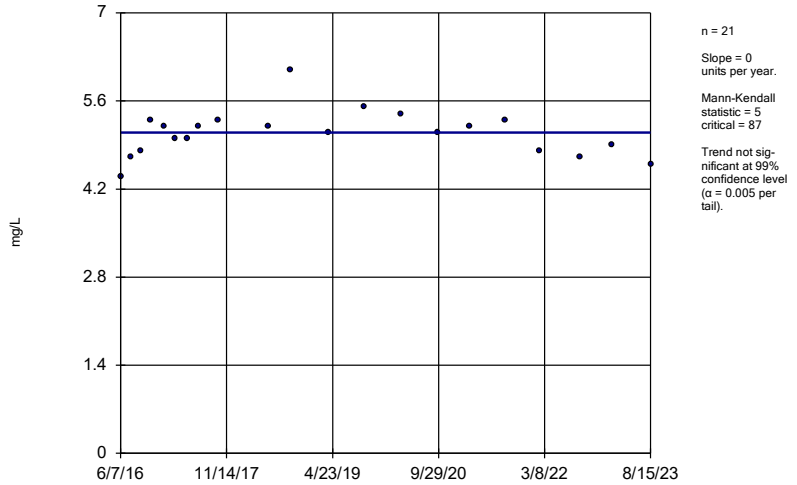
Mann-Kendall statistic = -138 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-17S (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 5 critical = 87

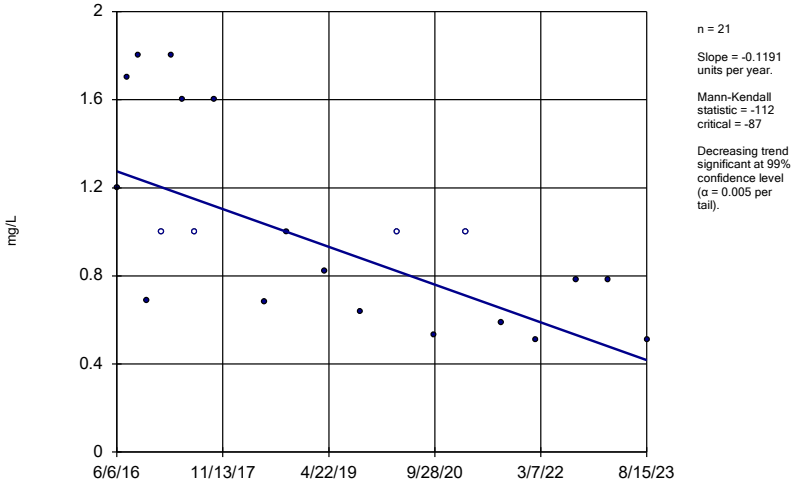
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 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-18I (bg)



n = 21

Slope = -0.1191 units per year.

Mann-Kendall statistic = -112 critical = -87

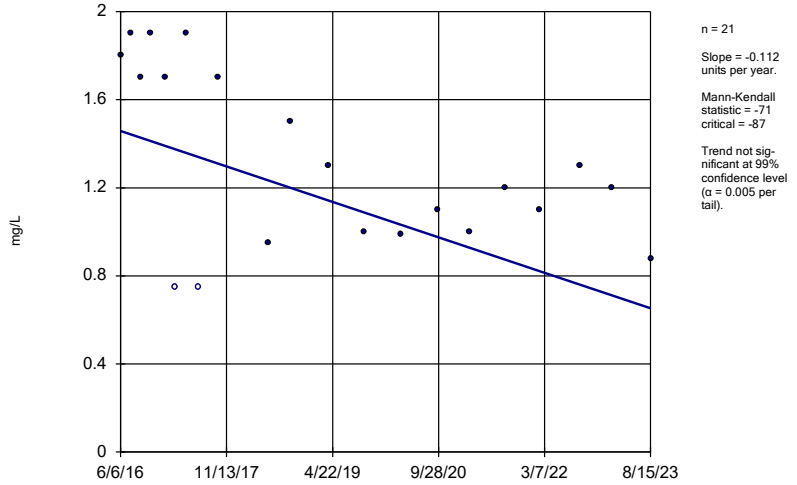
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 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-18S (bg)



n = 21

Slope = -0.112 units per year.

Mann-Kendall statistic = -71 critical = -87

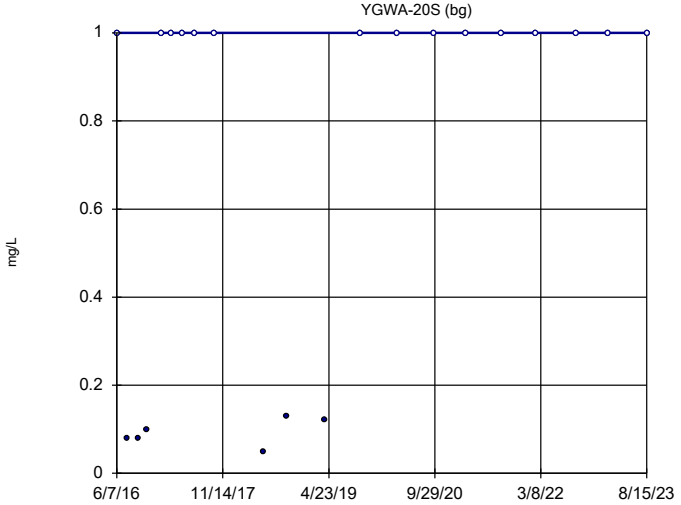
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 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-20S (bg)



n = 21

Slope = 0 units per year.

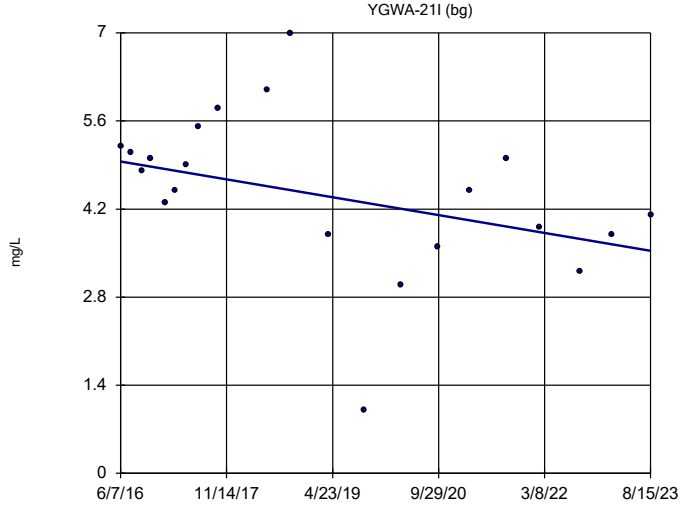
Mann-Kendall statistic = 54
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-21I (bg)



n = 21

Slope = -0.1972 units per year.

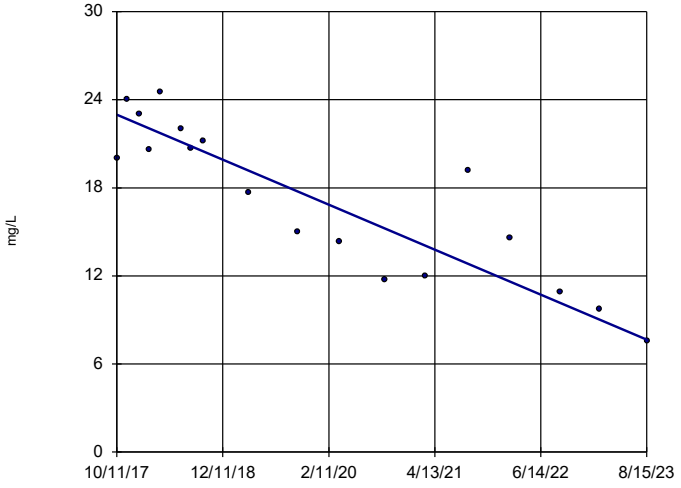
Mann-Kendall statistic = -61
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-39 (bg)



n = 18

Slope = -2.62 units per year.

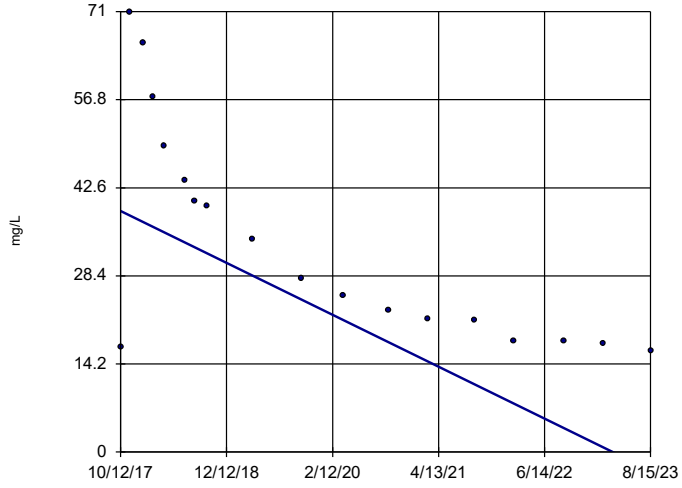
Mann-Kendall statistic = -107
critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-40 (bg)



n = 18

Slope = -7.156 units per year.

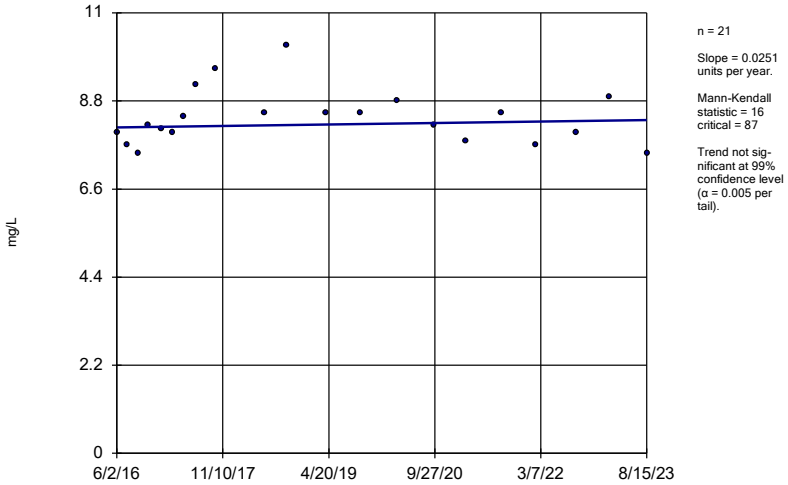
Mann-Kendall statistic = -120
critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-4I (bg)



n = 21

Slope = 0.0251 units per year.

Mann-Kendall statistic = 16
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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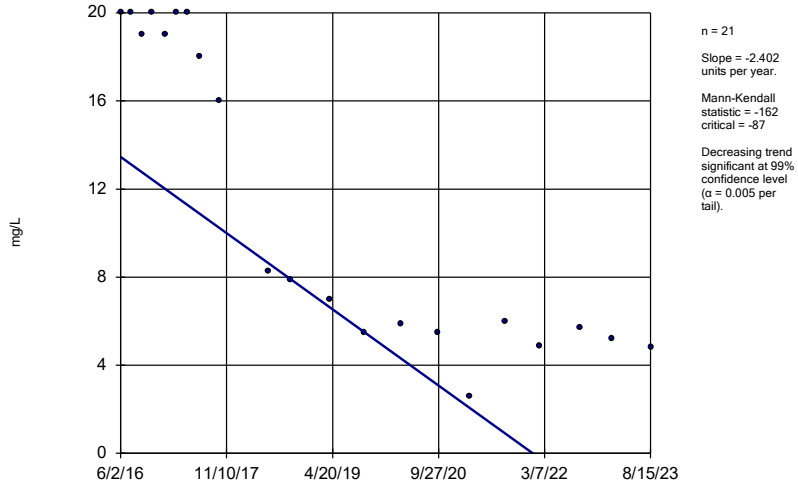
Sen's Slope Estimator

YGWA-5D (bg)



n = 21

Slope = -2.402 units per year.

Mann-Kendall statistic = -162
critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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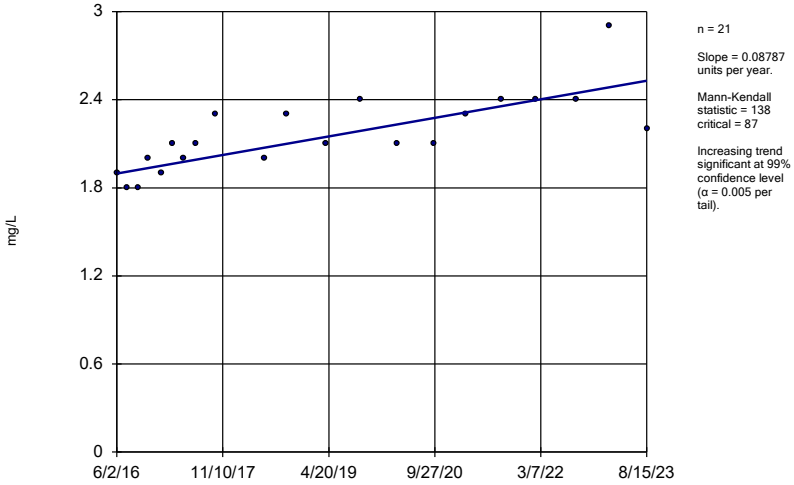
Sen's Slope Estimator

YGWA-5I (bg)



n = 21

Slope = 0.08787 units per year.

Mann-Kendall statistic = 138
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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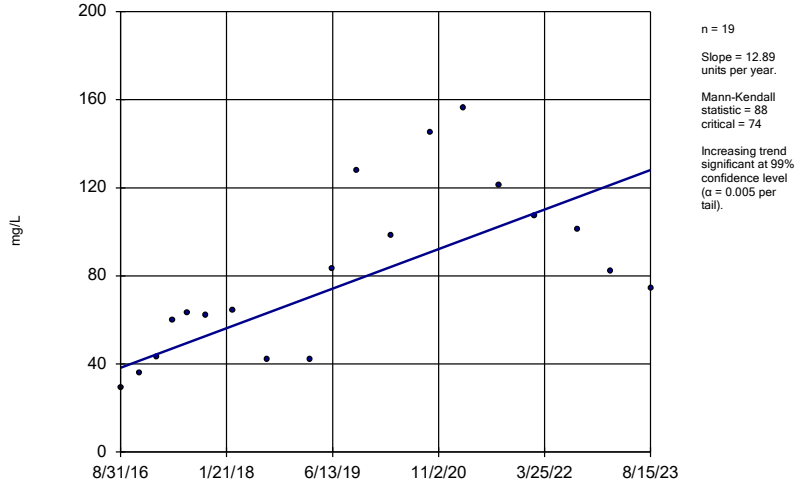
Sen's Slope Estimator

GWA-2 (bg)



n = 19

Slope = 12.89 units per year.

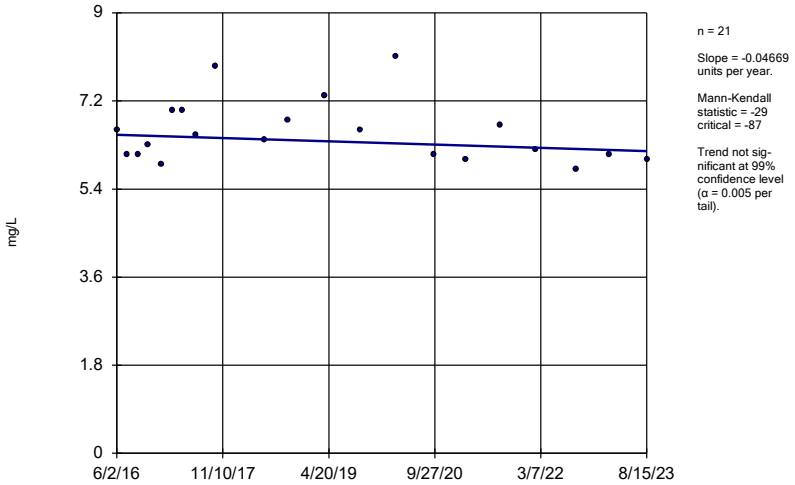
Mann-Kendall statistic = 88
critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-14S (bg)



n = 21

Slope = -0.04669 units per year.

Mann-Kendall statistic = -29
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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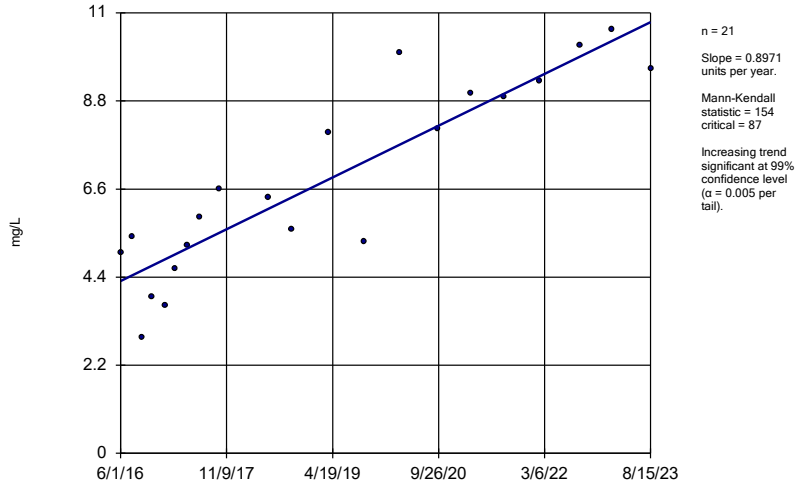
Sen's Slope Estimator

YGWA-1D (bg)



n = 21

Slope = 0.8971 units per year.

Mann-Kendall statistic = 154
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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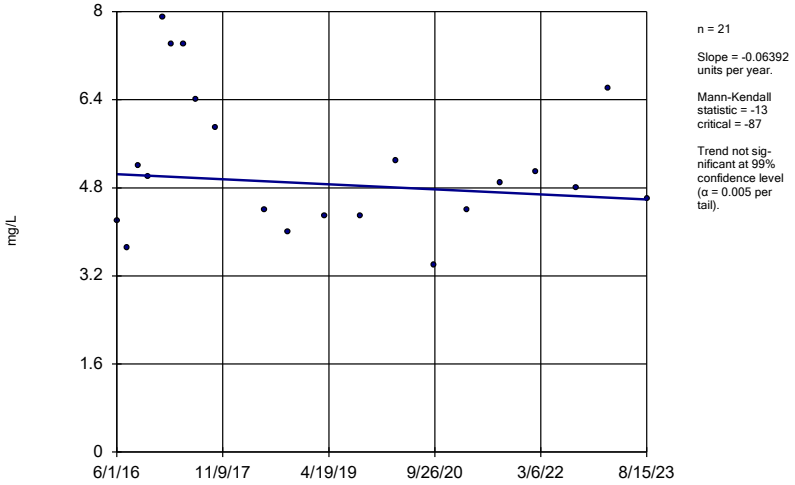
Sen's Slope Estimator

YGWA-1I (bg)



n = 21

Slope = -0.06392 units per year.

Mann-Kendall statistic = -13
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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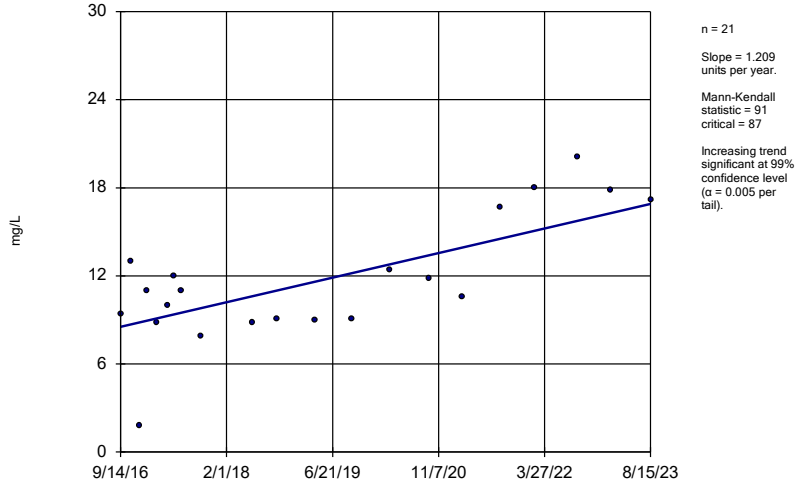
Sen's Slope Estimator

YGWA-2I (bg)



n = 21

Slope = 1.209 units per year.

Mann-Kendall statistic = 91
critical = 87

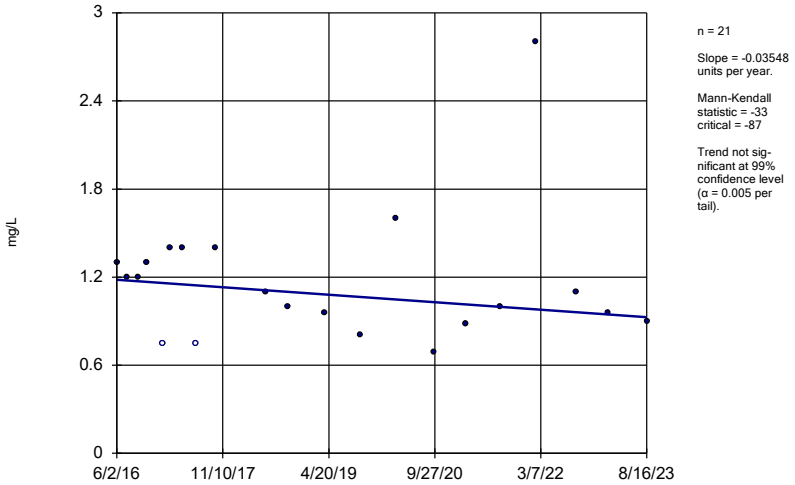
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 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 = 21

Slope = -0.03548 units per year.

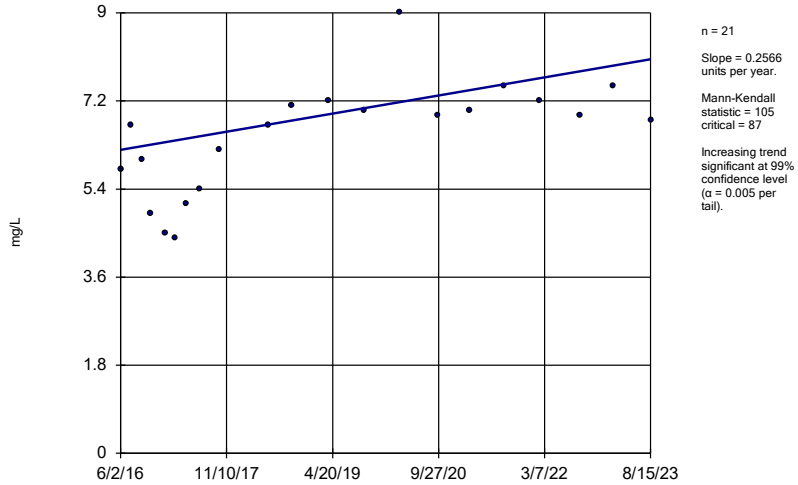
Mann-Kendall statistic = -33
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-3D (bg)



n = 21

Slope = 0.2566 units per year.

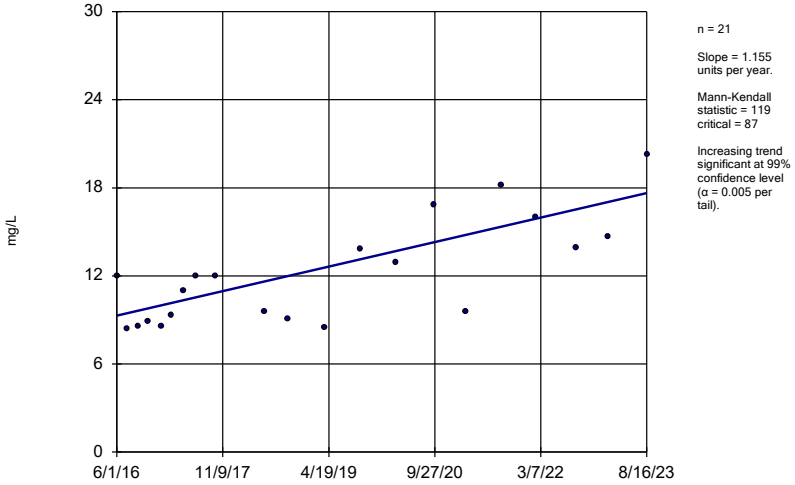
Mann-Kendall statistic = 105
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:14 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-3I (bg)



n = 21

Slope = 1.155 units per year.

Mann-Kendall statistic = 119
critical = 87

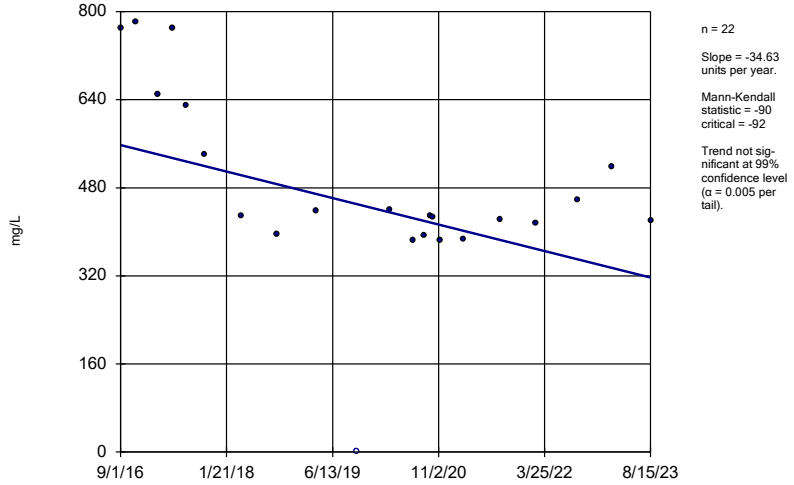
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:15 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 = 22

Slope = -34.63 units per year.

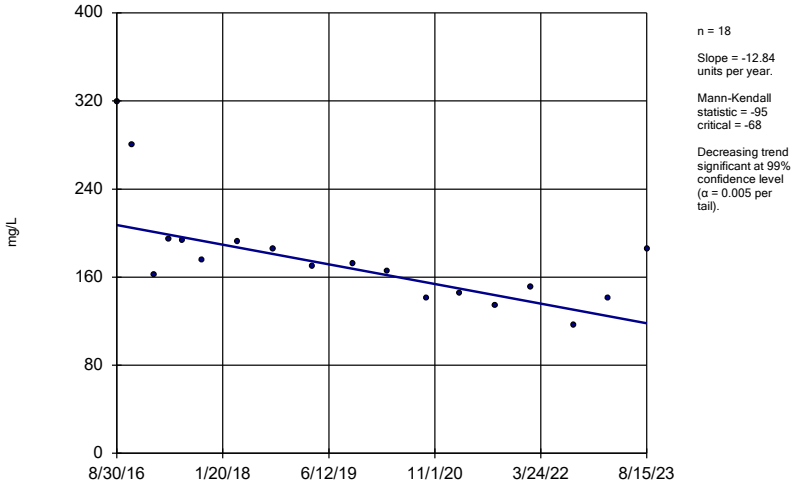
Mann-Kendall statistic = -90
critical = -92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-47 (bg)



n = 18

Slope = -12.84 units per year.

Mann-Kendall statistic = -95
critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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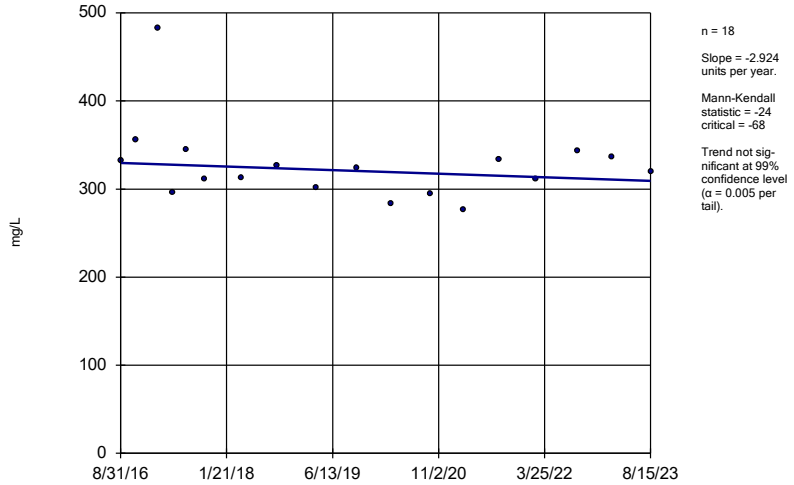
Sen's Slope Estimator

YGWC-44



n = 18

Slope = -2.924 units per year.

Mann-Kendall statistic = -24
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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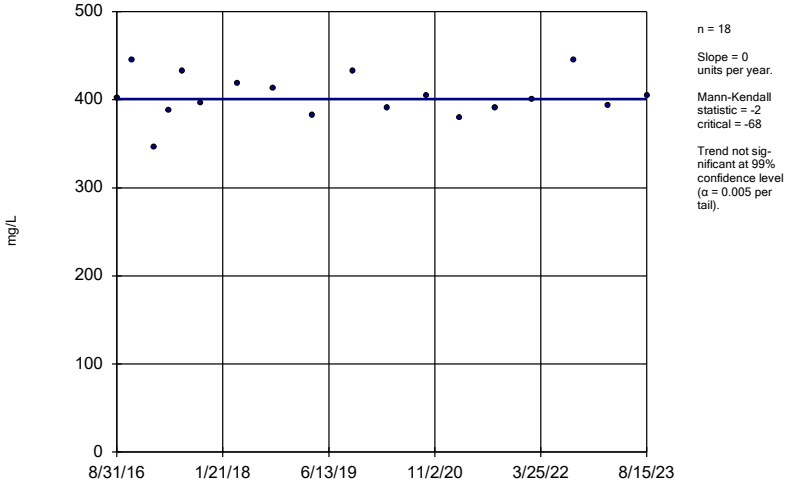
Sen's Slope Estimator

YGWC-45



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = -2
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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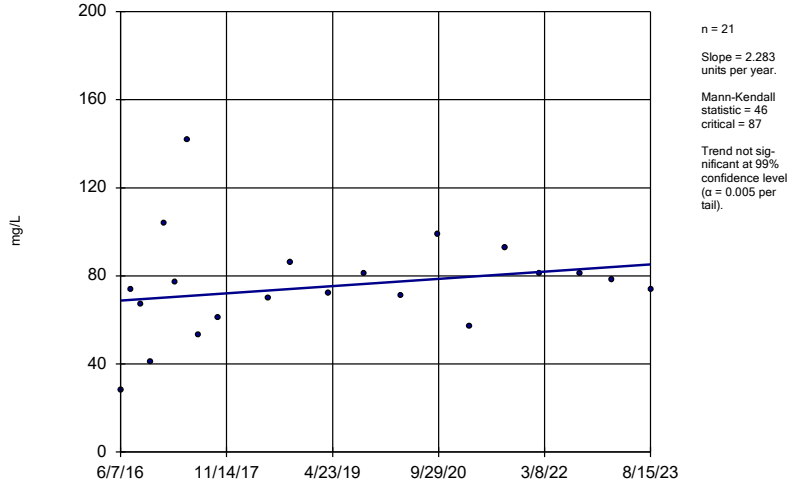
Sen's Slope Estimator

YGWA-17S (bg)



n = 21

Slope = 2.283 units per year.

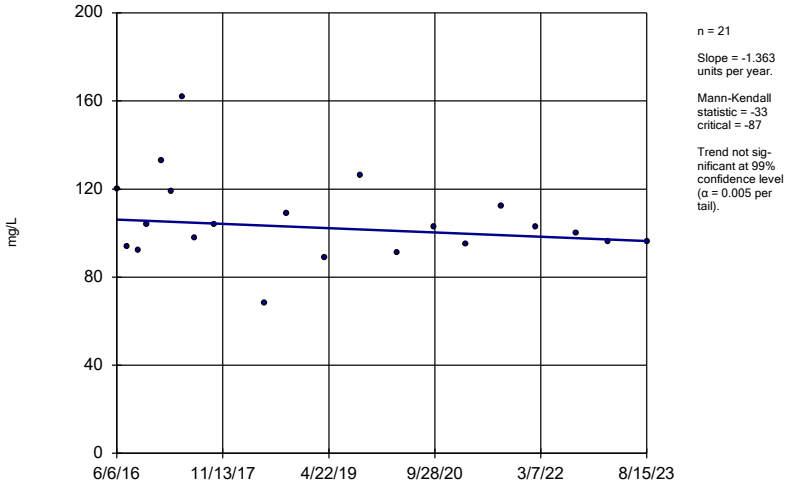
Mann-Kendall statistic = 46
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-18I (bg)



n = 21

Slope = -1.363 units per year.

Mann-Kendall statistic = -33 critical = -87

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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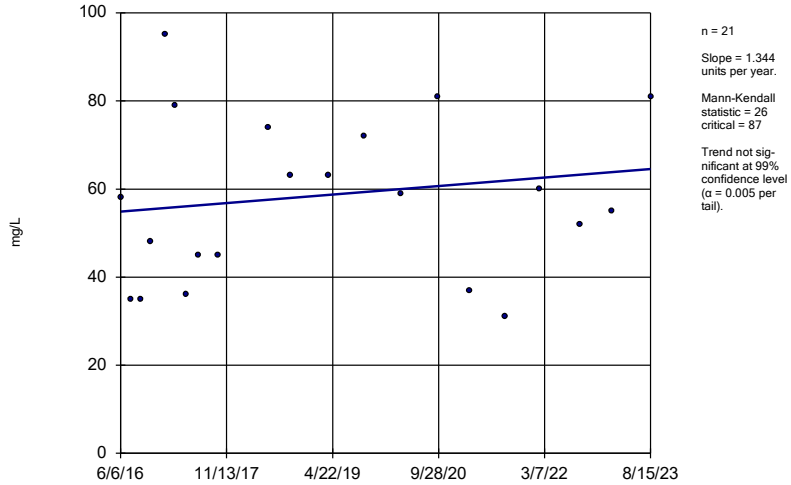
Sen's Slope Estimator

YGWA-18S (bg)



n = 21

Slope = 1.344 units per year.

Mann-Kendall statistic = 26 critical = 87

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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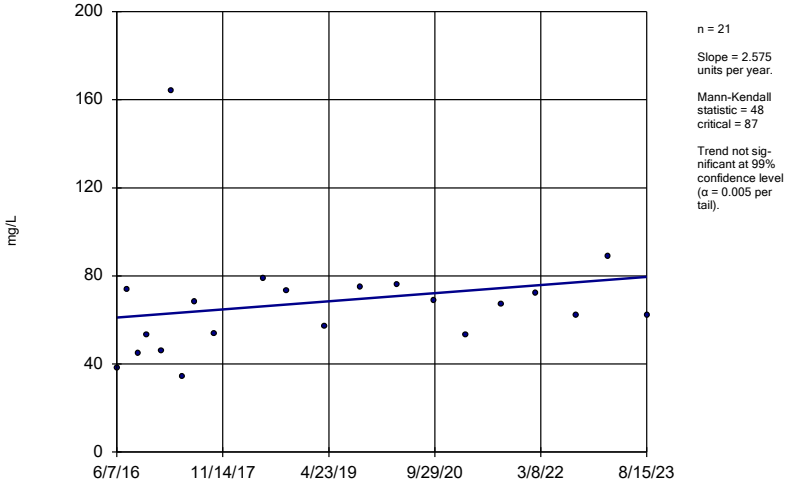
Sen's Slope Estimator

YGWA-20S (bg)



n = 21

Slope = 2.575 units per year.

Mann-Kendall statistic = 48 critical = 87

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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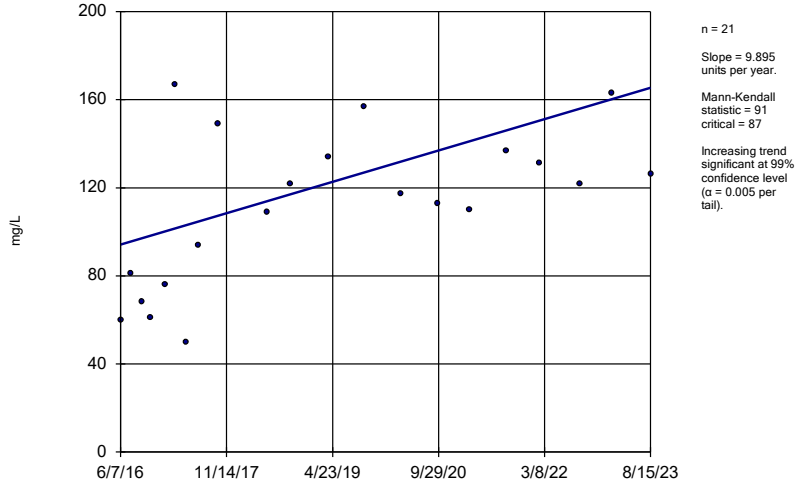
Sen's Slope Estimator

YGWA-21I (bg)



n = 21

Slope = 9.895 units per year.

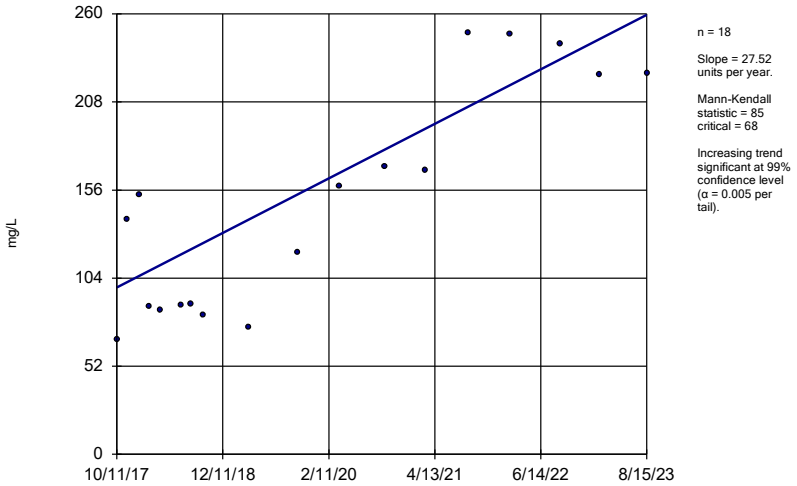
Mann-Kendall statistic = 91 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-39 (bg)



n = 18

Slope = 27.52 units per year.

Mann-Kendall statistic = 85 critical = 68

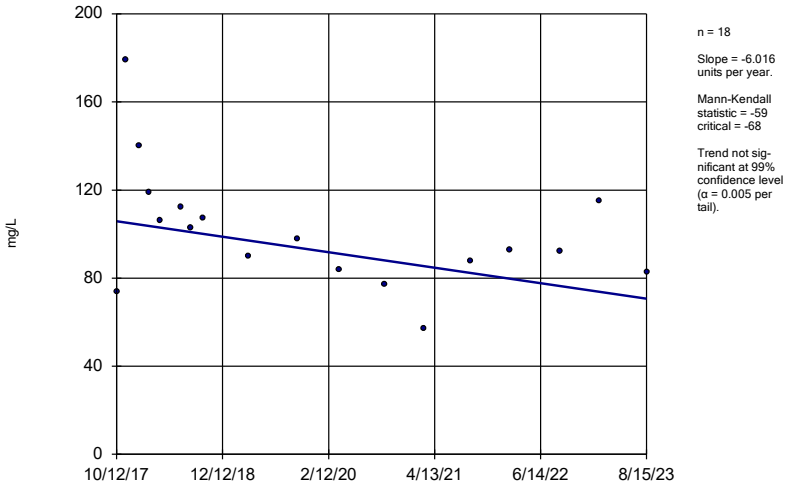
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-40 (bg)



n = 18

Slope = -6.016 units per year.

Mann-Kendall statistic = -59 critical = -68

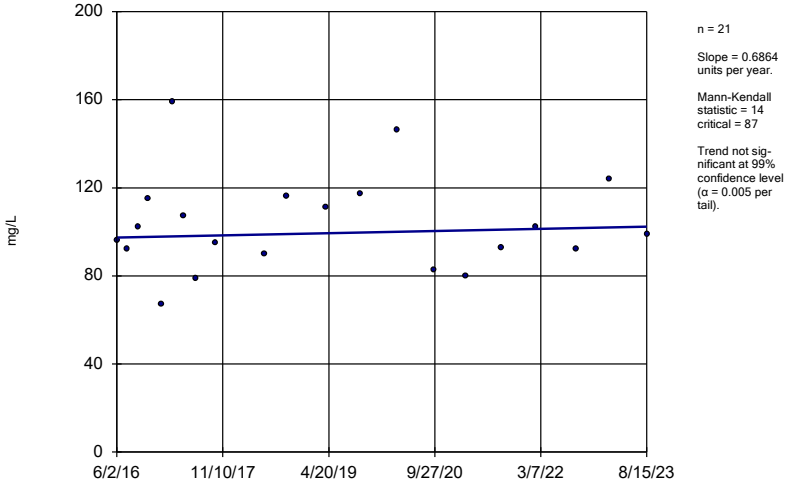
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-4I (bg)



n = 21

Slope = 0.6864 units per year.

Mann-Kendall statistic = 14 critical = 87

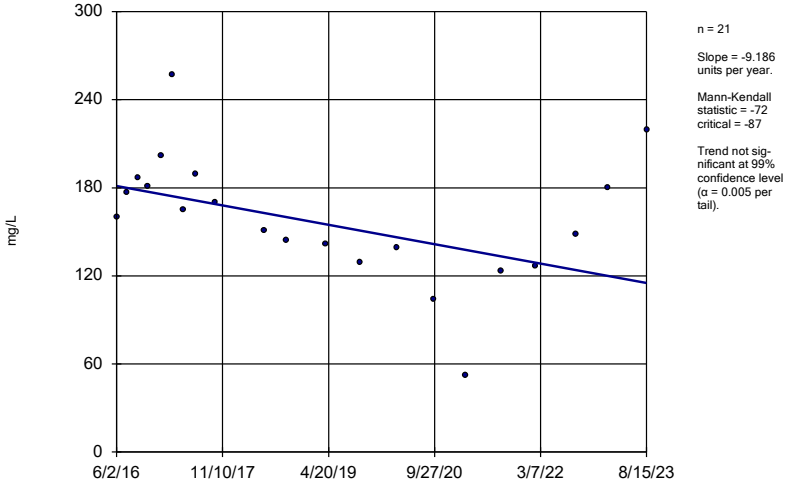
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-5D (bg)



n = 21

Slope = -9.186 units per year.

Mann-Kendall statistic = -72 critical = -87

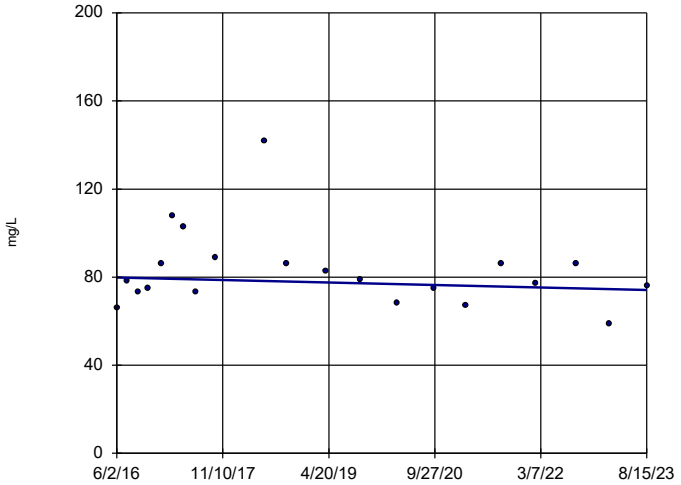
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-5I (bg)



n = 21

Slope = -0.77 units per year.

Mann-Kendall statistic = -20 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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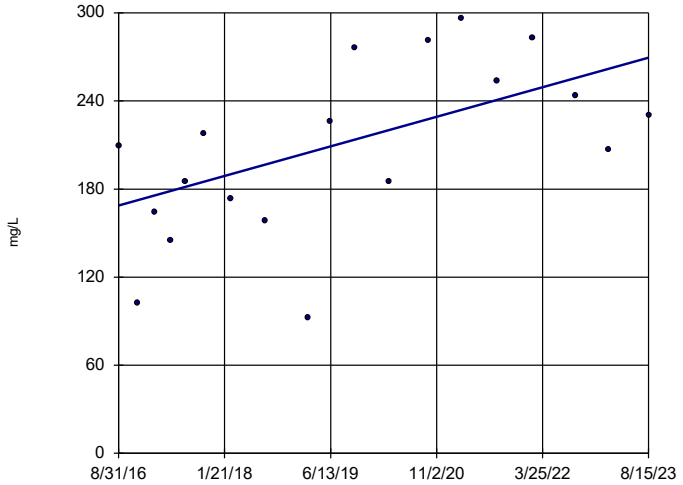
Sen's Slope Estimator

GWA-2 (bg)



n = 19

Slope = 14.49 units per year.

Mann-Kendall statistic = 72 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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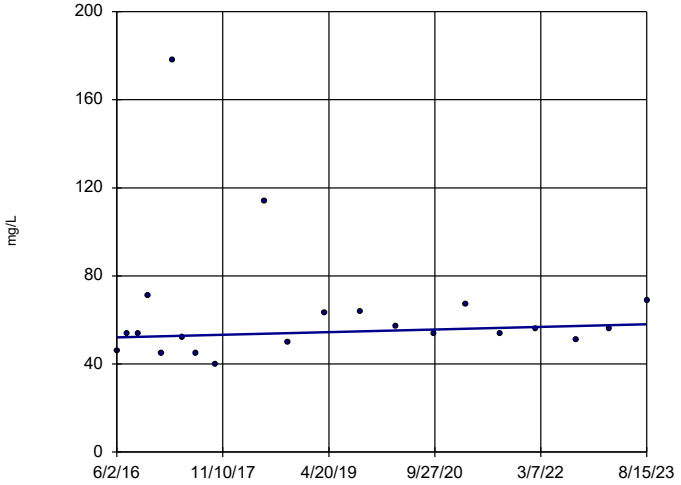
Sen's Slope Estimator

YGWA-14S (bg)



n = 21

Slope = 0.8282 units per year.

Mann-Kendall statistic = 30 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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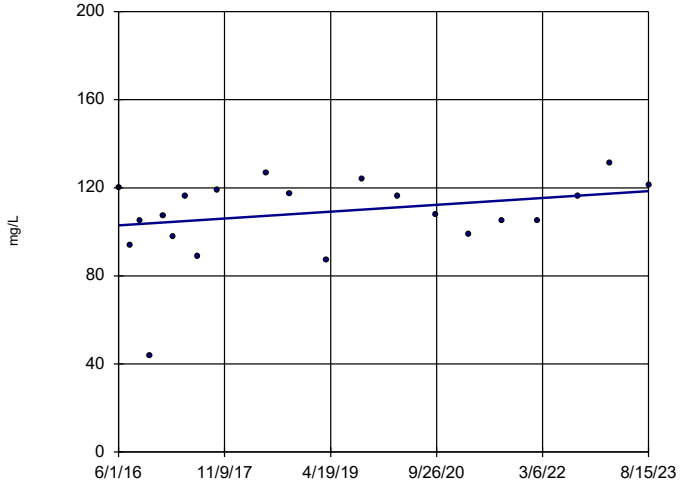
Sen's Slope Estimator

YGWA-1D (bg)



n = 21

Slope = 2.147 units per year.

Mann-Kendall statistic = 46 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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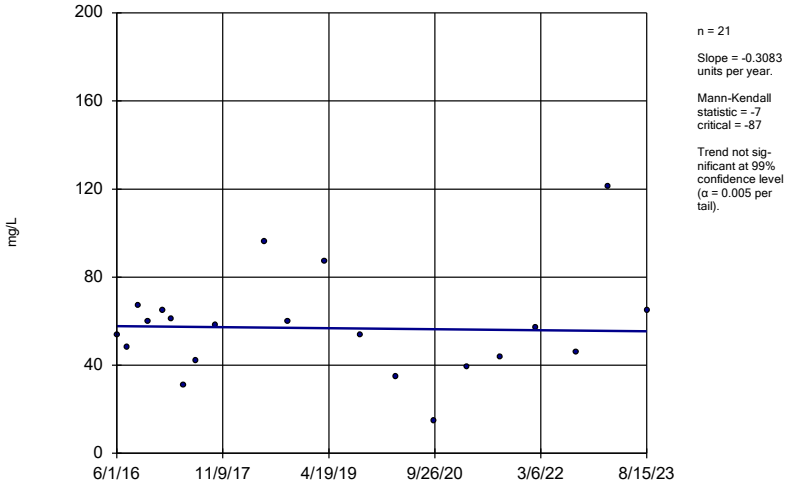
Sen's Slope Estimator

YGWA-1I (bg)



n = 21

Slope = -0.3083 units per year.

Mann-Kendall statistic = -7 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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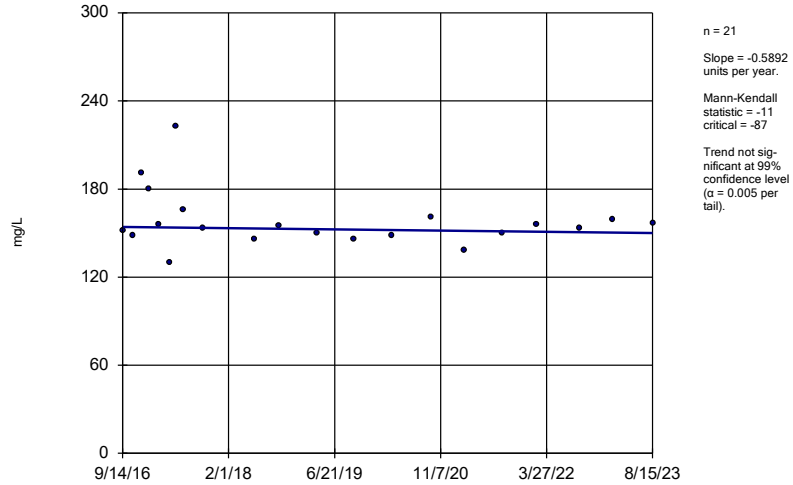
Sen's Slope Estimator

YGWA-2I (bg)



n = 21

Slope = -0.5892 units per year.

Mann-Kendall statistic = -11 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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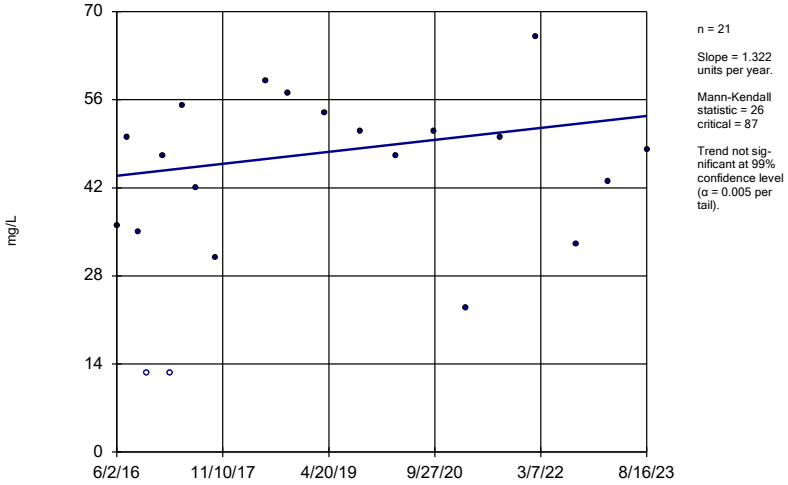
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 21

Slope = 1.322 units per year.

Mann-Kendall statistic = 26 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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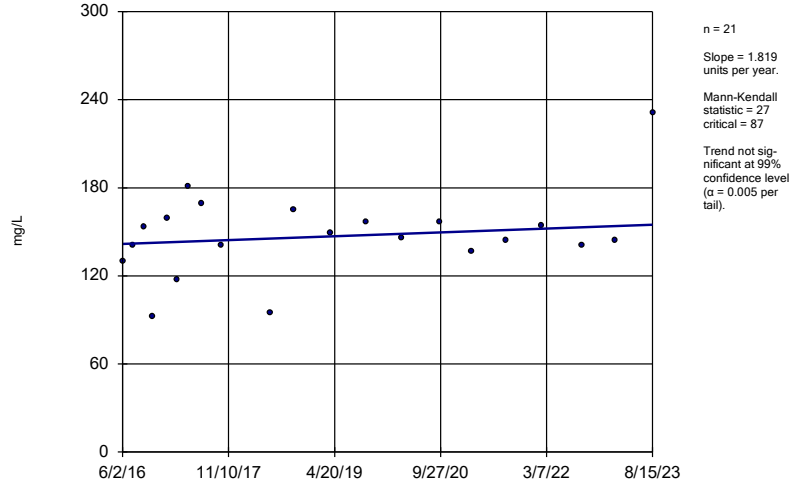
Sen's Slope Estimator

YGWA-3D (bg)



n = 21

Slope = 1.819 units per year.

Mann-Kendall statistic = 27 critical = 87

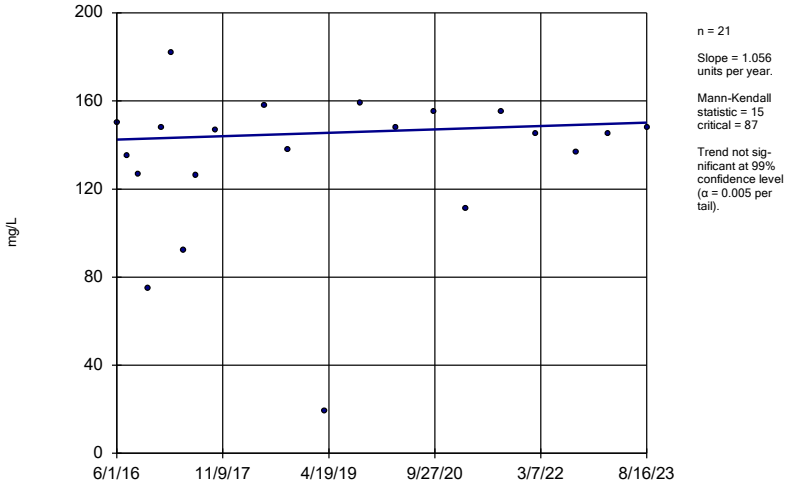
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Sen's Slope Estimator

YGWA-3I (bg)



n = 21

Slope = 1.056 units per year.

Mann-Kendall statistic = 15 critical = 87

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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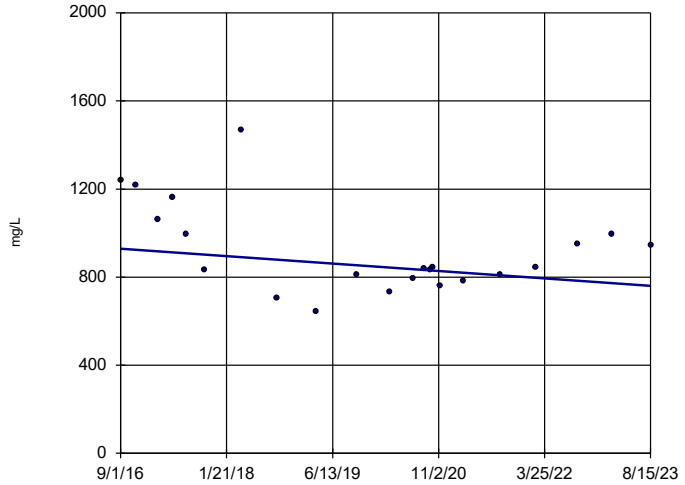
Sen's Slope Estimator

YGWC-46A



n = 22

Slope = -24.27 units per year.

Mann-Kendall statistic = -33 critical = -92

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

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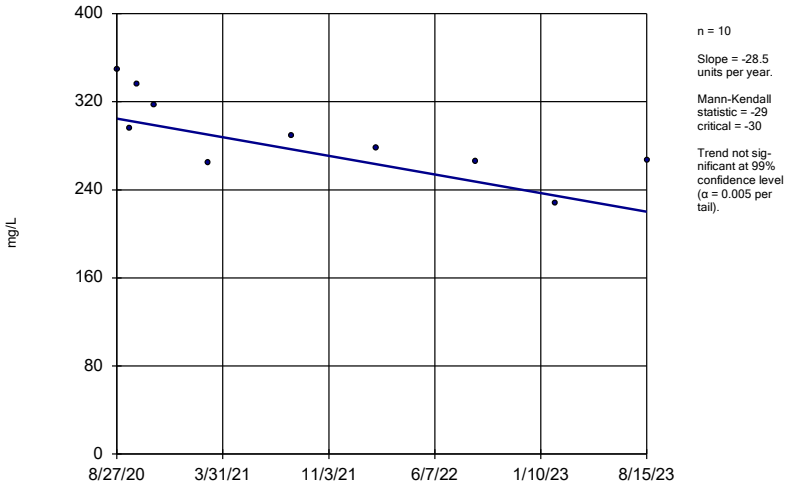
Sen's Slope Estimator

YGWC-52



n = 10

Slope = -28.5 units per year.

Mann-Kendall statistic = -29 critical = -30

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/9/2023 6:15 PM View: Appendix III - Trend Tes

Plant Yates Client: Southern Company Data: Yates Ash Pond1

FIGURE F.

Welch's t-test/Mann-Whitney - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 6:00 PM

Constituent	Well	Calc.	0.01	Alpha	Sig.	Method
Cadmium (mg/L)	YGWC-46A	1.497	No	0.01	No	Mann-W
Mercury (mg/L)	YGWC-46A	0.825	No	0.01	No	Mann-W
Thallium (mg/L)	YGWC-46A	-1.279	No	0.01	No	Mann-W

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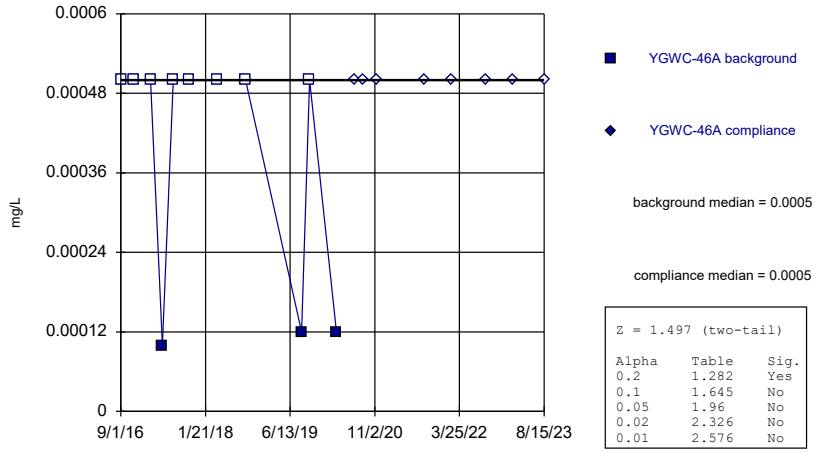
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

YGWC-46A



Z = 1.497 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Cadmium Analysis Run 10/9/2023 5:59 PM View: Mann-Whitney
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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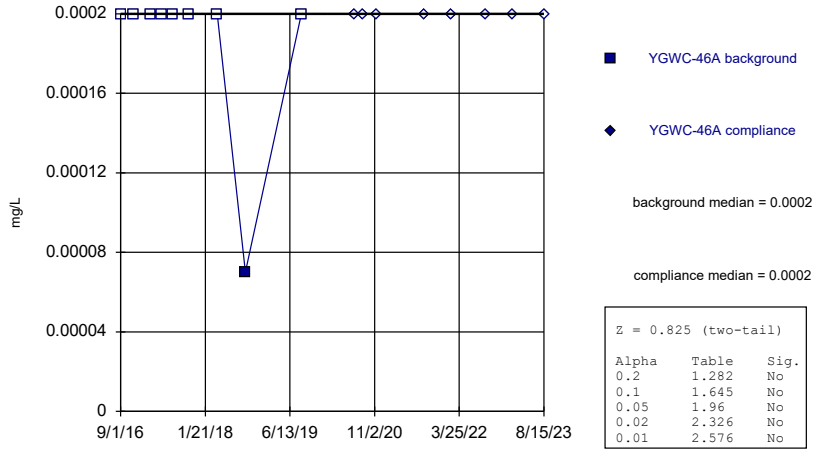
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

YGWC-46A



Z = 0.825 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Mercury Analysis Run 10/9/2023 5:59 PM View: Mann-Whitney
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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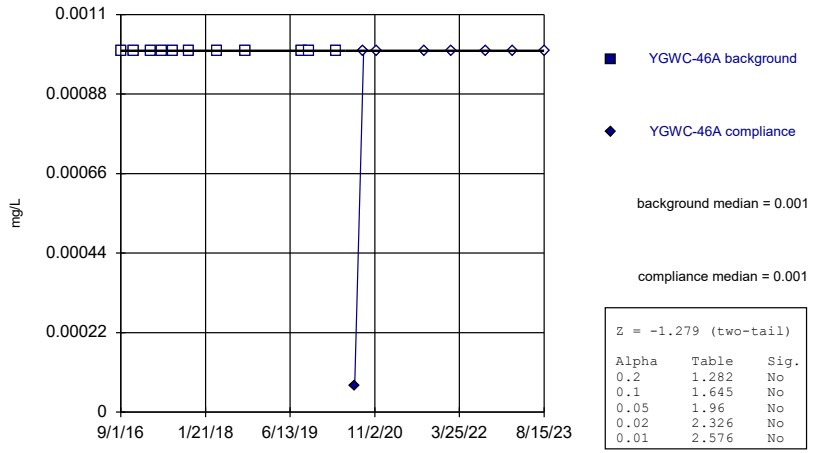
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

YGWC-46A



Z = -1.279 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Thallium Analysis Run 10/9/2023 5:59 PM View: Mann-Whitney
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Cadmium (mg/L) Analysis Run 10/9/2023 6:00 PM View: Mann-Whitney

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWC-46A
9/1/2016	<0.0005	
11/16/2016	<0.0005	
2/27/2017	<0.0005	
5/8/2017	0.0001 (J)	
7/13/2017	<0.0005	
10/11/2017	<0.0005	
4/4/2018	<0.0005	
9/19/2018	<0.0005	
8/21/2019	0.00012 (J)	
10/9/2019	<0.0005	
3/17/2020	0.00012 (J)	
7/6/2020		<0.0005
8/28/2020		<0.0005
11/12/2020		<0.0005
8/27/2021		<0.0005
2/9/2022		<0.0005
8/31/2022		<0.0005
2/10/2023		<0.0005
8/15/2023		<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Mercury (mg/L) Analysis Run 10/9/2023 6:00 PM View: Mann-Whitney

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWC-46A
9/1/2016	<0.0002	
11/16/2016	<0.0002	
2/27/2017	<0.0002	
5/8/2017	<0.0002	
7/13/2017	<0.0002	
10/11/2017	<0.0002	
4/4/2018	<0.0002	
9/19/2018	7E-05 (J)	
8/21/2019	<0.0002	
7/6/2020		<0.0002
8/28/2020		<0.0002
11/12/2020		<0.0002
8/27/2021		<0.0002
2/9/2022		<0.0002
8/31/2022		<0.0002
2/10/2023		<0.0002
8/15/2023		<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Thallium (mg/L) Analysis Run 10/9/2023 6:00 PM View: Mann-Whitney

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A	YGWC-46A
9/1/2016	<0.001	
11/16/2016	<0.001	
2/27/2017	<0.001	
5/8/2017	<0.001	
7/13/2017	<0.001	
10/11/2017	<0.001	
4/4/2018	<0.001	
9/19/2018	<0.001	
8/21/2019	<0.001	
10/9/2019	<0.001	
3/17/2020	<0.001	
7/6/2020		7.3E-05 (J)
8/28/2020		<0.001
11/12/2020		<0.001
8/27/2021		<0.001
2/9/2022		<0.001
8/31/2022		<0.001
2/10/2023		<0.001
8/15/2023		<0.001

ND substitution: RL or RL/2 if <15% NDs.

FIGURE G.

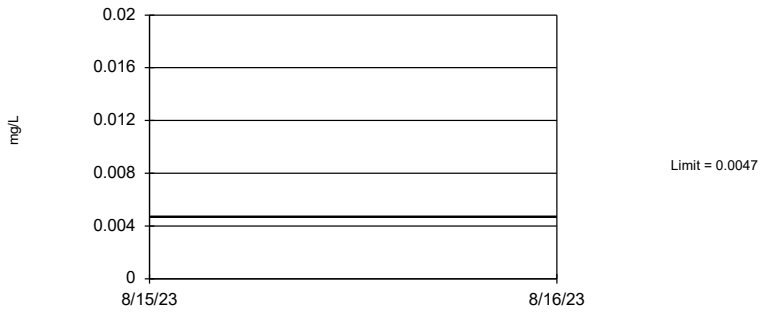
Upper Tolerance Limits - Summary Table

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 7:07 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0047	n/a	n/a	n/a	410	88.54	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	458	75.76	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.21	n/a	n/a	n/a	458	2.402	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0011	n/a	n/a	n/a	442	79.86	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.00063	n/a	n/a	n/a	442	94.8	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0093	n/a	n/a	n/a	410	80.73	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.035	n/a	n/a	n/a	452	69.03	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.92	n/a	n/a	n/a	437	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride, total (mg/L)	n/a	0.68	n/a	n/a	n/a	457	64.33	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	412	86.65	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	437	26.77	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	n/a	0.00064	n/a	n/a	n/a	366	89.07	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.014	n/a	n/a	n/a	401	61.1	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	440	92.73	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	376	97.34	n/a	n/a	NaN	NP Inter(NDs)

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 410 background values. 88.54% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Antimony Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 458 background values. 75.76% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Arsenic Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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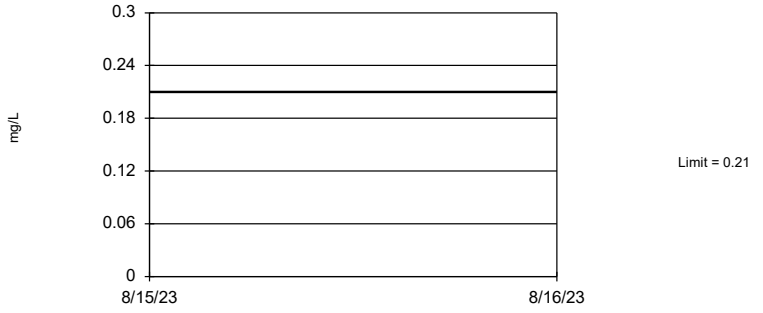
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 458 background values. 2.402% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Barium Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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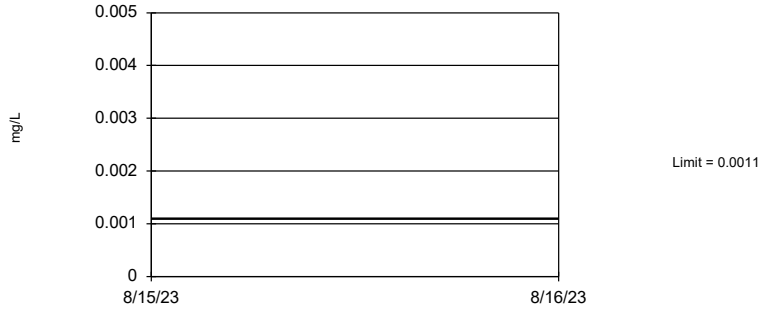
Tolerance Limit

Interwell Non-parametric

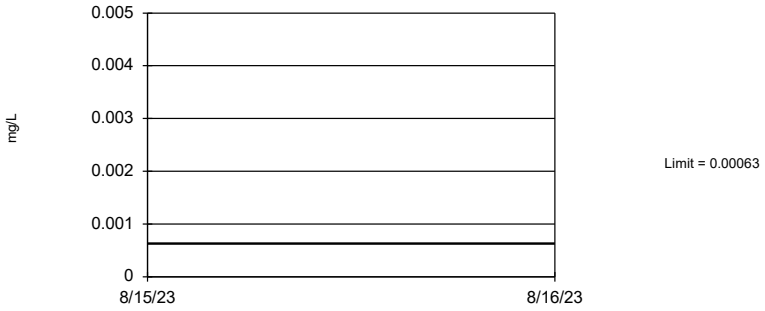


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 442 background values. 79.86% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Beryllium Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 442 background values. 94.8% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Cadmium Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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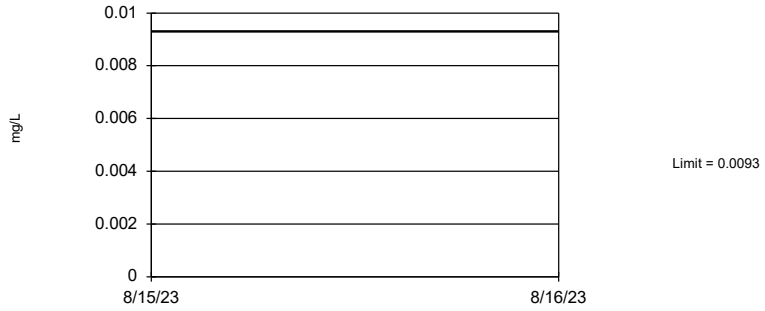
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 410 background values. 80.73% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Chromium Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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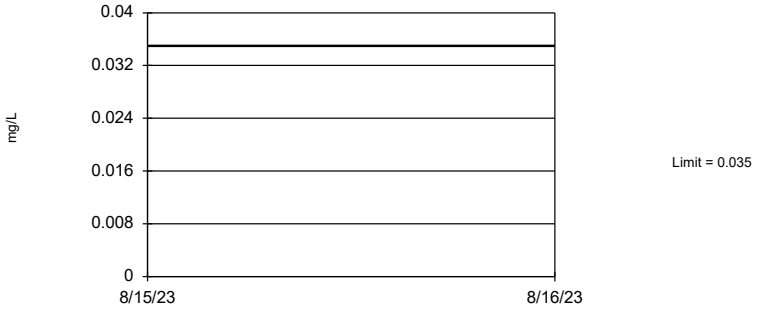
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 452 background values. 69.03% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Cobalt Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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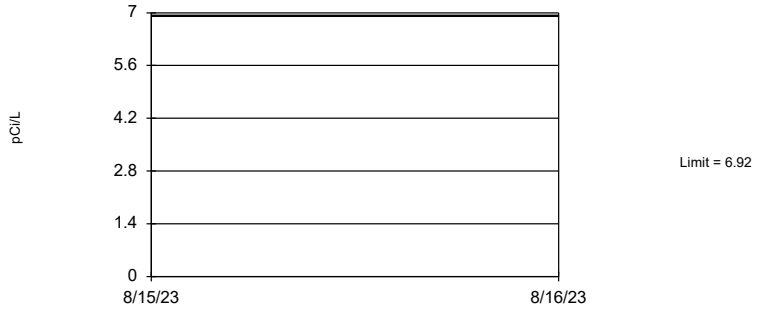
Tolerance Limit

Interwell Non-parametric

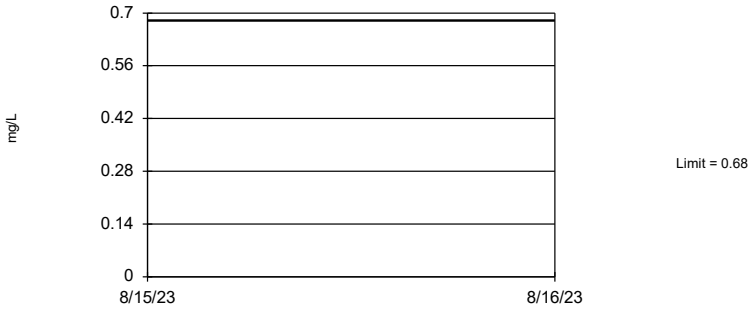


Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 437 background values. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Combined Radium 226 + 228 Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 457 background values. 64.33% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Fluoride, total Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 412 background values. 86.65% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Lead Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 437 background values. 26.77% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Lithium Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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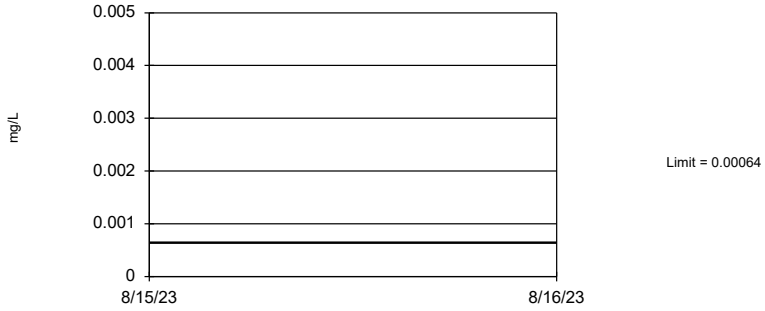
Tolerance Limit

Interwell Non-parametric

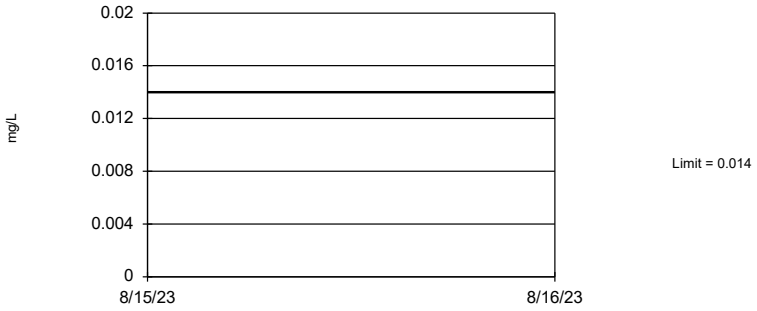


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 366 background values. 89.07% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Mercury Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 401 background values. 61.1% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Molybdenum Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 440 background values. 92.73% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Selenium Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 376 background values. 97.34% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Thallium Analysis Run 10/9/2023 7:06 PM View: Appendix IV - UTLs
Plant Yates Client: Southern Company Data: Yates Ash Pond1

FIGURE H.

YATES ASH POND 1 GWPS				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006		0.0047	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.21	2
Beryllium, Total (mg/L)	0.004		0.0011	0.004
Cadmium, Total (mg/L)	0.005		0.00063	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.92	6.92
Fluoride, Total (mg/L)	4		0.68	4
Lead, Total (mg/L)		0.015	0.0013	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.00064	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

FIGURE I.

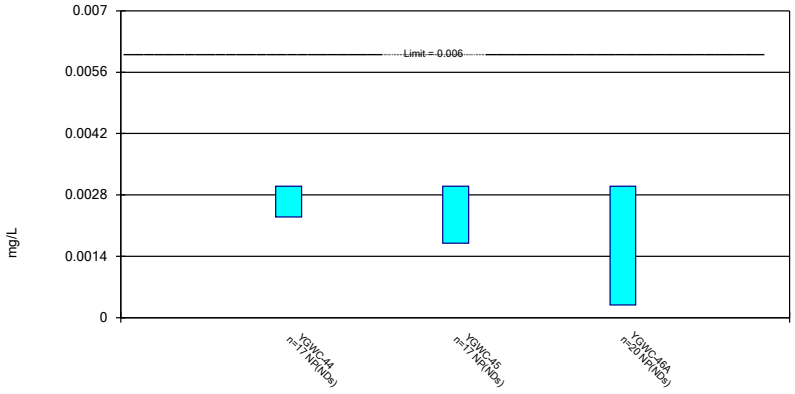
Appendix IV Confidence Intervals - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Ash Pond1 Printed 10/9/2023, 7:14 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-44	0.003	0.0023	0.006	No	17	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-45	0.003	0.0017	0.006	No	17	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-46A	0.003	0.00029	0.006	No	20	95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-44	0.005	0.00086	0.01	No	19	73.68	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-45	0.005	0.00078	0.01	No	19	78.95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-46A	0.005	0.001	0.01	No	22	40.91	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-44	0.1101	0.09103	2	No	19	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-45	0.06806	0.05568	2	No	19	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-46A	0.04616	0.03984	2	No	11	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-52	0.02018	0.01742	2	No	10	0	None	No	0.01	Param.
Cadmium (mg/L)	YGWC-46A	0.0005	0.00012	0.005	No	19	84.21	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-45	0.0061	0.0006	0.1	No	17	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-52	0.005	0.00086	0.1	No	10	50	None	No	0.011	NP (normality)
Cobalt (mg/L)	YGWC-44	0.003381	0.001627	0.035	No	19	5.263	None	ln(x)	0.01	Param.
Cobalt (mg/L)	YGWC-45	0.000818	0.0006275	0.035	No	18	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-46A	0.002491	0.0007833	0.035	No	11	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	YGWC-52	0.001914	0.001048	0.035	No	10	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-44	0.9134	0.2928	6.92	No	19	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-45	1.465	0.9578	6.92	No	19	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-46A	1.728	1.124	6.92	No	22	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-52	0.8689	0.3907	6.92	No	9	0	None	x^5	0.01	Param.
Fluoride, total (mg/L)	YGWC-44	0.12	0.07	4	No	20	75	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	YGWC-45	0.1826	0.07598	4	No	20	20	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride, total (mg/L)	YGWC-46A	0.1014	0.03761	4	No	23	21.74	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride, total (mg/L)	YGWC-52	0.1	0.063	4	No	10	80	Kaplan-Meier	No	0.011	NP (NDs)
Lead (mg/L)	YGWC-45	0.001	0.0001	0.015	No	17	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-46A	0.001	0.000044	0.015	No	20	95	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-52	0.001	0.000064	0.015	No	10	60	None	No	0.011	NP (NDs)
Lithium (mg/L)	YGWC-44	0.01348	0.01258	0.04	No	19	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-45	0.014	0.012	0.04	No	19	0	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-46A	0.01391	0.01154	0.04	No	11	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-52	0.004556	0.003784	0.04	No	10	0	None	No	0.01	Param.
Mercury (mg/L)	YGWC-44	0.0002	0.00006	0.002	No	15	93.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-45	0.0002	0.000071	0.002	No	15	93.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-46A	0.0002	0.00007	0.002	No	17	94.12	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-44	0.01	0.0005	0.1	No	19	94.74	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-45	0.0024	0.0011	0.1	No	19	15.79	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-46A	0.003199	0.001891	0.1	No	22	13.64	None	No	0.01	Param.
Molybdenum (mg/L)	YGWC-52	0.01	0.01	0.1	No	10	90	None	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-44	0.001	0.00008	0.002	No	17	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-46A	0.001	0.000073	0.002	No	19	94.74	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

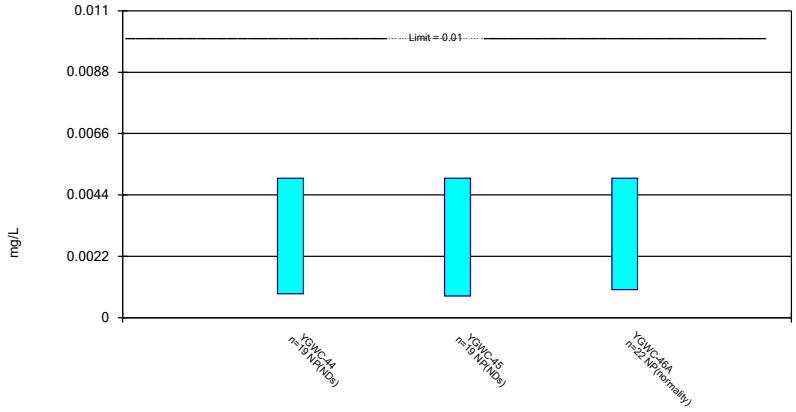
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

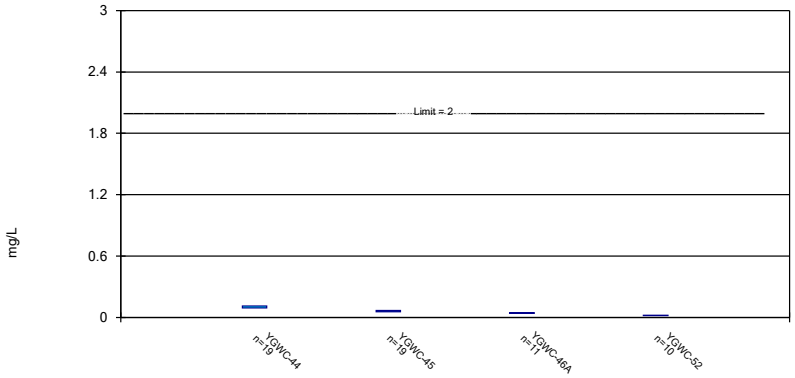
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric Confidence Interval

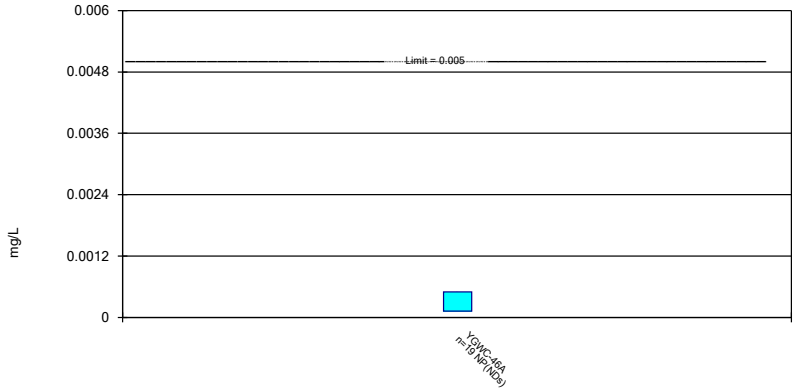
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

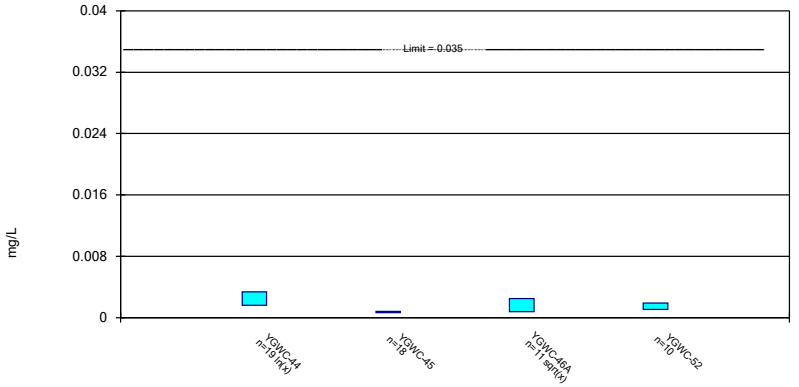
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

Constituent: Chromium Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric Confidence Interval

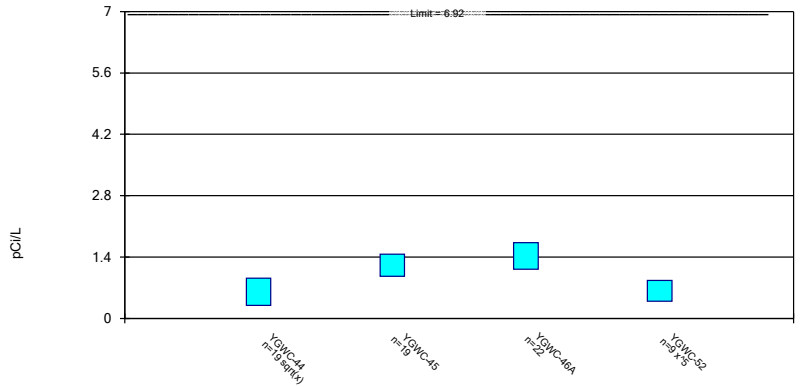
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric Confidence Interval

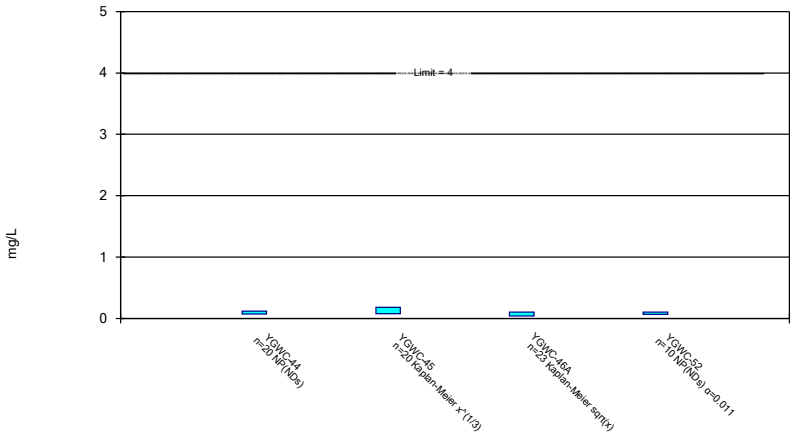
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confiden
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric and Non-Parametric (NP) Confidence Interval

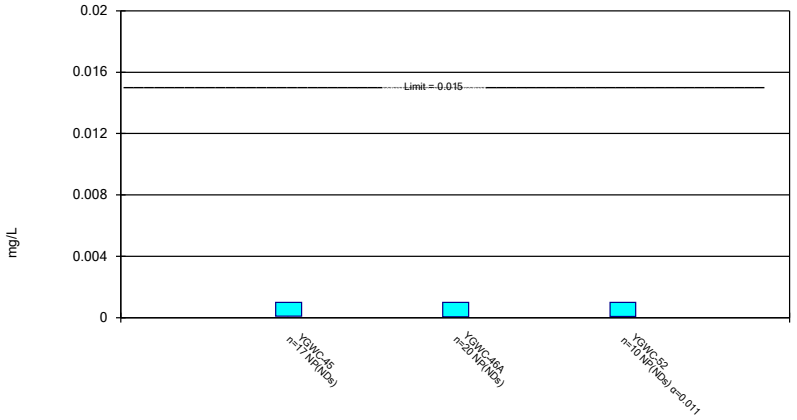
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

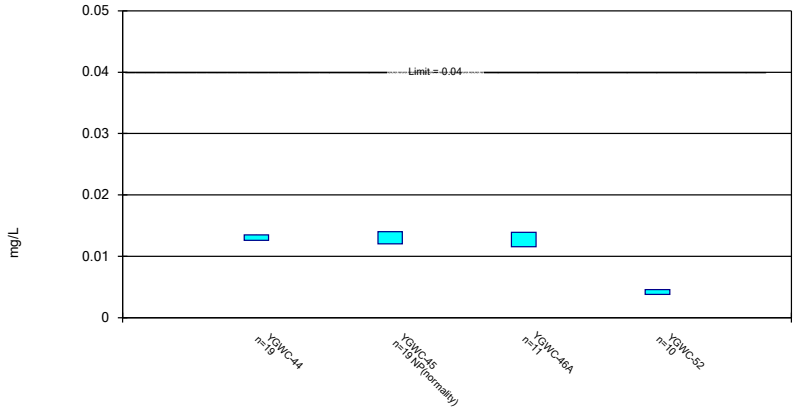
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric and Non-Parametric (NP) Confidence Interval

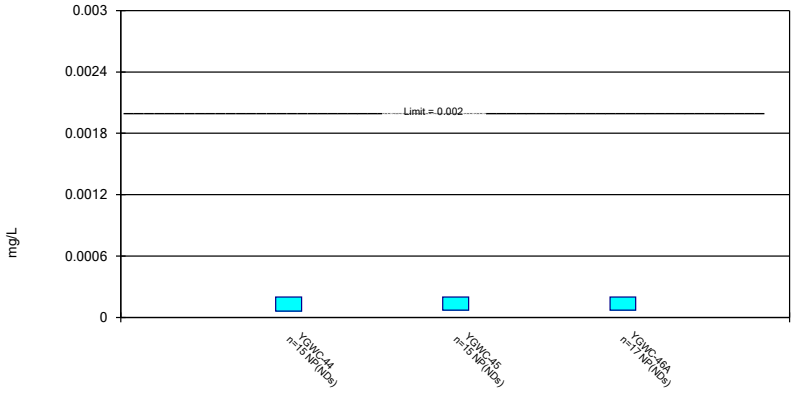
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

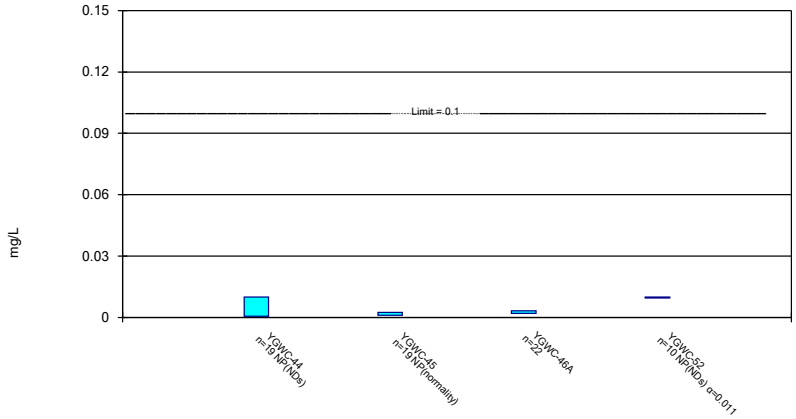
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Parametric and Non-Parametric (NP) Confidence Interval

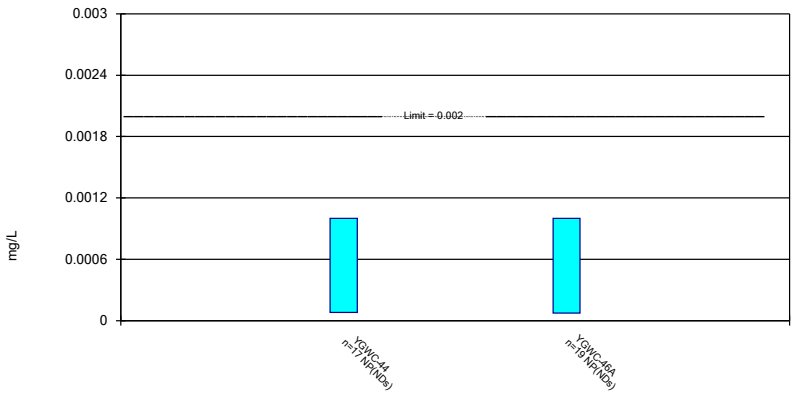
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals
Plant Yates Client: Southern Company Data: Yates Ash Pond1

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 10/9/2023 7:13 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
8/31/2016	<0.003	<0.003	
9/1/2016			<0.003
11/14/2016		<0.003	
11/15/2016	<0.003		
11/16/2016			<0.003
2/27/2017		<0.003	<0.003
2/28/2017	<0.003		
5/8/2017	<0.003		<0.003
5/9/2017		<0.003	
7/13/2017	<0.003	<0.003	<0.003
10/10/2017	<0.003	<0.003	
10/11/2017			<0.003
4/3/2018		<0.003	
4/4/2018	<0.003		<0.003
9/19/2018	<0.003	<0.003	<0.003
8/20/2019	<0.003	<0.003	
8/21/2019			<0.003
7/6/2020			<0.003
8/27/2020	<0.003		
8/28/2020		0.0017 (J)	0.00029 (J)
9/22/2020	<0.003		
9/23/2020		<0.003	<0.003
10/7/2020			<0.003
11/12/2020			<0.003
3/1/2021	<0.003	<0.003	
3/2/2021			<0.003
8/19/2021	<0.003	<0.003	
8/27/2021			<0.003
2/9/2022	<0.003	<0.003	<0.003
8/31/2022	<0.003	<0.003	<0.003
2/8/2023	<0.003		
2/9/2023		<0.003	
2/10/2023			<0.003
8/15/2023	0.0023 (J)	<0.003	<0.003
Mean	0.002959	0.002924	0.002865
Std. Dev.	0.0001698	0.0003153	0.000606
Upper Lim.	0.003	0.003	0.003
Lower Lim.	0.0023	0.0017	0.00029

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
8/31/2016	<0.005	<0.005	
9/1/2016			<0.005
11/14/2016		<0.005	
11/15/2016	<0.005		
11/16/2016			<0.005
2/27/2017		<0.005	<0.005
2/28/2017	0.0005 (J)		
5/8/2017	0.0006 (J)		0.0007 (J)
5/9/2017		<0.005	
7/13/2017	<0.005	<0.005	0.0011 (J)
10/10/2017	0.0007 (J)	0.0006 (J)	
10/11/2017			0.0011 (J)
4/3/2018		0.00061 (J)	
4/4/2018	<0.005		0.00087 (J)
9/19/2018	0.00086 (J)	0.00072 (J)	0.0012 (J)
8/20/2019	0.00097 (J)	0.00078 (J)	
8/21/2019			0.00074 (J)
10/8/2019	<0.005		
10/9/2019		<0.005	<0.005
3/17/2020	<0.005	<0.005	<0.005
7/6/2020			0.00079 (J)
8/27/2020	<0.005		
8/28/2020		<0.005	0.0015 (J)
9/22/2020	<0.005		
9/23/2020		<0.005	0.00091 (J)
10/7/2020			0.001 (J)
11/12/2020			0.0014 (J)
3/1/2021	<0.005	<0.005	
3/2/2021			0.0016 (J)
8/19/2021	<0.005	<0.005	
8/27/2021			0.0022 (J)
2/9/2022	<0.005	<0.005	<0.005
8/31/2022	<0.005	<0.005	<0.005
2/8/2023	<0.005		
2/9/2023		<0.005	
2/10/2023			<0.005
8/15/2023	<0.005	<0.005	<0.005
Mean	0.003875	0.00409	0.002732
Std. Dev.	0.001936	0.001811	0.001958
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.00086	0.00078	0.001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
8/31/2016	0.126	0.0754		
9/1/2016			0.0414	
11/14/2016		0.0701		
11/15/2016	0.115			
11/16/2016			0.0365	
2/27/2017		0.0834	0.0326	
2/28/2017	0.121			
5/8/2017	0.125		0.0332	
5/9/2017		0.0779		
7/13/2017	0.106	0.0719	0.0365	
10/10/2017	0.112	0.0708		
10/11/2017			0.0288	
4/3/2018		0.068		
4/4/2018	0.12		0.025	
9/19/2018	0.11	0.064	0.03	
8/20/2019	0.1	0.057		
8/21/2019			0.023	
10/8/2019	0.098			
10/9/2019		0.058	0.024	
3/17/2020	0.099	0.061	0.022	
7/6/2020			0.048	
8/27/2020	0.086			0.021
8/28/2020		0.053	0.05	
9/22/2020	0.096			0.021
9/23/2020		0.052	0.045	
10/7/2020			0.042	0.019
11/12/2020			0.042	0.019
3/1/2021	0.087	0.055		0.019
3/2/2021			0.044	
8/19/2021	0.089	0.055		
8/20/2021				0.019
8/27/2021			0.043	
2/9/2022	0.083	0.053	0.042	0.018
8/31/2022	0.073	0.052	0.036	0.017
2/8/2023	0.081			
2/9/2023		0.049		
2/10/2023			0.041	0.016
8/15/2023	0.084	0.049	0.04	0.019
Mean	0.1006	0.06187	0.043	0.0188
Std. Dev.	0.0163	0.01057	0.003795	0.001549
Upper Lim.	0.1101	0.06806	0.04616	0.02018
Lower Lim.	0.09103	0.05568	0.03984	0.01742

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-46A
9/1/2016	<0.0005
11/16/2016	<0.0005
2/27/2017	<0.0005
5/8/2017	0.0001 (J)
7/13/2017	<0.0005
10/11/2017	<0.0005
4/4/2018	<0.0005
9/19/2018	<0.0005
8/21/2019	0.00012 (J)
10/9/2019	<0.0005
3/17/2020	0.00012 (J)
7/6/2020	<0.0005
8/28/2020	<0.0005
11/12/2020	<0.0005
8/27/2021	<0.0005
2/9/2022	<0.0005
8/31/2022	<0.0005
2/10/2023	<0.0005
8/15/2023	<0.0005
Mean	0.0004389
Std. Dev.	0.0001449
Upper Lim.	0.0005
Lower Lim.	0.00012

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-45	YGWC-52
8/31/2016	<0.005	
11/14/2016	0.0061 (J)	
2/27/2017	<0.005	
5/9/2017	<0.005	
7/13/2017	0.0006 (J)	
10/10/2017	<0.005	
4/3/2018	<0.005	
9/19/2018	<0.005	
8/20/2019	<0.005	
8/27/2020		<0.005
8/28/2020	<0.005	
9/22/2020		0.00073 (J)
9/23/2020	0.00058 (J)	
10/7/2020		0.00086 (J)
11/12/2020		<0.005
3/1/2021	<0.005	0.00094 (J)
8/19/2021	<0.005	
8/20/2021		<0.005
2/9/2022	<0.005	0.0012 (J)
8/31/2022	<0.005	<0.005
2/9/2023	<0.005	
2/10/2023		0.0021 (J)
8/15/2023	<0.005	<0.005
Mean	0.004546	0.003083
Std. Dev.	0.001512	0.002054
Upper Lim.	0.0061	0.005
Lower Lim.	0.0006	0.00086

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
8/31/2016	0.0119	0.0009 (J)		
9/1/2016			0.0171	
11/14/2016		0.0009 (J)		
11/15/2016	0.0033 (J)			
11/16/2016			0.0145	
2/27/2017		0.001 (J)	0.0161	
2/28/2017	0.0017 (J)			
5/8/2017	0.0018 (J)		0.0367	
5/9/2017		0.0008 (J)		
7/13/2017	0.0022 (J)	0.0009 (J)	0.0265	
10/10/2017	0.0017 (J)	0.0008 (J)		
10/11/2017			0.0556	
4/3/2018		<0.01 (O)		
4/4/2018	<0.005		0.025	
9/19/2018	0.0025 (J)	0.00081 (J)	0.042	
8/20/2019	0.002 (J)	0.00071 (J)		
8/21/2019			0.027	
10/8/2019	0.0017 (J)			
10/9/2019		0.0007 (J)	0.024	
3/17/2020	0.004 (J)	0.00081 (J)	0.022	
7/6/2020			0.0041 (J)	
8/27/2020	0.003 (J)			0.0022 (J)
8/28/2020		0.00055 (J)	0.0038 (J)	
9/22/2020	0.0065			0.0019 (J)
9/23/2020		0.00053 (J)	0.0015 (J)	
10/7/2020			0.0014 (J)	0.0019 (J)
11/12/2020			0.001 (J)	0.0015 (J)
3/1/2021	0.0033 (J)	0.00062 (J)		0.0013 (J)
3/2/2021			0.00096 (J)	
8/19/2021	0.0014 (J)	0.00048 (J)		
8/20/2021				0.0013 (J)
8/27/2021			0.00056 (J)	
2/9/2022	0.0027 (J)	0.00051 (J)	0.0006 (J)	0.0015 (J)
8/31/2022	0.00099 (J)	0.00069 (J)	0.0017 (J)	0.00096 (J)
2/8/2023	0.0014 (J)			
2/9/2023		0.00077 (J)		
2/10/2023			0.0016 (J)	0.00055 (J)
8/15/2023	0.00084 (J)	0.00053 (J)	0.0012 (J)	0.0017 (J)
Mean	0.002917	0.0007228	0.001675	0.001481
Std. Dev.	0.002528	0.0001574	0.001187	0.0004854
Upper Lim.	0.003381	0.000818	0.002491	0.001914
Lower Lim.	0.001627	0.0006275	0.0007833	0.001048

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
8/31/2016	2.15	1.65		
9/1/2016			2.28	
11/14/2016		0.981 (U)		
11/15/2016	0.676 (U)			
11/16/2016			0.639 (U)	
11/28/2016			0.996	
2/27/2017		0.528 (U)	0.617 (U)	
2/28/2017	0.241 (U)			
5/8/2017	0.508 (U)		0.949	
5/9/2017		1.4		
7/13/2017	0.77 (U)	0.611 (U)	1.41	
10/10/2017	1.43	1.47		
10/11/2017			0.856 (U)	
4/3/2018		1.53		
4/4/2018	0.325 (U)		0.974	
9/19/2018	0.386 (U)	0.839 (U)	1.15 (U)	
8/20/2019	1.71	2.23		
8/21/2019			1.31	
10/8/2019	0.769 (U)			
10/9/2019		1.61	0.892 (U)	
3/17/2020	1.37	1.44	1.74	
7/6/2020			2.27	
8/27/2020	0.0859 (U)			0.852 (U)
8/28/2020		0.983 (U)	2.34	
9/22/2020	0.327 (U)			0.268 (U)
9/23/2020		0.746 (U)	0.575 (U)	
10/7/2020			1.81	0.819 (U)
3/1/2021	0.0694 (U)	1.28		0.846 (U)
3/2/2021			1.64	
8/19/2021	0.261 (U)	1.38		
8/20/2021				0.496 (U)
8/27/2021			1.83	
2/9/2022	0.332 (U)	1.11	1.74	0.926
8/31/2022	0.145 (U)	0.598 (U)	1.51	0.322 (U)
2/8/2023	0.193 (U)			
2/9/2023		1.29		
2/10/2023			1.92	0.786 (U)
8/15/2023	1.15	1.34	1.92	0.319 (U)
Mean	0.6789	1.211	1.426	0.626
Std. Dev.	0.6056	0.433	0.5623	0.2702
Upper Lim.	0.9134	1.465	1.728	0.8689
Lower Lim.	0.2928	0.9578	1.124	0.3907

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
8/31/2016	<0.1	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			<0.3	
4/3/2018		<0.3		
4/4/2018	<0.1		<0.3	
9/19/2018	<0.1	<0.3	<0.3	
3/27/2019	<0.1	0.18 (J)	0.12 (J)	
8/20/2019	<0.1	<0.3		
8/21/2019			<0.3	
10/8/2019	<0.1			
10/9/2019		<0.3	0.12 (J)	
3/17/2020	<0.1	0.076 (J)	<0.3	
7/6/2020			0.12	
8/27/2020	<0.1			<0.1
8/28/2020		0.07 (J)	0.12	
9/22/2020	<0.1			<0.1
9/23/2020		0.082 (J)	0.12	
10/7/2020			0.13	<0.1
11/12/2020			0.084 (J)	<0.1
3/1/2021	<0.1	0.073 (J)		<0.1
3/2/2021			0.12	
8/19/2021	<0.1	0.075 (J)		
8/20/2021				<0.1
8/27/2021			0.13	
2/9/2022	<0.1	0.063 (J)	0.12	<0.1
8/31/2022	0.055 (J)	0.1	0.12	0.059 (J)
2/8/2023	0.062 (J)			
2/9/2023		0.11		
2/10/2023			0.17	0.063 (J)
8/15/2023	<0.1	0.07 (J)	0.12	<0.1
Mean	0.09235	0.192	0.1573	0.0922
Std. Dev.	0.01946	0.1595	0.09845	0.01647
Upper Lim.	0.12	0.1826	0.1014	0.1
Lower Lim.	0.07	0.07598	0.03761	0.063

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-45	YGWC-46A	YGWC-52
8/31/2016	<0.001		
9/1/2016		<0.001	
11/14/2016	<0.001		
11/16/2016		<0.001	
2/27/2017	<0.001	<0.001	
5/8/2017		<0.001	
5/9/2017	0.0001 (J)		
7/13/2017	<0.001	<0.001	
10/10/2017	<0.001		
10/11/2017		<0.001	
4/3/2018	<0.001		
4/4/2018		<0.001	
9/19/2018	<0.001	<0.001	
8/20/2019	<0.001		
8/21/2019		<0.001	
7/6/2020		<0.001	
8/27/2020			9.2E-05 (J)
8/28/2020	<0.001	<0.001	
9/22/2020			6E-05 (J)
9/23/2020	<0.001	<0.001	
10/7/2020		<0.001	<0.001
11/12/2020		4.4E-05 (J)	6.4E-05 (J)
3/1/2021	<0.001		8.7E-05 (J)
3/2/2021		<0.001	
8/19/2021	<0.001		
8/20/2021			<0.001
8/27/2021		<0.001	
2/9/2022	<0.001	<0.001	<0.001
8/31/2022	<0.001	<0.001	<0.001
2/9/2023	<0.001		
2/10/2023		<0.001	<0.001
8/15/2023	<0.001	<0.001	<0.001
Mean	0.0009471	0.0009522	0.0006303
Std. Dev.	0.0002183	0.0002138	0.0004774
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.0001	4.4E-05	6.4E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
8/31/2016	0.0115 (J)	0.0147 (J)		
9/1/2016			0.0077 (J)	
11/14/2016		0.0175 (J)		
11/15/2016	0.0148 (J)			
11/16/2016			0.0075 (J)	
2/27/2017		0.0135 (J)	0.0084 (J)	
2/28/2017	0.0124 (J)			
5/8/2017	0.0132 (J)		0.0087 (J)	
5/9/2017		0.0136 (J)		
7/13/2017	0.0124 (J)	0.0129 (J)	0.0104 (J)	
10/10/2017	0.0123 (J)	0.015 (J)		
10/11/2017			0.0099 (J)	
4/3/2018		0.014 (J)		
4/4/2018	0.014 (J)		0.012 (J)	
9/19/2018	0.013 (J)	0.012 (J)	0.011 (J)	
8/20/2019	0.013 (J)	0.012 (J)		
8/21/2019			0.0076 (J)	
10/8/2019	0.012 (J)			
10/9/2019		0.012 (J)	0.0078 (J)	
3/17/2020	0.013 (J)	0.014 (J)	0.0071 (J)	
7/6/2020			0.011 (J)	
8/27/2020	0.013 (J)			0.0048 (J)
8/28/2020		0.012 (J)	0.012 (J)	
9/22/2020	0.013 (J)			0.0046 (J)
9/23/2020		0.012 (J)	0.013 (J)	
10/7/2020			0.011 (J)	0.0041 (J)
11/12/2020			0.014 (J)	0.0044 (J)
3/1/2021	0.013 (J)	0.012 (J)		0.0043 (J)
3/2/2021			0.013 (J)	
8/19/2021	0.013 (J)	0.012 (J)		
8/20/2021				0.0043 (J)
8/27/2021			0.014 (J)	
2/9/2022	0.014 (J)	0.012 (J)	0.014 (J)	0.0042 (J)
8/31/2022	0.013 (J)	0.012 (J)	0.015 (J)	0.0037 (J)
2/8/2023	0.014 (J)			
2/9/2023		0.01 (J)		
2/10/2023			0.011 (J)	0.0033 (J)
8/15/2023	0.013 (J)	0.012 (J)	0.012 (J)	0.004 (J)
Mean	0.01303	0.01291	0.01273	0.00417
Std. Dev.	0.0007718	0.001643	0.001421	0.0004322
Upper Lim.	0.01348	0.014	0.01391	0.004556
Lower Lim.	0.01258	0.012	0.01154	0.003784

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A
8/31/2016	<0.0002	<0.0002	
9/1/2016			<0.0002
11/14/2016		<0.0002	
11/15/2016	<0.0002		
11/16/2016			<0.0002
2/27/2017		<0.0002	<0.0002
2/28/2017	<0.0002		
5/8/2017	<0.0002		<0.0002
5/9/2017		<0.0002	
7/13/2017	<0.0002	<0.0002	<0.0002
10/10/2017	<0.0002	<0.0002	
10/11/2017			<0.0002
4/3/2018		<0.0002	
4/4/2018	<0.0002		<0.0002
9/19/2018	6E-05 (J)	7.1E-05 (J)	7E-05 (J)
8/20/2019	<0.0002	<0.0002	
8/21/2019			<0.0002
7/6/2020			<0.0002
8/27/2020	<0.0002		
8/28/2020		<0.0002	<0.0002
11/12/2020			<0.0002
8/19/2021	<0.0002	<0.0002	
8/27/2021			<0.0002
2/9/2022	<0.0002	<0.0002	<0.0002
8/31/2022	<0.0002	<0.0002	<0.0002
2/8/2023	<0.0002		
2/9/2023		<0.0002	
2/10/2023			<0.0002
8/15/2023	<0.0002	<0.0002	<0.0002
Mean	0.0001907	0.0001914	0.0001924
Std. Dev.	3.615E-05	3.331E-05	3.153E-05
Upper Lim.	0.0002	0.0002	0.0002
Lower Lim.	6E-05	7.1E-05	7E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-45	YGWC-46A	YGWC-52
8/31/2016	<0.01	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			<0.01
8/28/2020		0.0013 (J)	0.003 (J)	
9/22/2020	<0.01			<0.01
9/23/2020		0.0011 (J)	0.0025 (J)	
10/7/2020			0.0024 (J)	<0.01
11/12/2020			0.0019 (J)	<0.01
3/1/2021	<0.01	0.0012 (J)		<0.01
3/2/2021			0.0023 (J)	
8/19/2021	<0.01	0.0012 (J)		
8/20/2021				<0.01
8/27/2021			0.0022 (J)	
2/9/2022	<0.01	0.0012 (J)	0.0021 (J)	<0.01
8/31/2022	<0.01	0.0011 (J)	0.0017 (J)	<0.01
2/8/2023	<0.01			
2/9/2023		0.00097 (J)		
2/10/2023			0.0029 (J)	0.00083 (J)
8/15/2023	<0.01	0.0011 (J)	0.0031 (J)	<0.01
Mean	0.0095	0.002725	0.002545	0.009083
Std. Dev.	0.002179	0.003253	0.001218	0.0029
Upper Lim.	0.01	0.0024	0.003199	0.01
Lower Lim.	0.0005	0.0011	0.001891	0.01

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 10/9/2023 7:14 PM View: Appendix IV - Confidence Intervals

Plant Yates Client: Southern Company Data: Yates Ash Pond1

	YGWC-44	YGWC-46A
8/31/2016	<0.001	
9/1/2016		<0.001
11/15/2016	<0.001	
11/16/2016		<0.001
2/27/2017		<0.001
2/28/2017	<0.001	
5/8/2017	<0.001	<0.001
7/13/2017	<0.001	<0.001
10/10/2017	<0.001	
10/11/2017		<0.001
4/4/2018	<0.001	<0.001
9/19/2018	<0.001	<0.001
8/20/2019	<0.001	
8/21/2019		<0.001
10/8/2019	<0.001	
10/9/2019		<0.001
3/17/2020	8E-05 (J)	<0.001
7/6/2020		7.3E-05 (J)
8/27/2020	<0.001	
8/28/2020		<0.001
11/12/2020		<0.001
8/19/2021	<0.001	
8/27/2021		<0.001
2/9/2022	<0.001	<0.001
8/31/2022	<0.001	<0.001
2/8/2023	<0.001	
2/10/2023		<0.001
8/15/2023	<0.001	<0.001
Mean	0.0009459	0.0009512
Std. Dev.	0.0002231	0.0002127
Upper Lim.	0.001	0.001
Lower Lim.	8E-05	7.3E-05

ND substitution: RL or RL/2 if <15% NDs.

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